



# Board of Regents, State of Iowa Efficiency and Transformation Review



University of Northern  
Iowa



University of Iowa



Iowa State University



# Cover Letter

January 10, 2014  
Ms. Patrice Sayre  
Chief Business Officer  
Board of Regents, State of Iowa  
11260 Aurora Ave  
Urbandale, Iowa 50322

RE: In Response to Request for Proposal for Efficiency and Transformation Review, Board of Regents,  
State of Iowa

**Dear Ms. Sayre:**

Deloitte Consulting LLP (Deloitte<sup>1</sup>) is pleased to submit this response to the Request for Proposal for assistance with the Efficiency and Transformation Review for the Board of Regents. We are excited about the opportunity to serve the Board and appreciate the invitation to demonstrate our capabilities and qualifications in support of this important initiative.

Deloitte has been supporting the public sector since the inception of our firm well over 100 years ago and for the last 20 years have supported engagements for over 200 higher education institutions. We have performed projects similar to this RFP for Northeast R1 University, University of California Berkeley, and the Large University System. We bring this on-point background and relevant experience to this historic initiative for the State of Iowa from day one.

Based on these experiences, our team brings four critical elements that the Board needs for the long-term success of this effort:

- Deep Enterprise Cost Reduction Expertise
- Functional Breadth and Depth in the Administrative and Academic Operations of Higher Education
- A Collaborative Approach Proven in the University Environment
- Long History of Rapidly Delivering Tangible Results—from Analysis through Implementation

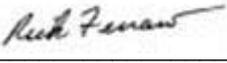
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<sup>1</sup> As used in this document, “Deloitte” means Deloitte Consulting LLP, a subsidiary of Deloitte LLP. Please see [www.deloitte.com/us/about](http://www.deloitte.com/us/about) for a detailed description of the legal structure of Deloitte LLP and its subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.

This translates into opportunities of greater value, an increase in the speed to impact, and most importantly lower risk for the Board.

We would be pleased to provide any additional information if needed. Should you have any questions, please feel free to contact us: Christopher Rose - +703 980 1359 or christopherrose@deloitte.com or Rick Ferraro – +1 703 251 3685 or rferraro@deloitte.com. We look forward to working with you.

Very truly yours,

By: 

Rick Ferraro  
Director

Deloitte Consulting LLP

By: 

Christopher Rose  
Principal

Deloitte Consulting LLP

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# 1 Basic Data on Bidder

## Bidder Information:

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## Proposal Evaluation Points of Contact

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Contracts POC	Timothy Harris, Director tiharris@deloitte.com (703) 885-6130

## Additional Company Information

Type of Entity	Limited Liability Partnership
State and Date of Incorporation	Delaware, 1996
Parent Corporation	Deloitte Consulting LLP's parent entity is Deloitte LLP Deloitte LLP is organized in the State of Delaware with its headquarters at 1633 Broadway, New York, NY 10019
Nearest Offices	699 Walnut St. Des Moines, IA 50309 4840 N River Blvd NE, Suite 400, Cedar Rapids, IA 52411 4550 E. 53rd St., Suite 110, Davenport, IA 52807
Managing Office	Deloitte Consulting operates more than 80 offices across the US and will staff this program with practitioners from various locations based on the specific skills required for each phase of the program.
Small business or certified targeted small business as defined in Iowa Code (2011) section 15.102	No

## 2 Executive Summary

As the Iowa Board of Regents (the Board) embarks on this historic transformation, it is seeking the support of a management consulting team that possesses deep enterprise cost reduction experience, functional depth and breadth in the administrative and academic operations of Higher Education, a collaborative approach proven in the University environment, and a long history of rapidly delivering tangible results. The selection of a firm with these qualities produces opportunities of greater value, increases the speed to impact and, most importantly, lowers risk for the Board. As we will demonstrate in this proposal, we bring the right team—Deloitte Consulting, KH Consulting Group, and Ad Astra (the Deloitte Team) – to meet Iowa’s needs during this important endeavor. With Deloitte as the prime vendor, our team possesses an innovative blend of Higher Education capabilities, personnel, and experiences that will deliver the value and timeliness the Board seeks while mitigating the unique combination of risks associated with such a large scale transformation effort.

### 2.A Deloitte’s Understanding of Iowa’s Needs

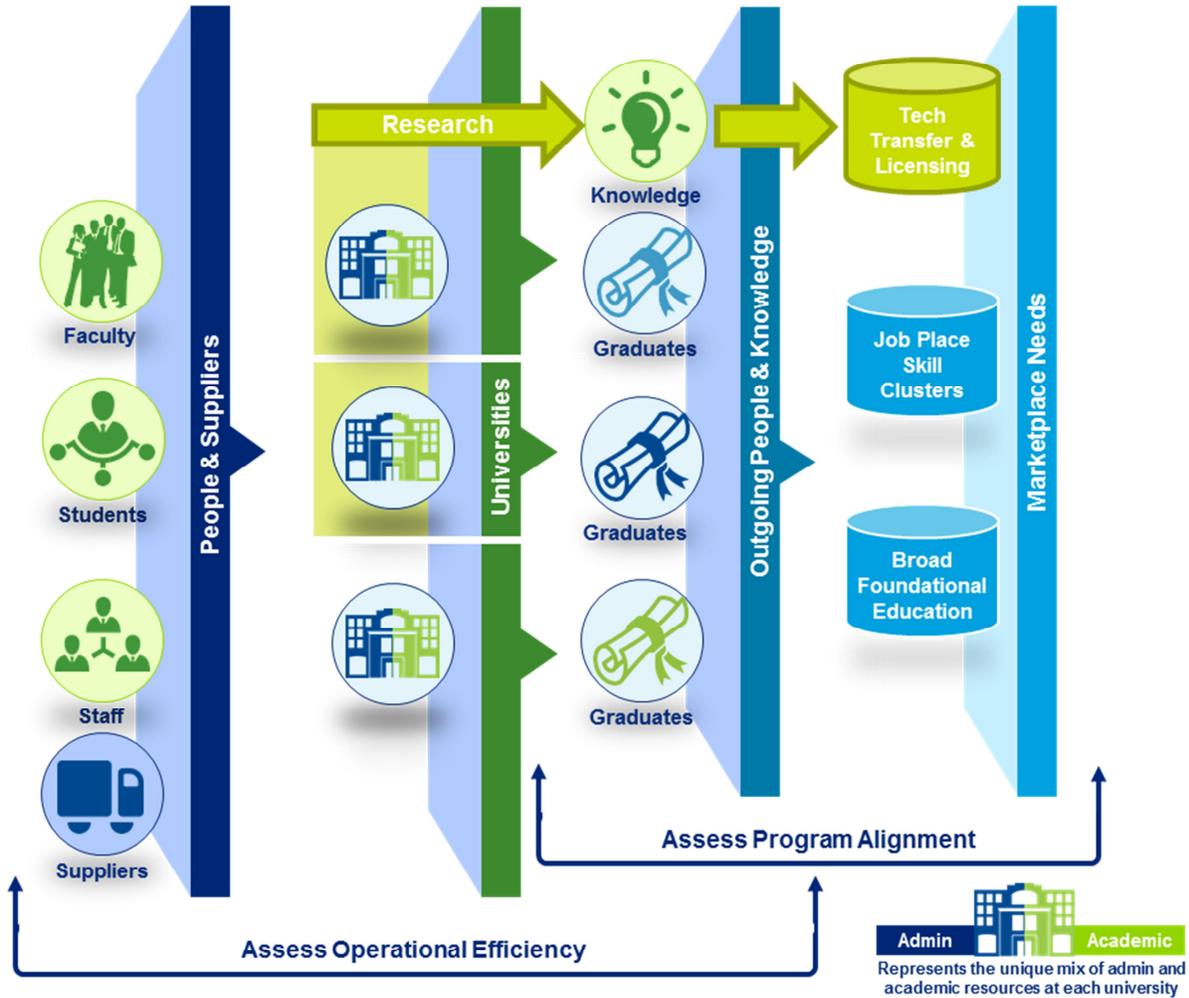
The Board is seeking management consulting support to perform a comprehensive, system-wide operational and programmatic review of Iowa’s public universities. This review should be conducted across administrative and academic support services and program, at both the institutional and system level. This review will include identifying opportunities to reduce costs, improve efficiency, and/or increase revenue for Iowa’s State System of Higher Education. These services should be performed in alignment with the Board’s overarching mission to:

- Provide high-quality accessible education to students
- Engage in high-quality research, scholarship, and creative activities to enhance the quality of life for Iowans and society in general
- Provide needed public services
- Create and support economic development in partnership with public and private sectors

In the Deloitte Team’s view, students, faculty and staff, along with suppliers, may be considered inputs to Iowa’s university system. Individuals leaving with education and the new knowledge produced through research may be considered outputs. The three major universities—the State University of Iowa at Iowa City, Iowa State University of Science and Technology at Ames, and the University of Northern Iowa at Cedar Falls—each graduate individuals with a unique blend of skills, based on the programs they provide. This input-output model is represented in the graphic found on the next page.

To best assess the system’s efficiency, there is a need to assess both the *operational* efficiency of academic and administrative support services and the *alignment* academic program to marketplace needs.

The Iowa Board of Regents oversees three universities to educate students to meet marketplace needs.



Overall impact of the Iowa's State System of Higher Education is determined by assessing to two areas: operational alignment and program alignment

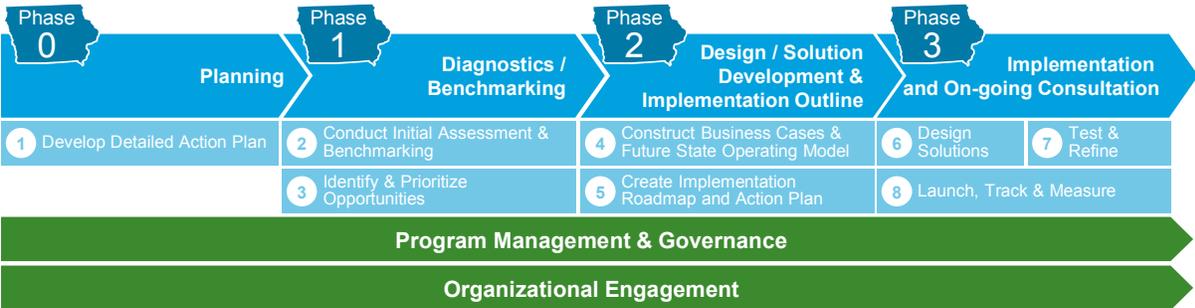
Figure 1: Iowa's State System of Higher Education input/output Model

To best assess the system's efficiency, there is a need to assess both the operational efficiency of academic and administrative support services and the alignment academic program to marketplace needs.

## 2.B Scope of Services Being Proposed

Deloitte's approach will include a review of the administrative and academic areas defined in the Board's Request for Proposal (RFP), with the addition of Advancement. Our integrated Deloitte Team allows us to address more than the full scope of the Board's request, identifying not only function-specific opportunities, but also synergies to be gained across the system. And with Deloitte in the lead, we bring a track record of successfully delivering the entire program lifecycle from review through results.

We understand a program of this size, visibility, and complexity requires a thorough approach to best engage the diverse group of stakeholders and perform a comprehensive review across all three universities. To meet this need, we have drawn upon our experience with transformation projects, our experience in Higher Education, and our understanding of Iowa to tailor a methodology for program execution, which is depicted below.



**Figure 2: The Deloitte Team’s Core Methodology for Iowa’s Efficiency and Transformation Review Program**

Before beginning the requested activities, we propose the inclusion of a planning phase, to be performed pro-bono as our investment in the program’s success. We make this investment because we believe this “start before we start” approach accelerates the launch of the Phase One assessment activities and creates momentum for everything beyond. Key activities in each phase are as follows:

- Phase Zero, Planning** includes collaborating with the Board to refine the vision of the program, review a list of preliminary hypotheses, develop a working action plan, confirm a governance structure, and align and engage leadership early through a Strategic Choices Lab.
- Phase One, Diagnostic/ Benchmarking** includes a broad review of all in-scope areas, to compile a list of opportunities that could be implemented to reduce costs, increase revenue, and improve service within Iowa’s individual universities and across the entire system. Collaborating with the Board, the list is then prioritized to identify which opportunities will be further evaluated Phase Two.
- Phase Two, Design/ Solution Development & Implementaton Outline** includes the creation of business cases for high-priority opportunities and the development of a high-level future state operating model for the Iowa System. The final list of high-priority opportunities will then be sequenced across an implementation roadmap and built into a detailed implementation action plan.
- Phase Three, Implementation and Ongoing Consultation**, if the Board chooses to proceed, includes developing the detailed process designs and detailed organizational and technological requirements needed to implement the future-state operating model and associated improvement opportunities. Additionally, to support ongoing implementation efforts, the team would establish a Results Management Office (RMO) to drive, coordinate, support, measure and track implementation activities.

Throughout each of these phases, we will continuously collaborate with the Board to evaluate our progress and to make sure we are focused on the opportunities that are relevant, actionable, and provide the most cost savings and value. Our approach means we do not waste time, money, or resources on opportunities that will not produce a tangible return on investment – keeping in mind not only the financial and resource implications, but the academic mission of teaching and research, as well.

It is important to note that phases on these large programs often run in tandem with each other. As quick-win opportunities are identified and approved early, they could be planned and implemented while other long-term changes may take more investigation before being prioritized. This leads us to approach the Board's request as a program, rather than a project, to produce a portfolio of opportunities to be managed and monitored, each potentially at different stages of activity and engagement. And as such, our methodology also includes the capabilities of a **Program Management Office** and **Organizational Engagement**.

In our experience, strong program management, with a people-focused approach, is critical to the success of a transformation impacting so many diverse stakeholder groups. It is important that stakeholders are kept informed and feel the program is being well managed, to avoid any negative impacts which occur when individuals or groups are not engaged. With this in mind, our activities include not only the requested communications plan, but also a proprietary organizational diagnostic known as As One, to be used as a stakeholder input to implementation selection during Phase Two.

Details about our approach, methodology, and phase-driven activities are found in section 6.0 Methodology of this proposal.

## 2.C Qualifications and Experience

The Deloitte Team brings the people, capabilities, and experience to successfully support the Board through this transformational endeavor. We have completed hundreds of high-profile transformation projects with our Higher Education, Public Sector, and Commercial clients and we have honed our capabilities during many high-profile engagements working with our clients on some of their most critical and strategic initiatives to achieve greater efficiency and fiscal stability. Examples of these projects are highlighted in the table below and are detailed in section 4.B of this proposal, and in Appendix 0.

	Assessment					Solution Design								Solution Implementation						
	Organizational and Operational Assessment	Cost Reduction Opportunities	Organizational Engagement	Business Case Development	Implementation Roadmap	Facilities Ops, Maintenance, Construction	Finance and Administration	Human Resources	Information Technology	Research	Sourcing and Procurement	Organizational Design	Revenue Generation	Academic Programs	Shared Services	IT Transformation	Strategic Sourcing and Procurement	Communications, Training, Change Management	Space Utilization and Scheduling	Academic Curriculum and Faculty Deployment
University of California – Berkeley**	X	X			X		X	X	X	X		X		X	X					
	X	X	X	X	X				X					X	X					
University of Texas at Austin*					X		X		X						X					
	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Harvard University**	X	X		X	X				X			X		X	X					
Federal Government of Canada Deficit Reduction**	X	X	X	X	X															
University of Northern Iowa*		X				X													X	
Chabot-Las Positas Community College District*	X	X	X									X								
Large R1 Public Institution		X		X	X	X	X	X		X	X	X								
University of Iowa		X				X													X	
Mississippi Institutions of Higher Learning	X	X				X													X	
University of California – Los Angeles		X										X								
Education Institution	X	X		X			X	X	X		X	X	X	X	X	X	X			
Johns Hopkins University		X	X		X						X	X					X			
State University							X		X							X				
Higher Education Organization							X		X							X				
Dartmouth College			X		X	X	X				X	X		X		X	X	X		
City of Los Angeles, Office of the Mayor			X		X								X							

**Table 1. Recent Experience Leading Complex Efficiency Programs**

As seen in the table above, we recently completed complex efficiency projects with leading Higher Education institutions including the University of California, Berkeley, Large University System, Northeast R1 University, and Chabot-Las Positas Community College. At the University of California, Berkeley, our team drove implementation to address \$18-\$34M in annual savings opportunities and \$14-\$22M in annual revenue growth opportunities in Berkeley’s Finance, HR, IT, and Research Administration services. The academic assessment we conducted for Chabot-Las Positas Community College identified a potential \$12.6M in cost-reduction and \$4.2M in revenue-generating opportunities for the community college system.

One of the public sector projects we have included was conducted with the Government of Canada where, working collaboratively, we applied analytics to identify \$5.2 billion in savings to their budget across nearly 70 government department and agencies.

In addition to our experience leading transformation projects, some with Iowa’s peers, the Deloitte Team brings an understanding of Iowa’s Higher Education system. Our previous work with the University of Iowa and the University of Northern Iowa provide us with an understanding of elements of the operations, culture, and systems unique to the state and further bolster our strong desire to work with the Board on this exciting initiative.

## 2.D Description of Similar Projects Completed

Below, please find a brief list of similar projects the Deloitte has delivered. These projects, as well as others, are discussed in more detail in section 4.B Project Spotlights.

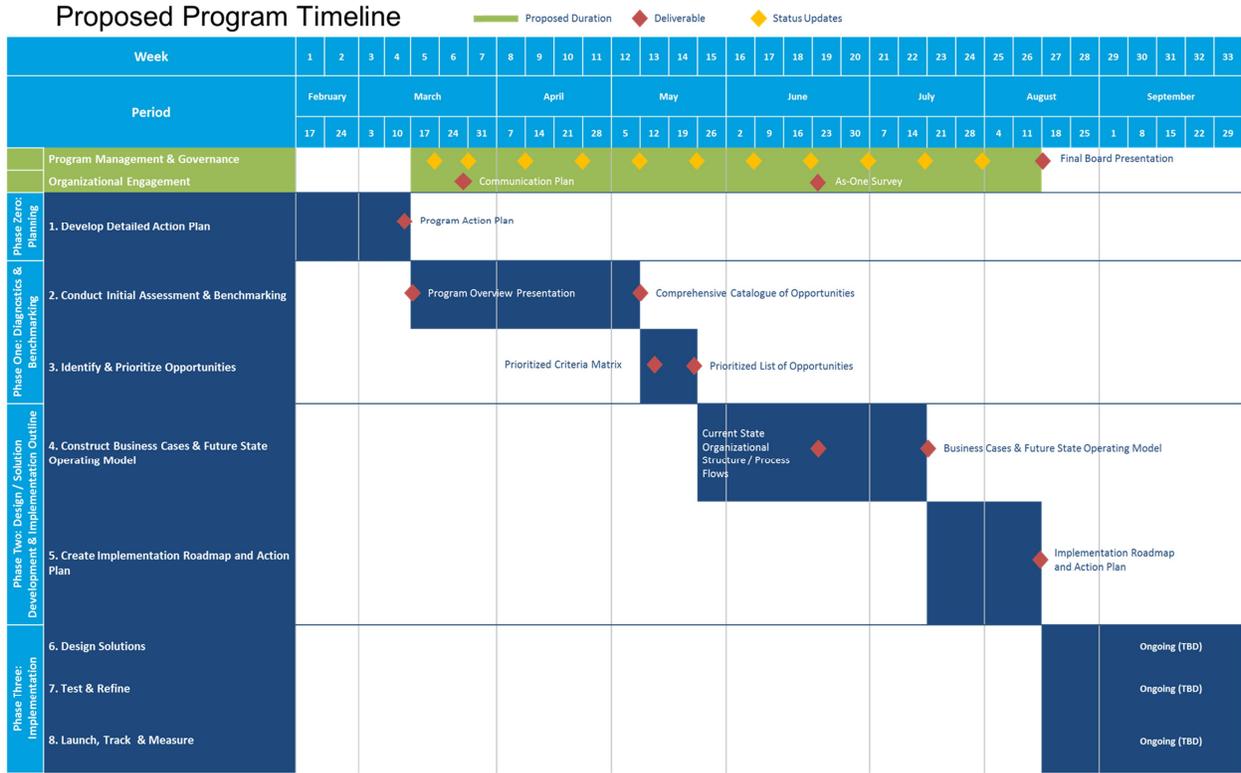
<b>Client</b>	<b>University of California, Berkeley</b>
<b>Contact Name</b>	[REDACTED]
<b>Assessment Duration</b>	3 months
<b>Scope of Assessment</b>	Finance, Human Resources, Information Technology, and Research Administration
<b>Outcome</b>	<ul style="list-style-type: none"> <li>Design and Implementation of Administrative Service Centers for Finance, Human Resources, Information Technology, and Research Administration</li> </ul>
<b>Client</b>	<b>Northeast R1 University</b>
<b>Contact Name</b>	[REDACTED]
<b>Assessment Duration</b>	4 months
<b>Scope of Assessment</b>	Advancement, Finance, Human Resources, Information Technology, Operations, Research Administration, and Sourcing & Procurement
<b>Outcome</b>	<ul style="list-style-type: none"> <li>Identified opportunities to save \$18-\$34M annually</li> <li>Identified opportunities to increase revenue \$14-\$22M annually</li> <li>Increased financial efficiencies through cost containment</li> <li>Tackled administrative inefficiency to streamline roles and accountabilities so as to enable the faculty and staff to execute their core job responsibilities</li> <li>Developed a new model to establish world class administrative services</li> </ul>
<b>Client</b>	<b>Large University System</b>
<b>Contact Name</b>	[REDACTED]
<b>Assessment Duration</b>	8 months
<b>Scope of Assessment</b>	Information Technology across the System
<b>Outcome</b>	<ul style="list-style-type: none"> <li>Identified 29 recommendations with potential savings of approximately \$54M annually</li> <li>Developed an integrated roadmap to guide the System through the implementation of the 29 recommendations</li> </ul>

<b>Client</b>	Federal Government of Canada
<b>Contact Name</b>	[REDACTED]
<b>Assessment Duration</b>	6 months
<b>Scope of Assessment</b>	Nearly 70 departments and agencies while examining \$91B in spending annually.
<b>Outcome</b>	<ul style="list-style-type: none"> <li>The Government of Canada and Deloitte worked collaboratively to apply analytics to 70 government agencies organizations to save \$5.2 billion for the resulting budget that passed.</li> <li>Improve cost reduction decision-marking and governance structure necessary to capture identified opportunities</li> </ul>

**Table 2. Similar Projects Completed**

## 2.E High Level Project Execution Plan

The below graphic illustrates our proposed high-level program plan, with Phase Zero lasting four weeks, Phase One lasting 10 weeks, and Phase Two lasting 11 weeks. More details of our program plan may be found in the 6.0 Methodology section of this document.



**Figure 3: Proposed High-level Program Timeline**

## 3 Company Background

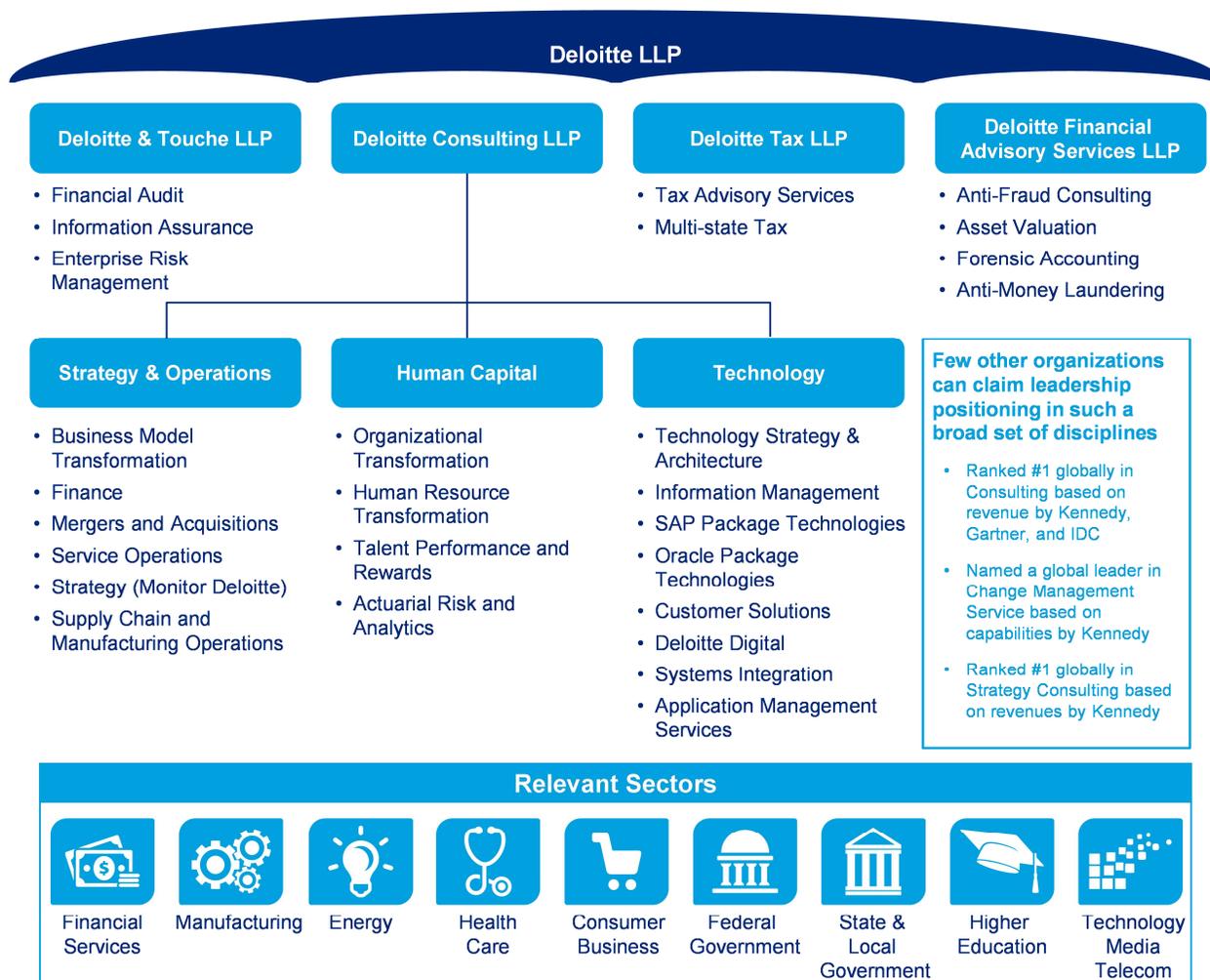
### 3.A History of Deloitte

Deloitte's history dates back to the 1989 merger of Deloitte (founded in 1845), Haskins & Sells (founded in 1896) and Touche Ross (founded in 1947). We operate under the global umbrella of Deloitte Touche Tohmatsu Limited ("DTTL"). For more than 100 years, clients have relied on Deloitte LLP (Deloitte) and its predecessor organizations for solutions to their ever-changing needs. In 1995, Deloitte Consulting was established.

### 3.B Deloitte Size and Organizational Structure

With over 60,000 personnel across 87 offices in the U.S. and 193,000 practitioners spanning more than 150 countries, Deloitte brings multi-disciplinary expertise to the Board. Deloitte subsidiaries rank among the nation's leading professional services firms in audit, tax, consulting, and financial advisory services across more than 20 industries. Drawing from the vast resources and years of experience across these areas, we enter engagements as one firm dedicated to meeting the specific needs of our clients.

As presented in the following graphic, within the U.S., services are provided by the four subsidiaries of Deloitte LLP: Deloitte Consulting LLP, Deloitte & Touche LLP, Deloitte Tax LLP, and Deloitte Financial Advisory Services LLP. Each subsidiary has a set of competencies it specializes in and delivers into the marketplace.



**Figure 4: Deloitte Consulting Organizational Structure**

### 3.C Deloitte’s Sector Specific Company History

Across our member firms, Deloitte brings a world-class global team with deep experience in strategy development and implementation within Higher Education, Government, and Commercial. Beginning with our founding in 1845, Deloitte has provided consulting services to commercial clients across multiple industry sectors. Our history in serving the public sector dates back to 1893 when two of our founders, Charles Waldo Haskins and Elijah Watt Sells, who conducted one of the first modern enterprise cost reduction assessments in the form of a department-by-department review of the entire Federal government. In Higher Education, we have worked with prestigious institutions such as Harvard University, Dartmouth College, the University of California- Berkeley, Northeast R1 University, and the University of Texas School System over the last 20 years.

## Deloitte's Higher Education Consulting Experiences

Since 1994, we have focused on delivering solutions to some of the toughest challenges facing higher education – severe economic constraints, rising tuitions, difficulty cutting costs, escalating technology demands, and increasing security risks. With over 500 seasoned professionals in North America alone, the Deloitte Higher Education Practice has served more than 200 higher education institutions and university systems. We are proud of our successful record of supporting Higher Education. The table below provides a representative list of our recent higher education clients during the last five years.



Deloitte serves approximately 200 higher education clients including:

- 9 of the top 10 universities
- 20 of the top 25 universities
- 45 of the top 100 universities

*As ranked by the 2012 U.S. News & World Report*

### Recent Higher Education Clients

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Brandeis University</li> <li>• City University of New York (CUNY)</li> <li>• Columbia University</li> <li>• Dartmouth College</li> <li>• Eastern Michigan University</li> <li>• Florida State University</li> <li>• Georgetown University</li> <li>• Harvard University</li> <li>• Indiana University</li> <li>• Johns Hopkins University</li> <li>• Kennesaw State University</li> <li>• Michigan State University</li> <li>• Our Lady of the Lake University</li> <li>• Simmons College</li> <li>• Large University System</li> <li>• Northeast R1 University</li> </ul> | <ul style="list-style-type: none"> <li>• University of California, Berkeley</li> <li>• University of California, Davis</li> <li>• University of California, Los Angeles</li> <li>• University of California, San Francisco</li> <li>• University of Chicago</li> <li>• University of Illinois</li> <li>• University of Maryland</li> <li>• University of North Carolina, Chapel Hill</li> <li>• University of Rochester</li> <li>• University of Texas at Austin</li> <li>• University of Washington</li> <li>• University of Wisconsin – Madison</li> <li>• Vanderbilt University</li> <li>• Virginia Community College System</li> <li>• Yale University</li> </ul> |
|---|---|

**Table 3. Recent Higher Education Clients**

## Thought leadership and global research

Deloitte invests heavily in thought leadership and research. Deloitte operates through a network of researchers, senior client service practitioners, and academic and technology partners. From boardrooms to business journals, Deloitte is known for bringing new perspectives to real-world issues and challenges. The table below provides a sample of the higher education thought leadership our firm has recently published.

## Representative Higher Education Thought Leadership



### Start to Finish

The education sector recognizes that, to gain or maintain a competitive advantage, improving processes, technologies and organizational culture is crucial. The part that is unclear, however, is how to get there.

“Start to finish,” a point-of-view report from Deloitte’s Higher Education practice, discusses the need for technology-enabled change in Higher Education. It is based on many years of executing and supporting change initiatives at institutions throughout North America and around the world. It provides a detailed look at the common pitfalls that can lead to project failure and offers practical insight to overcome these challenges to achieve academic and operational objectives.



### Funding the future in challenging times – How asset optimization can sustain and grow colleges and Universities

This thought leadership piece outlines features and processes of asset optimization and its importance to higher education institutions. The Deloitte value optimization strategy is presented with particular emphasis on the context in which higher education institutions operate. There is also a focus on the importance of optimizing real estate assets. Key considerations when implementing an asset optimization strategy are discussed as well as two examples of asset optimization: creating sustainability in an American university and handling deferred maintenance.



### Making the grade 2011: A study of the top 10 issues facing higher education institutions

This study, completed by Deloitte in 2011, describes the top ten issues facing higher education institutions globally. The study is based upon global research conducted by Deloitte’s Higher Education practice and offers compelling insights into the changing landscape of higher education and the key challenges that institutions are currently confronting.

**Table 4. Representative Sample of Deloitte’s Higher Education Thought Leadership**

Deloitte is committed to staying ahead of current trends, research, and challenges facing universities and colleges and supporting professional development within the sector. Our commitment includes involvement in professional organizations including the National Association of College and University Business Officers (NACUBO), EDUCAUSE, Higher Education User Group (HEUG), and the Council for Advancement and Support of Education (CASE). We also give back to the higher education community by delivering presentations and webinars at conferences and user groups such as Alliance (national and regional), Workday Rising, and Oracle OpenWorld.

### Higher education benchmarking study

Deloitte’s Global Benchmarking Center is comprised of more than 60 highly-experienced professionals and has completed over 800 client benchmarks since 2005, with deep benchmarking knowledge in finance, human resources, information technology, sales, general and administrative, procurement, supply chain, shared services, and industry-specific operations functions.

Understanding that higher education institutions are being forced to reduce costs and increase operating efficiency to deal with today’s challenging fiscal times, Deloitte’s Higher Education Practice, in

collaboration with our Global Benchmarking Center, has developed a Higher Education Benchmark Study (Study) to provide industry-specific comparative data across key administrative functions.

Our Study is composed of public and private higher education institutions from the U.S. and Canada including top-tier national research universities and regional public and private schools, such as the University of North Carolina-Chapel Hill, Northwestern University, Southern Methodist University, Saint Louis University, and Temple University, among others.

The areas benchmarked in the Study include Admissions, Advancement, Facilities, Financial Aid, Human Resources, Procurement, and Finance. The study also considered cross-cutting areas such as technology, shared services, and outsourcing. Knowledge gained through the study has helped participants identify strengths and weaknesses from an efficiency perspective, and also highlight areas where targeted investment could potentially lead to improved performance. For the Board, this means that we can leverage the extensive knowledge gained from our database of Higher Education Benchmarks to further inform our analysis as we consider options for improved efficiency and cost reduction.

### 3.D Deloitte Annual Financial Report

Deloitte has clear and demonstrated financial strength and sustainability to support the Board throughout the length of this engagement and beyond. Our most recent financial information is from fiscal year 2013 which ended June 1, 2013. During this period, the Deloitte U.S. Firms had revenue of U.S. \$13.89 billion. See more detailed information in the chart below.

<b>Deloitte LLP and Subsidiaries – By The Numbers</b>			
<b>U.S. Firms</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Offices (national and regional)	104	102	100
Number of cities	87	87	89
People	60,951	56,827	51,262
Consolidated Revenues (US\$)	\$13.9 BB	\$ 13.1 BB	\$ 11.9 BB
<b>Consolidated Revenue Breakdown By Area</b>			
Consulting	46%	45%	44%
Audit and Enterprise Risk Services	31%	31%	32%
Tax	18%	19%	20%
Financial Advisory Services	5%	5%	4%

*Source: Deloitte LLP, New York*

**Table 5. Deloitte LLP and Subsidiaries – By the Numbers**

Since the U.S. Firms are privately owned partnerships, they do not have audited financial statements nor do they file other corporate financial information such as a 10-K. The consolidated financial information above for the U.S. Firms is publicly available. Should you have additional questions regarding this

information, please contact Frank Friedman, Chief Financial Officer of Deloitte LLP - +816 881 5102 or Graham Cowie, U.S. Firms' Controller of Deloitte Services LP - +615 882 7270.

Further, although the U.S. Firms do not have a rating from one of the nationally recognized credit rating agencies, their privately placed debt is rated by the National Association of Insurance Commissioners ("NAIC"). The U.S. Firms' privately placed debt carries an NAIC 1 rating; NAIC's highest rating, which is comparable to an "A" or better rating from one of the nationally recognized rating agencies.

## 4 Qualifications and Experience

Reflecting on the Board's vision for the future, the Deloitte Team recognizes that the Board is looking to improve delivery of their core mission and address the growing needs of each University. We understand the need for change in the organization to drive cost reduction and operational efficiency while enhancing quality and innovation. Areas such as the ability to reduce and control costs around administrative services, to gain greater value in your technology investments, and to optimize existing and future revenue generation projects will help bring the Iowa System not only to a position of stronger financial stability, but to a point where each campus is poised to achieve an even greater level of excellence and prominence in the future.

Deloitte is the right firm to support the Board as it embarks upon this effort. We have extensive experience helping universities improve efficiency and transform their organizations. Our firm's qualifications, background, and experience position us to deliver results for the following reasons:

- **We have deep enterprise cost reduction expertise.** In addition to our work with the University of Iowa and University of Northern Iowa, our team has extensive experience conducting operational and academic assessments to identify cost savings opportunities and drive operational efficiency at systems such as the Large University System, the Chabot-Las Positas Community College District, and the Mississippi Institutions of Higher Learning. This knowledge base positions us well to identify the best opportunities for the cost reduction opportunities, recommend revenue generation projects, and suggest alternative organizational structures for the Iowa System.
- **We bring functional depth and breadth in the administrative and academic operations of Public Higher Education.** We are proud to have been engaged by numerous institutions and systems of higher education to address their most significant challenges. We have delivered meaningful services to over 200 colleges and universities across all administrative and academic operations, showing how deeply we understand higher education and university systems. Our broad experience and depth of knowledge has allowed us to develop key insights into the challenges and opportunities faced by our public higher education clients including, but not limited to, the University of California at Berkeley, the Large University System, and the University of Texas at Austin.
- **We bring a collaborative approach to engage the University in change.** We deeply understand the importance of engaging stakeholders across and within the Board and its Universities. Our approach to identifying cost reduction opportunities and structuring organizational change that involves engaging and collaborating with stakeholders at various levels has been time-tested and proven successful at other institutions of higher education such as the Large University System and Northeast R1 University.
- **We know what it takes to achieve rapid results.** We bring the analytical rigor—and also the hands-on experience—to analyze, design, and implement improvement opportunities and help them stick. Few firms can offer this holistic capability to drive projects from strategic analysis to implementation and beyond. We are uniquely qualified to provide end-to-end strategy through implementation support.

- **We understand Iowa:** From our previous analyses and benchmarking efforts for the University of Iowa and University of Northern Iowa, we bring a deep understanding of the operational and cultural landscape of Iowa, the Regent System, and its Universities.

## Proven Capabilities

We understand the goals of the Board, and we have the capabilities and experience required to deliver a comprehensive academic assessment, to identify and implement opportunities to decrease costs and increase revenues, and to enhance operational efficiency. Based on our experience supporting other Public Higher Education institutions with similar challenges and our assessment of the RFP, we have identified a number of key capabilities critical to the success of this effort. Our objective is to bring these proven capabilities, tested methodologies, and Public Higher Education experience to the Board to help you embark on your own transformational program:

- Organizational and Operational Assessment
- Cost Reduction Opportunities
- Organizational Engagement
- Business Case Development
- Implementation Roadmap

**Organizational and Operational Assessment:** Clients seek our assistance with a range of organizational design and people management challenges because we understand operational efficiency. We conduct assessments and drive a wide array of organizational changes, such as shared services delivery, outsourcing, and organizational structure redesign. Most importantly, we know that project success in Higher Education is dependent upon establishing efficient and effective administrative functions to support the goals of research and teaching while respecting the unique attributes of every unit, department, and faculty member. As a reflection of this approach, Deloitte has developed function-specific (HR, finance, procurement, etc.) process modeling and benchmarking capabilities for Higher Education which will allow Deloitte and the University system to more effectively focus on specific, practical analysis and solutions, as opposed to generic approaches commonly seen in shared services consulting. At Northeast R1 University, for example, Deloitte was asked to identify and assess improvement opportunities across the University, with guiding principles to create greater operational efficiencies to allow for reinvestment in the University mission, enhance service quality through implementation of cost effective best practices, and create clear accountability and authority for efficient decision making.

**Cost Reduction Opportunities:** Our Enterprise Cost Management (ECM) methodology maintains effective control over enterprise costs and enables both quick wins and sustainable cost reduction effects. At Simmons College, Deloitte was able to apply our core capabilities to cut expenses by 15-20%, including savings of approximately \$4M in non-academic support functions through re-negotiating contracts and re-organizing operations. At Dartmouth College, our strategic sourcing effort alone generated estimated average savings of 22% across categories such as Facilities, Technology, and Office Supplies. Furthermore, the Government of Canada and Deloitte worked collaboratively to apply

analytics to 70 government agencies' organizations to save \$5.2 billion for the resulting budget that passed

**Organizational Engagement:** Organizational engagement, communications, and change management are critical to the successful execution of any major transformation. Deloitte supports clients in a range of these services, including leadership alignment, change readiness assessment, change impact assessment, workforce transition planning, and communication strategy, planning, and execution. We can provide recommendations for staff development while also identifying cross-training opportunities to assist in the event of staff reductions. Our numerous experiences with higher education have taught us that a 'one-size-fits-all' approach to different stakeholders is not a recipe for success and will limit the adoption and impact of recommended strategies. For example, Deloitte worked directly with HR leadership at Johns Hopkins University to craft a workforce transition strategy across all institutions, involving changes to over 11,000 employees. Our customized outreach and change management program enabled the successful launch of seven shared services organizations.



Deloitte was named a global leader in Human Capital Strategy Consulting, HR Consulting, and Change Management Service by Kennedy.

Source: Kennedy Consulting Research & Advisory; Change Management Consulting Market; © 2012 Kennedy Information, LLC. Reproduced under license

**Business Case Development:** Deloitte has deep experience determining potential opportunity values, costs, and expected benefits and in helping our clients evaluate a set of potential opportunity or policy alternatives. Our ValuePrint business case tool accounts for not only the tangibles – monetized costs and benefits – but more importantly intangibles and risk. We present our analyses in a manner that helps clients to focus decision-making on objective criteria, as well as create a portfolio of projects aligned with strategic objectives. Business Case development is a common practice across our previous work with Higher Education (e.g. Northeast R1 University, Harvard University, and Simmons College) and Public Sector clients (e.g. Federal Government of Canada) alike.

**Implementation Roadmap:** Following a strategy assessment, clients are typically confronted with the challenge of implementing new business operations and/or technology changes. Deloitte works with its clients to develop a tailored, actionable roadmap that breaks down strategic recommendations into a concrete set of sequenced activities, milestones, "Go- No Go" criteria, and resource requirements with a target completion dates to keep implementation efforts on track. Our clients trust us with their most critical and strategic initiatives. For example, when Harvard University wanted to transform their library system from 73 separate libraries to one library organization supported by shared services, they turned to Deloitte to develop a strategic implementation roadmap for the future as well as to identify the organizational and operational changes needed to improve efficiency and enhance performance. In 2013, with diminishing support from the State of California, the University of California at Berkeley engaged Deloitte to begin implementing a series of projects to reduce administrative costs and streamline operations. Our team developed a comprehensive implementation roadmap helping the University realize

a series of successful “Finance, IT, and HR shared services “Go-Lives” with minimal disruption to over 3,000 end-users.

## 4.A Additional Project Spotlights

Within this proposal, we reference our successfully delivered work at the University of California at Berkeley, the Large University System, the University of Texas at Austin, Northeast R1 University, and Harvard University. We also highlight our success serving the Federal Government of Canada and our partner qualifications serving the University of Northern Iowa and the Chabot Las Positas Community College District. These representative qualifications are relevant to the experience requested by the Board and are examples of how we have made a powerful impact on the clients we serve. Additional detailed write-ups of our work with other higher education/public sector clients can be found in Appendix 0:

### Design and Implementation of Administrative Service Centers for Finance, Human Resources, Information Technology, and Research Administration: University of California, Berkeley

#### The Client

The University of California, Berkeley is a public research university located in Berkeley, California. It is the oldest institution in the UC system and offers approximately 350 undergraduate and graduate degree programs in a wide range of disciplines for its nearly 36,000 students. In 2013, the University’s endowment reached \$3.33B.

#### Related Key Capabilities

- Organizational and Operational Assessment
- Cost Reduction Opportunities
- Implementation Roadmap

#### Challenge

With diminishing support from the State of California, the University of California system has begun implementing a series of projects under the Working Smarter Initiative to reduce administrative costs and streamline operations. Following the guiding principle, UC Berkeley plans to offer better service, improve accuracy, minimize duplication of effort and reduce costs through the Campus Shared Services initiative. Deloitte was engaged to help the client launch the first phases of Finance, HR, IT, and Research Administration administrative service centers.

#### Scope of Engagement and Approach

- Created an integrated plan outlining major milestones across multiple work threads
- Developed detailed organizational design with sizing recommendations
- Outlined job profiles and staffing plans to prepare for hiring
- Developed training plan for all campus Shared Services employees
- Updated detailed change and communication plan addressing entire campus population
- Created and updated process guides and playbooks
- Defined Key Performance Indicators (KPIs) for service center staff
- Revamped the project plan and defined scope for enabling technologies and infrastructure
- Planned and conducted dry-run to test end-to-end processes and handoffs between Shared Services and other campus units

## Design and Implementation of Administrative Service Centers for Finance, Human Resources, Information Technology, and Research Administration: University of California, Berkeley

### Key Objectives Achieved

UC Berkeley released the following video about the Campus Shared Services program. We encourage you to take a moment to view the video to understand the impact of this transformation initiative:

<http://www.youtube.com/watch?v=4Qlh9pukl5M&feature=youtu.be>

- Implemented an overall work plan to meet aggressive timelines and re-focus limited resources on the most important activities
- Developed an approach to define the scope of services for day-1 and gained consensus with leadership
- Created an organizational design and sizing based on industry experience, client data and surveys
- Developed a communications plan to aide in consensus building and smooth implementation of the new department
- Used the framework to organize and develop incident, service request, problem and knowledge management processes
- Planned and executed a dry-run of processes and activities for testing and training

## Comprehensive IT Assessment: Large University System

### The Client

Large University System is one of the largest systems of higher education in the nation, with a budget of \$3.5 billion and 22 individual System Members spread across the State [REDACTED]. The System educates more than 120,000 students and makes more than 22 million additional educational contacts through service and outreach programs each year.

### Related Key Capabilities

- Organizational and Operational Assessment
- Cost Reduction Opportunities
- Organizational Engagement
- Business Case Development
- Implementation Roadmap

### Challenge

Chancellor **John Sharp's** announcement to the **TAMUS** community stated: "IT is a daily part of our lives in this technology age, so we need to ensure that our IT groups throughout the system are where we need to be..."

That is why we have taken this step to look for recommendations on how to most effectively and efficiently deliver IT services to our constituents, today and in the future."

### Scope of Engagement and Approach

The Comprehensive IT Assessment project followed Deloitte's IT Transformation methodology and approach, including a current state analysis, future state recommendations, gap analysis, and implementation roadmap for IT across all 22 System Members. The IT Assessment included analysis and resulting recommendations related to Governance, Security, Network and Infrastructure, Applications, Operations, Demand and Project Management, and Staffing and Support.

The project was divided into two parts and entailed a comprehensive current state analysis that included:

- 82 initial interviews, including 72 in-person and 10 video-conference interviews with 138 System stakeholders
- An additional 8 group interview sessions conducted with in-scope application functional users and administrators during the IT Applications phase

## Comprehensive IT Assessment: Large University System

- 238 questionnaire responses from key executive and technical stakeholders across each of the 22 System Members addressing current state data requests from each of the seven (7) phases of the IT Assessment

From the data collected and a review of leading IT practices across a range of comparable public and private sector organizations, a set of 29 recommendations were identified and put forth to TAMUS project leadership.

### Key Objectives Achieved

- The 29 recommendations identified could result in potential annual savings of approximately \$54 million as part of an IT Transformation program to move key IT services to a more central service delivery model
- The integrated roadmap delivered to guide the System through the implementation of the 29 recommendations will allow the System to implement the full set of recommendations as an integrated IT Transformation Program, or to select top priority items and move forward with these with an understanding of the interdependencies with other recommendations

## Administrative Systems Master Plan: University of Texas at Austin

### The Client

With over 50,000 students and 21,000 faculty and staff, the University of Texas at Austin is one of the largest public universities in the US. Information technology is delivered through a combination of centralized services provided by a central IT organization plus decentralized services provided by multiple departmental IT organizations.

### Related Key Capabilities

- Implementation Roadmap

### Challenge

With a portfolio of administrative systems dominated by legacy, “home-grown” applications, UT Austin is challenged to meet the needs and expectations of the 21<sup>st</sup> century faculty, students and staff. The University sought Deloitte’s advisory support in the development of a 10-yr Master Plan for campus-wide administrative systems, a plan that aligns resources and investments with the University’s mission and goals. The Master Plan will serve as a roadmap for the work ahead and will encourage coordination and collaboration between business areas.

### Scope of Engagement and Approach

The project was led by a coordinating group which oversaw and integrated the efforts of eight working groups that focused on topics encompassed in the Master Plan. Deloitte provided advisory support, including the planning and design of work products, research and subject matter specialist advice, peer institution benchmarking, vendor/product analysis, and organization of the content into deliverables for integration into the overall Master Plan.

### Key Objectives Achieved

- The primary deliverables were recommendations for the Master Plan and actionable steps to allow administrative systems, related business processes, and support functions to provide cost effective solutions for campus while addressing significant industry trends and local challenges with the current legacy systems.

## Cost Reduction, Shared Services and Performance Improvement: Northeast R1 University

### The Client

Northeast R1 University is a private research university located in [REDACTED]. The University consists of eight principal academic schools on three campuses and has an endowment exceeding \$1B. The campus community has close to 11,000 students, 1,300 faculty, and more than 3,000 staff.

### Related Key Capabilities

- Organizational and Operational Assessment
- Cost Reduction Opportunities
- Organizational Engagement
- Business Case Development
- Implementation Roadmap

### Challenge

Recognizing imminent higher education challenges, including concerns about costs of education and financial aid, an uncertain return on endowment, and a difficult environment for research funding and philanthropy, Northeast R1 University took positive action to ensure that administrative functions were structured to support the University's core mission of teaching, research, and impact on society. The Project was established to identify and assess improvement opportunities across the University, with guiding principles to create greater operational efficiencies to allow for reinvestment in the University mission, enhance service quality through implementation of cost effective best practices, and create clear accountability and authority for efficient decision making

### Scope of Engagement and Approach

- Assessed opportunities across all areas of administrative services, including Advancement, Finance, HR, IT, Operations, Research Administration, and Sourcing & Procurement to improve administrative effectiveness and efficiency (except in labs, classrooms, and clinics)
- Performed an assessment across administrative operations to identify and prioritize improvement opportunities through analysis, interviews, and focus groups
- Created a catalogue of approximately 100 improvement opportunities
- Developed ten detailed business cases for potential implementation to realize cost savings, revenue generation, and operational efficiencies
- Developed high-level implementation roadmap
- Created future state organizational structures and processes assessing Shared Services and Outsourcing

### Key Objectives Achieved

- Identified opportunities to save \$18-\$34M annually
- Identified opportunities to increase revenue \$14-\$22M annually
- Increased financial efficiencies through cost containment
- Tackled administrative inefficiency to streamline roles and accountabilities so as to enable faculty and staff to execute their core job responsibilities
- Developed a new model to establish world class administrative services

## Library Transition and IT Transformation: Harvard University

### The Client

Harvard University is a private Ivy League research university in Cambridge, Massachusetts. Established in 1636, the University has the largest endowment in the US reaching close to \$30B in 2012. Over 7,200 students attend the University which contains 2,100 faculty members. The University library system contains one of the largest and most important collections in the world, totaling over 16 million volumes. The library system consists of 73 libraries, serving the entire undergraduate and graduate communities, as well as University faculty and numerous visiting scholars.

### Related Key Capabilities

- Organizational and Operational Assessment
- Cost Reduction Opportunities
- Business Case Development
- Implementation Roadmap

### Challenge

The Harvard University Library system has billions of dollars in assets and an unparalleled collection of physical and virtual materials that help to establish the client as a top choice for faculty, researchers and students from around the world. However, the client's vast collection is often difficult for scholars to access, and the Library increasingly struggles to effectively support innovation and collaboration as research and teaching became more interdisciplinary. This creates competitive pressures and threatens the University's ability to attract top talent.

At the time of the engagement, the Library was composed of more than 70 individual libraries, each operating autonomously. This decentralization led to disjointed decision making, fragmented processes and technologies, limited aggregate buying power, and minimal collaboration with peer institutions. Moreover, the client leadership estimated that the Library was outspending peer academic research libraries by 20%, mainly on administrative processes.

### Scope of Engagement and Approach

- Designed and implemented a Shared Services model for the Library's access services, technical services, and conservation, preservation and digitization services
- Supported the senior associate provost in developing and implementing the Library strategy
- Supported the client's CIO to identify the technology supports and design an implementation roadmap for the new Library organization
- Designed and implemented a Project Management Office to manage the ongoing transition

### Key Objectives Achieved

This change affected over 900 Library employees and touched every school and department across the University. As part of this project, Deloitte Consulting created business cases for improvement opportunities and strategic projects, and a corresponding implementation roadmap, designed the future Shared Services operating model and the IT operating model, assisted with detailed organizational design, and supported the transition to the new Library organization. Specific focus areas included Shared Services, Strategy, IT, and PMO. As a result of this project, the Library:

- Unified 73 libraries into 'One Library' and conducted a successful implementation
- Developed new Library Shared Services and Library IT operating models that are clear and flexible, and that prepare the client to stay ahead of emerging technologies
- Gained commitment to strategic projects to support innovation, digital scholarship, open access and next-gen technologies

## Federal Government Deficit Reduction: Federal Government of Canada

### The Client

The cost reduction engagement for the Government of Canada encompassed nearly 70 departments and agencies while examining \$91B in spending annually.

### Related Key Capabilities

- Organizational and Operational Assessment
- Cost Reduction Opportunities
- Organizational Engagement
- Business Case Development
- Implementation Roadmap

### Challenge

In 2011, facing a budget deficit, the Government of Canada launched a comprehensive Strategic and Operating Review across the entire Federal Government operations to return to a balanced federal budget by 2014-15. The review was focused on improving the efficiency and effectiveness of government and programs to ensure value for taxpayer money. This multi-billion dollar efficiency / cost reduction initiative was one of the largest of its kind in Canadian history. It was also known as the Deficit Reduction Action Plan (DRAP). In the context of increasing fiscal pressure and uncertainty, the federal government engaged Deloitte to assist with this strategic program. There was an emphasis on deriving savings from operating costs, within a three year time period. Expenditure reduction proposals were submitted by federal Ministers on behalf of departments and agencies, and they were reviewed by both the Treasury Board Secretariat (TBS) and Deloitte, and then assessed by the Strategic and Operating Review Committee, chaired by the President of the Treasury Board.

### Scope of Engagement and Approach

- Supported the review process by advising on private and public sector best practices to create lean processes for operations and administration
- Advised the Cabinet-level Strategic and Operational Review Committee and reviewed more than 70 agencies
- Assisted individual Ministers and senior executives in assessing cost reduction proposals for their respective departments and agencies, with additional streams of activities looking at 'horizontal' opportunities
- Collected and analyzed financial information and summarized and presented key findings.
- Conducted comparative analysis and assessment of programs and initiatives

### Key Objectives Achieved

The Government of Canada and Deloitte worked collaboratively to apply analytics to 70 government agencies organizations to save \$5.2 billion for the resulting budget that passed. Deloitte's team provided independent analysis and an independent voice in evaluating the proposals which included:

- Assisting selected departments with the development of efficiency proposals
- Establishing an analytical framework to review proposals that leverages Canadian and international private sector and government advisory experience and best practices
- Identifying the best cost reduction actions that are achievable in the short term and sustainable over time
- Helping the government improve cost reduction decision-making and governance structure necessary to capture identified opportunities

## Strategic Cost Management Model: Chabot-Las Positas Community College District

### The Client

Chabot-Las Positas Community College District (CLPCCD), serves the San Francisco East Bay Area through its two Colleges: Chabot College and Las Positas College. The District specializes in university transfer, technical training, continuing education, workforce development, contract education with local businesses, and cultural enrichment. The District serves nearly 22,000 students and employs more than 1,200 administrators, faculty, and classified staff

### Related Key Capabilities

- Operational and Organizational Assessment
- Cost Reduction Opportunities
- Revenue Generation Opportunities
- Organizational Engagement

### Challenge

KH was originally retained to assist Las Positas College in its Educational Master Plan and design of a new organizational and staffing configuration to support the Plan. In addition, KH ensured linkage to the Facilities Master Plan, made possible through a District-wide \$500-million bond for the transformation of the two colleges. While KH was working with Las Positas, the Chancellor realized that the District was facing hard fiscal times in light of pending changes in State funding and that KH's assistance in helping the two colleges to collaborate and leverage their resources would be beneficial.

### Scope of Engagement and Approach

- Developed a Strategic Cost Management model that could be used in both academic and administrative areas. KH applied the Strategic Cost Management Model to address a \$20-million gap at San Francisco City College (with an enrollment of 80,000 students); the gap was closed and no programs were terminated, no campuses were closed, and no students were turned away. The model was applied to academic, student services, and administrative areas at the District Office and the two colleges.
- Worked with CLPCCD to address their pending financial shortfall by applying KH tools to its situation. KH's Strategic Cost Management Model involves engaging faculty, administrators, and staff in developing short- and long-term strategies to enhance revenues, contain costs, and collaborate and share resources as appropriate while still achieving desired student learning outcomes.
- Worked closely with CLPCCD faculty and staff to adopt a strategic approach to cost management, as well as revisit and refocus their missions.
- Helped CLPCCD to look outside of its institutional boundaries to assess the strategic importance of its programs, facilities, and community service offerings in the broader context of the community

### Key Objectives Achieved

In total, more than 750 ideas were generated with the potential of \$4.2 million in new revenues and \$12.6 million in cost reductions. These ideas allowed the District to revitalize their operations and the Colleges to refocus their programs and better serve their community needs overall.

## Academic Scheduling Efficiency & Effectiveness Assessment & Academic Scheduling Optimization: University of Northern Iowa

### The Client

The University offers courses covering a broad spectrum of curriculum on both the undergraduate and graduate level. Fall 2013 headcount enrollment at the University is 12,159 students.

2010-2015 strategic goals with accountability, affordability and accessibility themes:

- Implementing processes to consistently collect, share and utilize data for continuous improvement
- Implementing process improvement strategies across all university units
- Developing processes that manage the most effective and efficient utilization of facilities
- Improving student retention among student groups with the greatest need
- Increasing four-year graduation rates

### Key Related Capabilities

- Organizational and Operational Assessment
- Cost Reduction Opportunities

### Challenge

- Need to support enrollment growth with existing academic resources (faculty and space) which are already perceived to be scarce following five year annual enrollment growth of 2%.
- Visibility of academic space utilization and capacity bottlenecks (e.g., multimedia rooms, especially during TR morning meeting patterns) created by inefficient scheduling practices
- Existing scheduling processes lacked the institution-wide context needed to be measured and managed in a way that graduates students in a timely manner and maximizes the institution's contribution to an educated workforce

### Scope of Engagement and Approach (2010)

- Benchmark existing scheduling effectiveness of each academic department related to course offerings supply versus student demand
- Benchmark facility allocation using proprietary indicators of performance
- Quantify existing capacity in academic instructional space
- Recommended strategies to improve capacity focused on the mitigation of existing bottlenecks
- Presented performance indicators with peer comparison and related opportunities for improvement

### Key Objectives Achieved

- Established the overall efficiency of client's course offerings at 80.00% (27.11 average census enrollment v. 33.89 average enrollment capacity per section) in the Fall 2010 term
  - This efficiency level was slightly above the industry mean of 76.31% (placing the client in the 61<sup>st</sup> percentile) and the like institution mean of 78.62%
  - Only 36.56% of the courses offered (397 of the 1,086 courses) were "balanced" with student demand (between 70 and 95% full at census date)
  - There was still considerable opportunity remaining to improve to the goal utilization of 85% (which is 77<sup>th</sup> percentile)
  - Applying a \$2,000 per section adjunct instructional rate, improving to 85% course fill rate by reducing the number of net offerings by 116 would yield an instructional cost savings of \$232,000 per major academic term
  - Reduction Candidates (additional offerings of courses that are not statistically needed to meet student demand) amounted to 8.72% of the total offerings (172 of the 1,973 offerings)
  - Elimination Candidates (boutique courses with on offering and very low demand) accounted for 11.45% of the schedule (226 offerings)
- Identified significant pent up demand for other courses in the Fall 2010 schedule
  - Addition Candidates (additional sections needed in overfilled courses) amounted to 10.94% of the schedule (172 sections)

**Academic Scheduling Efficiency & Effectiveness Assessment &  
Academic Scheduling Optimization:  
University of Northern Iowa**

- 262 of the 1,086 courses were overfilled (> 95% enrolled at census date)
  - Established classroom utilization in the Fall 2009 term of the hours during client's standard scheduling week as 45.26% v. industry mean of 47.97% (placing the client in the 41<sup>st</sup> percentile) and the like institution mean of 50.60%
    - Identified a significant issue in the seat fill of classrooms at 52.56% v. industry mean of 62.08% (placing the client in the 10<sup>th</sup> percentile) and the like institution mean of 61.96%, along with a software implementation solution to improve fill ratios
    - Quantified "off-grid" classroom meeting pattern assignments during primetime at 34.38%, and the related capacity waste at 8.84%
    - Identified multi-media bottleneck in a subset of classrooms causing bottlenecking
    - Outlined capacity improving strategies that, cumulatively, could add up to 31.59% new usable classroom capacity, which could support enrolment growth of up to 3,841 additional students)
  - Implementation of these strategies would save the client \$8.45M in construction costs and building maintenance over 10 years v. new construction to support this level of enrolment growth
- 

## 4.B Our Proposed Team

We strongly recommend the Board select an experienced team of seasoned professionals with the right mix of skills to help position the Board for a successful outcome at the end of the engagement. The Deloitte Team assembled for this program possesses the right knowledge, experience, and dedication necessary to work with you collaboratively and guide you through the complex decisions needed to bring about a successful outcome for the engagement.

We have compiled a team of professionals that have a proven track record of success in assessing the needs of higher education institutions and deep experience in taking cost reduction strategies off-paper to deliver tangible results. The Deloitte Core Team identified for this engagement possess a combined functional depth and breadth of experience in administrative and academic operations at higher education institutions that allow them to assess the needs of the Board, identify solutions, and execute the chosen strategies through a collaborative approach that has been proven in the University environment. Our chosen Subject Matter Advisors (SMAs) have years of experience working in their selected fields and will provide the Board and the Deloitte Core Team with direction and advice based on their deep knowledge and experience. Combined, the Deloitte Team brings the Board the best combination of knowledge, experience, and capabilities needed to bring about success.

In addition to the Deloitte resources, we have engaged resources from KH Consulting Group (KH) and Ad Astra to further build upon the existing experience and capabilities of the Deloitte Team. Ad Astra builds upon Deloitte's existing assessment experience by providing their own specialized research and analysis capabilities proven in university environments. KH Consulting Group's workable approach to transformation in academic and university environments and adapts Deloitte's own transformation experience. Working as one cohesive team, the combined unit will have an even deeper knowledge and know-how in the data analytics and university system-focused change necessary to fulfil the Board's request. Below is a short overview of KH Consulting Group and Ad Astra.

### *KH Consulting Group*

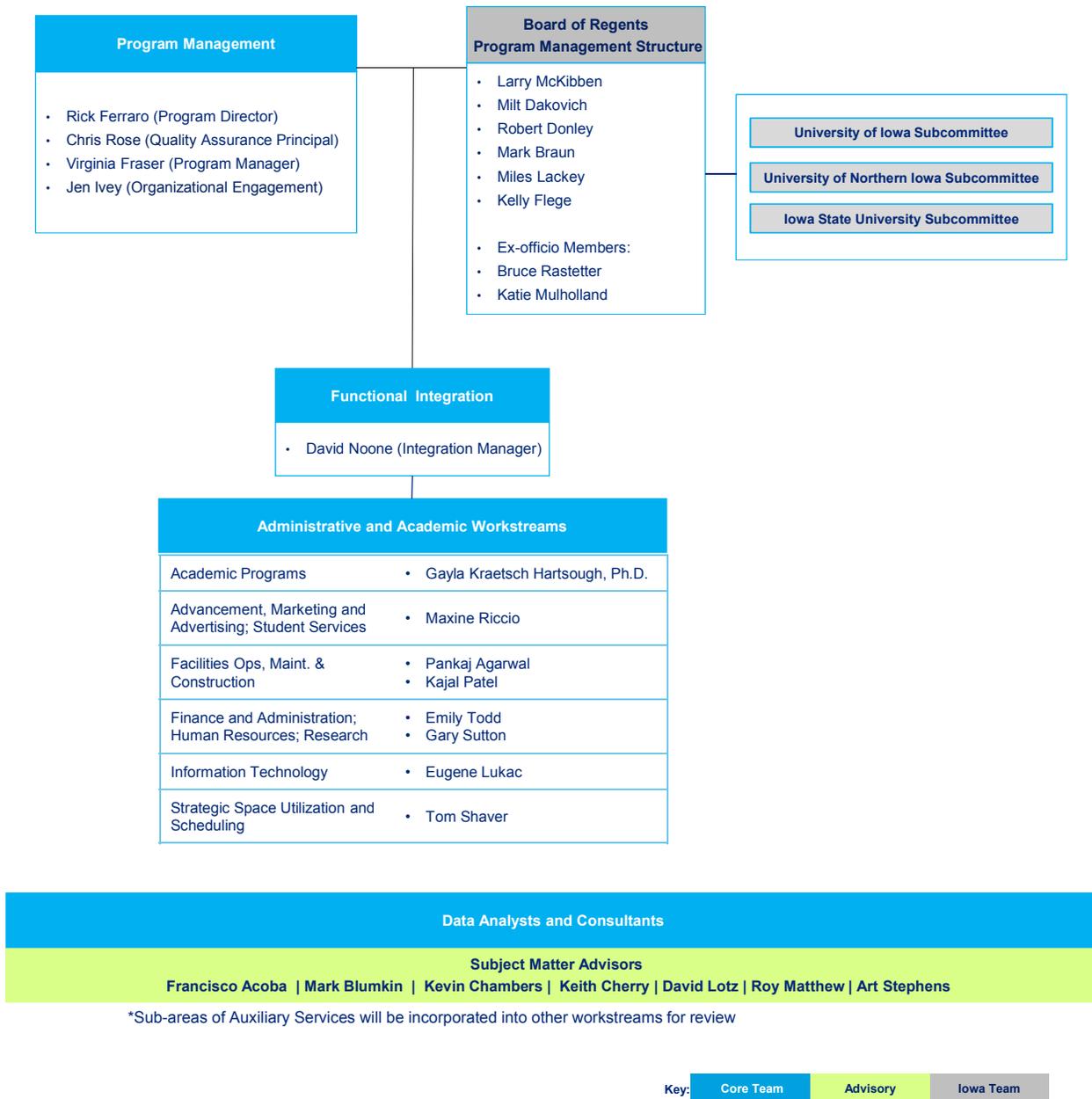
KH Consulting Group (KH) is a recognized leader in conducting higher-education assessments that measure the efficiency with which universities and colleges deliver their academic programs. KH has served more than 200 clients and performed consulting studies in 25 states and 7 foreign countries. As a management consulting firm, KH offers services in strategic planning, organizational structures, process reengineering, human resources, management audits and performance reviews, program evaluation, and accountability and performance measurements. KH's President has served more than 80 colleges and universities, which have included large and small 4-year institutions. Among KH's higher education clients are Northwestern University; University of California at Los Angeles (UCLA); California State University System; Eastern New Mexico University; Florida A&M University; Howard University, Medical School and Dental School; University of Nevada Las Vegas; University of Southern California; University of the Pacific; and Xavier University. Their Strategic Cost Management Model has been applied to colleges and universities where it has improved faculty productivity, revenue generation and student learning outcomes.

### *Ad Astra*

Since 1996, Ad Astra has provided more than 800 colleges their course offering management software, including Iowa State University and the University of Northern Iowa. This tool, as well as the management insight derived from numerous client engagements gives the team the ability to conduct student-specific course demand analysis, historical analysis of course demand and student availability, and develop high-impact schedule optimization opportunities.

## **Our Proposed Team Structure – Organizational Chart & Roles**

The following graphic depicts the Core Team and Subject Matter Advisor (SMA) staffing model we propose for this effort to meet the requirements of the Board. This model includes the Deloitte Team, Board, and University resources that will be required to successfully complete the scope of work as requested in the RFP. The Deloitte Team resources we selected to deliver this engagement are handpicked to meet the specific needs of the Board, the Universities, and this program.



**Figure 5: Proposed Phase One and Two Organizational Structure**

The above organizational structure for this program reflects various levels of the Deloitte Team resources:

The Core Team members bring the necessary skill sets in the areas of program management and execution needed to deliver success. The Core Team is comprised of four teams: Program Management, Program Integration, Functional Areas, and Data Analysts and Consultants.

The **Program Management** team consists of Engagement Leadership, the Program Manager, and the Organizational Engagement Lead. These individuals will be the main points of contact for the Board and their stakeholders. In charge of the overall engagement, their specific roles are detailed below:

- The engagement senior leadership team consists of Rick Ferraro and Chris Rose, who have a proven track record of success with large, complex, organization assessments, administrative transformation, and strategic sourcing projects within higher education, the public sector, and the commercial sector, across the skill dimensions identified above. Relying on over 20 years of experience, Rick and Chris will help jump-start the strategy for the engagement, and to keep involved along the way to share lessons learned and key inputs. They will provide valuable insight and guidance and will participate in key meetings, visioning sessions, and strategic planning sessions with the Board team throughout the program.
- As Program Manager, Virginia Fraser can be relied upon to work directly with Board and University stakeholders to develop the approach and program plan, and facilitate key meetings. Relying on her over fifteen years of program management experience, Virginia will also oversee the activities of the program integration and functional teams, as well as oversee day-to-day program management activities. Virginia will work closely with the University's program participants to maintain alignment on the direction of the work and final products.
- Employed as the Organizational Engagement Lead, Jen Ivey will provide strategic and tactical advice and services as needed across the work. Working with engagement leadership, Jen will conduct and monitor the organizational diagnostic survey and facilitate key sessions. Jen will also advise all functional teams on stakeholder engagement and working specifically with the Human Resources to provide guidance based on her experience.
- The Program Integration Manager will be responsible for coordinating activities across each of the functional teams. Specifically, the Manager will work to identify key challenges and opportunities that exist across and within the functional teams. They can be counted on to attend key interviews and sessions across the academic and administrative services functional areas, to structure common deliverables from each of the functional teams, and hold a birds-eye view of the engagement's progress.

**Functional Teams** focused on both administrative services and academic programs will conduct the efficiency and transformation review at both the system and University levels for the areas identified in the RFP. Each functional team will be led by a manager and at least one Subject Matter Advisor with deep experience in that functional area. These Subject Matter Advisors are considered industry game changers in their respective domains and have worked with leadership teams across various higher education, public, and private sector organizations. Each functional team will conduct an assessment for each university as well as a system-wide assessment, all while coordinating with the engagement core team to maintain efficient operations, consistency, and cross-sharing of opportunities across the engagement.

The **Data Analysts and Consultants** are the specialists supporting the Functional Teams by analyzing the current state data across and within the Universities. They will assist in identifying key pain points and cost cutting and revenue generating opportunities, as well as assisting in the development of business cases for identified opportunities.

A group of **Subject Matter Advisors**, highly experienced in their respective fields, will be employed in an advisory capacity. These individuals will be engaged at key points throughout the program to provide targeted insight based on their experience across the functional areas.

Our proposed organizational structure also depicts that we will work closely with key Board and University-level stakeholders to gain insights from their perspectives and assess our approach over the duration of the program:

- As defined in the RFP and in the Question and Answer document provided by the Board, the **Board of Regents Program Management Structure** will consist of representatives from the Board of Regents and each University. This group will meet with Deloitte Leadership on a frequent basis to assess vision, objectives, and approach of the program, as well as help address issues and risks in a timely fashion. It is expected that the Board will identify at least one individual to work closely with the Deloitte Team's Program Manager on a daily basis to review and refine the program plan, help manage activities and deliverables from the Board's perspective, help resolve issues and risks in a timely manner, and help the Deloitte Team navigate through the University environment.
- **The University Subcommittees** will consist of a group of individuals from each University specializing in the in-scope functional areas. These individuals will be engaged at various points throughout the program to assist with data collection and validation and to provide context and understanding of each University's specific operating environment.

### Our Team's Experience and Skills

We understand that assembling the appropriate program team is as important as identifying a successful program plan. Creating the framework necessary to meet the specific needs of the Board's goals of achieving additional fund reductions and allocations, as presented above, will take a deeply-experienced cross-functional team of practitioners. With this in mind we present a team tailored to the specific needs of the Board, with deep experience in assisting other higher educational institutions and large organizations perform projects of similar size and complexity and the skill sets required to deliver on the scope of work requested by the Board. Further, we will leverage the knowledge and skills of our subcontractors to bring a team with capabilities across specialized areas that will result in immediate value to Iowa.

The table on the following page aligns the skills and capabilities of each core team member, Functional Lead, and Subject Matter Advisor to those that we believe are crucial to the success of the engagement. We focused on individuals with the skills and capabilities required to not only identify the challenges and opportunities that exist, but who also hold the ability to build business cases for and execute on the strategies needed to drive success. This matrix illustrates that our assembled team has the capabilities and relevant experiences necessary to fully achieve the goals of the program in a timely and effective manner.

		Scope Areas																					
Role		Tenure (Yrs)	Organizational and Operational Assessment	Cost reduction/service improvement opportunities/recommendations	Business Case Development	Communications and Change Management	Implementation Roadmap	Solution Implementation	Human Resources	Student Services/Academic Support Programs	Marketing & Advertising	Information Technology	Finance and Administration	Academic Programs	Research	Facilities Ops, Maintenance, Construction	Strategic Sourcing and Procurement	Academic Curriculum and Faculty Deployment	Auxiliary Services	Revenue Generation	Space Utilization and Scheduling	Shared Services	
<b>Program Management Team</b>																							
<b>Rick Ferraro</b>	Program Director	9	X	X	X	X	X	X	X		X		X			X	X		X	X		X	
<b>Chris Rose</b>	Quality Assurance Principal	10	X	X	X	X	X	X	X			X	X				X			X		X	
<b>Virginia Fraser</b>	Program Manager	10	X	X	X	X	X	X	X			X	X		X						X		X
<b>Jen Ivey</b>	Org Engagement Manager	7	X	X	X	X	X	X	X			X											X
<b>David Noone</b>	Program Integration Manager	7	X	X	X	X	X	X	X			X	X		X								X
<b>Functional Area Team Leads</b>																							
<b>Maxine Riccio</b>	Advancement, Marketing & Advertising, and Student Services	2								X		X		X					X				
<b>Pankaj Agarwal</b>	Facilities Ops, Maint., & Construction	10	X	X	X		X	X								X			X		X	X	
<b>Kajal Patel</b>	Facilities Ops, Maint., & Construction	2	X	X		X	X	X								X			X		X		
<b>Emily Todd</b>	Finance and Human Resources	2	X	X	X		X		X				X		X								X
<b>Gary Sutton</b>	Sourcing & Procurement	1.5	X	X	X		X	X							X		X						

		Scope Areas																					
	Role	Tenure (Yrs)	Organizational and Operational Assessment	Cost reduction/service improvement opportunities/recommendations	Business Case Development	Communications and Change Management	Implementation Roadmap	Solution Implementation	Human Resources	Student Services/Academic Support Programs	Marketing & Advertising	Information Technology	Finance and Administration	Academic Programs	Research	Facilities Ops, Maintenance, Construction	Strategic Sourcing and Procurement	Academic Curriculum and Faculty Deployment	Auxiliary Services	Revenue Generation	Space Utilization and Scheduling	Shared Services	
<b>Eugene Lukac</b>	Information Technology	7	X	X	X	X	X					X						X				X	
<b>Gayla Kraetsch Hartsough</b>	Academic Programs	27	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X
<b>Tom Shaver</b>	Strategic Space Utilization & Scheduling	18	X	X	X	X	X	X						X		X						X	
<b>Francisco Acoba</b>	Facilities	9	X	X	X		X	X								X					X	X	
<b>Mark Blumkin</b>	Capital Projects & Construction	11.5	X	X	X		X	X								X	X			X	X		
<b>Kevin Chambers</b>	Sourcing & Procurement	15	X	X	X	X	X	X	X			X	X		X	X	X						
<b>Keith Cherry</b>	Organizational Engagement	7	X		X	X	X	X	X		X	X			X								X
<b>David Lotz</b>	Advancement & Student Services	3	X	X	X	X		X		X	X									X			
<b>Roy Matthew</b>	Information Technology	15	X	X	X	X	X	X	X			X	X	X	X		X			X			X
<b>Art Stephens</b>	Statewide Higher Education System	7	X	X	X	X	X	X	X			X	X				X						X

**Table 6. Team Capabilities and Relevant Experience**

## Board of Regents, State of Iowa Team

The table below provides the experience and qualifications of the Deloitte Core Team and SMAs for Phases One and Two of the services requested in the Board's RFP. Detailed resumes of each Core Team member can be found in Appendix 11.C.

Program Management Team	Experience and Qualifications
 <p><b>Rick Ferraro</b> Engagement Director</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>Over 30 years' enterprise cost management experience, including working with Higher Education</li> <li>Recently led the realization of \$5.2B in savings for the Government of Canada</li> </ul>	<ul style="list-style-type: none"> <li>Rick is a Director in Deloitte Consulting's Strategy &amp; Operations Business Model Transformation practice. Rick leads the Public Sector and Higher Education Enterprise Cost Management portion of that practice. He has led or supported over 40 transformations of large organizations across the private, public, and non-profit sectors.</li> <li>Rick guides teams in evaluating their existing service delivery model, organizational capabilities, and improvement potentials across many functional areas, including Finance, Human Resources, IT, Procurement, Public Affairs, and Research and Development.</li> <li>Recently, Rick led the Government of Canada Cost Reduction project, which encompassed nearly 70 departments and producing \$5.2B in savings. Other clients he has served include: Brandeis University, Johns Hopkins University, Northeast R1 University, United Technologies Corporation, and the US Postal Service.</li> </ul>
 <p><b>Christopher Rose</b> Quality Assurance Principal</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>Over 30 years' enterprise cost management experience, including working with Higher Education</li> <li>Recently led the realization of \$5.2B in savings for the Government of Canada</li> </ul>	<ul style="list-style-type: none"> <li>Chris is a Principal at Deloitte Consulting with over 20 years of industry and consulting experience. Chris has supported more than 70 engagements, providing deep experience in operational systems, organizational strategy, finance transformation, and enterprise cost management.</li> <li>Chris has led and supported numerous cost reduction, organizational redesign, and shared services assessments and implementations for complex, multi-billion dollar operations within departments of the US Federal government, as well as the Governments of Columbia and Canada.</li> <li>Most recently, Chris supported a major back office function of the Department of the Army to restructure their 11,000-person, 106-location operation into a more efficient service delivery model which included the use of regional shared service centers.</li> </ul>
 <p><b>Virginia Fraser</b> Program Manager</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>Over 15 years of program management experience.</li> <li>Over 10 years of experience in Business Process Redesign, business transformation, performance improvement, and operating model transformation</li> <li>Worked at Carnegie Mellon University for seven years prior to joining Deloitte</li> </ul>	<ul style="list-style-type: none"> <li>Virginia is a seasoned Senior Manager with a well-rounded background in consulting for both Higher Education and State Government clients. She has over 15 years of experience managing large, complex programs, and over 10 years of experience in Business Process Redesign and Business Transformation for large organizations.</li> <li>Virginia has a wide variety of skills in performance improvement and operating model transformation from strategy development through implementation. She has experience in Shared Services and Cost Reduction strategy and implementation, systems implementation, and IT governance.</li> <li>Recently, Virginia led a business transformation project at Northeast R1 University where she analyzed cost reduction and delivery improvement opportunities across all university administrative services (e.g., Finance, Human Resources, IT, Communications, Operations), resulting in ~\$25M potential annual cost savings. Other Higher Education clients include: Harvard University, Yale University, and the University of Rochester.</li> </ul>

Program Management Team		Experience and Qualifications
 <p><b>Jen Ivey</b> Organizational Engagement &amp; Change Management Manager</p>	<ul style="list-style-type: none"> <li>Jennifer (Jen) Ivey is a Human Capital Manager and a member of the Organizational Transformation practice at Deloitte Consulting. She has over 15 years of experience in Public Sector and consulting, focusing on organizational engagement, change management, learning and development, and strategic communications.</li> <li>Jen is uniquely skilled at creating targeted and innovative implementation and change management solutions for new processes, organizational structures, technology solutions, and leadership initiatives that succeed under the unique constraints that exist in a public sector environment.</li> <li>Most recently, Jen led and supported a comprehensive organizational assessment of the 45,000 executive department employees of the Commonwealth of Massachusetts Human Resource Department, which led to the creation of a 5-year project roadmap to support employee success in the Commonwealth.</li> </ul>	
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>Over 15 years of experience in creating and implementing change management solutions for new processes, organizational structures, technology solutions, and leadership initiatives in the public sector</li> </ul>		
 <p><b>David Noone</b> Program Integration Manager</p>	<ul style="list-style-type: none"> <li>Dave has over 11 years of experience improving processes, reducing costs, defining and improving service delivery models, and leading effective program management activities.</li> <li>Dave has strong experience leading assessments of administrative services and processes within Universities in areas including: Finance, Human Resources, Communications, Administrative Support, Libraries, and Research Administration.</li> <li>Most recently, Dave acted as the project manager for an engagement with Northeast R1 University, where he was responsible for managing multiple workstreams developing a university-wide shared services design</li> </ul>	
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>Over 11 years consulting experience with higher education and government in the areas of process improvement, cost reduction, and program management</li> <li>Cross-functional experience working with multiple functional areas of top-tier universities</li> </ul>		

Functional Team Leads	Experience & Qualifications
 <p><b>Gayla Kraetsch Hartsough, Ph.D.</b> Academic Programs Functional Lead</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• More than 35 years' experience in higher education, as well as the public and private sectors</li> <li>• Has worked on university-wide projects and multi-campus projects requiring strategic changes.</li> </ul>	<ul style="list-style-type: none"> <li>• Gayla has been President of KH Consulting Group (KH) since 1986. KH specializes in strategic planning, organizational design and restructuring, marketing, human resources, information systems, and business process reengineering</li> <li>• She has extensive expertise in higher education, having served more than 80 colleges and universities, involving educational master planning, organization change, strategic planning, service delivery, and stakeholder buy-in, particularly faculty.</li> <li>• She is the chief architect of KH's Strategic Cost Management model and has applied it to academic programs at more than 10 institutions as a means to improve revenue generation, faculty productivity, and student learning outcomes.</li> <li>• She is an adjunct faculty member at the University of Southern California (USC), Sol Price School of Public Policy, and has been a Guest Lecturer for the executive training program for Shenzhen, China, and Indonesia since 2010.</li> </ul>
 <p><b>Maxine Riccio</b> Advancement, Marketing and Advertising; Student Services Functional Lead</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• Industry experience working in higher education administration for a liberal arts college</li> </ul>	<ul style="list-style-type: none"> <li>• Maxine is a Strategy and Operations Consultant for Public Sector and Health Care and Life Sciences. She has client service experience in business process analysis, project management, training development and implementation, and organizational visioning.</li> <li>• Maxine has training in organizational design and change, financial analysis, optimization theory and modeling, project management, and business process modeling.</li> <li>• Prior to joining Deloitte, Maxine gained three years of experience in strategic planning, social impact measurement, and statistical and regression analysis.</li> </ul>
 <p><b>Pankaj Agarwal</b> Facilities Operations, Maintenance. &amp; Construction Functional Co-Lead</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• 15 years of experience in providing facilities management consulting for a variety of private and public companies</li> </ul>	<ul style="list-style-type: none"> <li>• Pankaj Agarwal is a Senior Manager at Deloitte Consulting that specializes in outsourcing and performance improvement. He is a leader in Deloitte's Real Estate &amp; Location Strategy Practice with significant experience in facilities management.</li> <li>• Pankaj's specific experience includes determining opportunities for improvement, building strong business cases for change, improving processes and developing performance measurement and management frameworks and scorecards. He has end-to-end outsourcing experience from analysis to business case development to service provider selection and establishing governance processes.</li> </ul>
 <p><b>Kajal Patel</b> Facilities Operations, Maintenance. &amp; Construction Functional Co-Lead</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• Experience in construction cost assessments and internal controls analysis for higher education, public, and private sectors</li> </ul>	<ul style="list-style-type: none"> <li>• Kajal is a senior associate in Deloitte's Engineering and Construction Consulting with experience in construction cost assessments, internal controls analysis and strategy development, forensic investigations, fraud awareness, real estate valuation, and construction benchmarking analysis</li> <li>• Kajal has an understanding of capital project programs and processes, with experience in project management oversight, insurance reconciliations, risk assessments, and closeout.</li> </ul>

	<p><b>Emily Todd</b> Finance and Administration; Human Resources; Research Functional Co-Lead</p>	<ul style="list-style-type: none"> <li>Emily Todd is a senior consultant with Deloitte's Strategy and Operations practice with broad consulting experience in international strategy, business modeling and process redesign for healthcare and higher education institutions.</li> <li>Her background includes helping US-based academic medical centers and health governance organizations develop and implement international strategies, as well as assisting foreign healthcare institutions adopt US standards of excellence.</li> <li>Emily has also worked in higher education, focusing mostly on budget process redesign and operations improvement.</li> </ul>
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>Experience with operations improvement and process redesign for higher education institutions</li> </ul>		
	<p><b>Gary Sutton</b> Finance and Administration; Human Resources; Research Functional Co-Lead</p>	<ul style="list-style-type: none"> <li>Gary is a Specialist Leader at Deloitte Consulting with over 15 years of experience transforming sourcing and procurement organizations into high-performing operations. He has led and supported over 20 projects across multiple industries, including the Public Sector.</li> <li>Gary has conducted transformations in the following areas: technical and leadership capabilities, strategic and transactional processes, and organizational design. He also has significant experience with e-procurement technologies (e.g., e-sourcing, contract management).</li> <li>Gary has been a workstream lead at Northeast R1 University and Brandeis University, and conducted organizational maturity model and spend analyses as well as category sourcing at both universities.</li> </ul>
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>Specialist Leader with over 15 years of experience in transforming sourcing and procurement organizations within private and public sectors</li> </ul>		
	<p><b>Eugene Lukac, Ph.D.</b> Information Technology Functional Lead</p>	<ul style="list-style-type: none"> <li>Eugene Lukac, Ph.D. is a Specialist Leader in Technology Strategy &amp; Architecture with over 15 years of experience helping large clients align business and IT strategies, improve the business effectiveness of IT processes, and develop business cases for technology investments.</li> <li>Some of his recent projects include the identification of over \$300 million in IT savings for a large healthcare organization and the development of a business case for justifying \$250 million SAP investment</li> </ul>
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>More than 15 years experience working with clients to align their business and IT Strategies and improve effectiveness of IT Processes</li> </ul>		
	<p><b>Tom Shaver,</b> Strategic Space Utilization &amp; Scheduling Functional Lead</p>	<ul style="list-style-type: none"> <li>Tom Shaver is Founder and CEO of Ad Astra Information Systems, which he launched in 1996 to provide scheduling technology solutions for higher education institutions.</li> <li>Since 1996, Shaver has launched Ad Astra software at more than 800 college and university campuses to help them with their facilities scheduling, course offering management, event management, resource management and more.</li> <li>Shaver developed an innovative, capacity-based model for improved academic resource management and a student-centric model for course offering management. Today, this model establishes a framework and business justification for better management of academic resources on college and university campuses.</li> <li>Shaver recently received approval on a patent to protect Ad Astra's inventions in the scheduling software market including: student-specific course demand analysis, historical analysis of course demand and student availability, and high-impact schedule refinement.</li> </ul>
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>More than 20 years' experience in technology consulting for higher education institutions</li> <li>Specific work with state-wide institutions focused on efficient use of campus facilities</li> </ul>		

Subject Matter Advisors	Experience & Qualifications
 <p><b>Francisco Acoba</b> Facilities Subject Matter Advisor</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• More than 16 years' experience in facilities management transformation, performance benchmarking, restructuring, and cost reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Francisco is a director with Deloitte Consulting's Strategy &amp; Operations practice based in New York, New York. He has over sixteen years of experience providing management consulting services to corporate real estate and facilities management organizations in Commercial and Public sectors.</li> <li>• Francisco specializes in assessing operations and business processes, developing new service delivery models to optimize outsourcing/insourcing opportunities, and applying IT solutions to better support organizations' business strategies.</li> <li>• In Higher Education, Francisco has led an assessment of Harvard University's capital program, concentrating on process improvement, cost reduction, policy and procedure development, and performance management.</li> </ul>
 <p><b>Mark Blumkin</b> Capital Projects and Construction Subject Matter Advisor</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• Over 30 years of experience working with owners of capital projects, college and university facilities, and operations groups</li> <li>• Civil Engineer with MBA and deep consulting experience focusing on capital projects</li> </ul>	<ul style="list-style-type: none"> <li>• Mark is a Director in Deloitte's Financial Advisory Services Engineering &amp; Construction practice. He has over 30 years of experience advising major capital construction programs on strategy and execution issues related to efficient delivery of large capital projects.</li> <li>• Mark leads the firm's capital projects consulting services for higher education institutions, and has led over 25 engagements at public and private universities.</li> <li>• Recently, Mark led the Facilities and Operations workstream at Northeast R1 University focusing on maintenance processes, technology, and energy cost savings.</li> <li>• Additionally, Mark led a benchmarking engagement at Columbia University Medical Center focused on capital project processes and cost per square foot of various capital project types. He also led a process improvement and benchmarking engagement at the University of Michigan focused on leading practices in project development and execution.</li> </ul>
 <p><b>Kevin Chambers</b> Sourcing &amp; Procurement Subject Matter Advisor</p> <p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• Leads Deloitte's S&amp;O practice with over 20 years' experience in supply chain management and strategic sourcing</li> <li>• Experience in strategic planning and business process improvement</li> </ul>	<ul style="list-style-type: none"> <li>• Kevin is a Principal with Deloitte Consulting's Strategy &amp; Operations Federal practice.</li> <li>• Kevin is a certified Project Management Professional (PMP) with over 20 years of experience providing strategic business advice in supply chain management, strategy and operations, data warehousing, strategic planning, business process reengineering, workforce development, and logistics management.</li> <li>• Recently, Kevin oversaw the Purchasing and Supply Chain Management Immersion Education contract at the Department of Defense where he was responsible for program management, enterprise resource management, financial support, and client services. During the four year engagement, over 3,300 students attended the Immersion Education course at four sites located in Georgia, Ohio, Oklahoma, and Utah.</li> </ul>

	<p><b>Keith Cherry, Ph.D.</b> Organizational Engagement Subject Matter Advisor</p>	<ul style="list-style-type: none"> <li>• Keith Cherry, Ph.D. leads Deloitte's National Human Capital Industry Segments for Higher Education and Public Sector, has more than 20 years of experience as an advisor to complex transformational engagements.</li> <li>• Dr. Cherry has assisted numerous government agencies and universities with major organizational change initiatives and human capital programs, including designing and implementing new structures, streamlining administrative operations, and reengineering HR business processes.</li> <li>• He is currently conducting a leading edge benchmarking study of Talent Management practices of the Top 25 Universities in the country and he recently completed an assessment of Georgetown University's performance management program. Dr. Cherry has previously held teaching and research appointments at the University of South Florida and the George Washington University.</li> </ul>
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• More than 20 years of experience advising complex transformational engagements in higher education and public sector</li> <li>• Provided subject matter advising with both universities and government agencies on major organizational change initiatives</li> </ul>		
	<p><b>David Lotz</b> Advancement &amp; Student Services Subject Matter Advisor</p>	<ul style="list-style-type: none"> <li>• David is a Specialist Leader at Deloitte Consulting with 20+ years of experience in Advancement and strategic communications at higher education institutions.</li> <li>• Prior to Deloitte, David led the higher education practice for Convio, Inc., overseeing product direction, service, strategy and sales for the company's college and university clients and partners. In addition, David previously served as assistant dean for resource development at the UT Austin McCombs School of Business, as director of major gifts at the UCLA Anderson School of Management and as director of development for Baylor University.</li> <li>• David serves as a lead industry advisor to the Deloitte Global Benchmarking Center's Higher Education Benchmarking Study, and he also currently serves on the Council for Advancement and Support of Education (CASE) U.S. Industry Advisory Council.</li> </ul>
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• 20+ years in senior leadership roles at national universities</li> <li>• Knowledge and experience in strategic communications and change management at higher education institutions</li> </ul>		
	<p><b>Roy Mathew</b> Information Technology Subject Matter Advisor</p>	<ul style="list-style-type: none"> <li>• Roy is a Principal in Deloitte's Technology Strategy practice. He has extensive Higher Education experience as a program manager for large R1 University projects where he focuses on the design and implementation of operational efficiency and effectiveness.</li> <li>• Roy has deep knowledge and experience in implementing large transformation projects. His experiences include establishing effective governance structures, developing pricing and chargeback models, managing organizational and workforce development changes, and establishing change management programs.</li> <li>• Roy recently led operational improvement and strategic performance management engagements at the University of California Berkeley and Northeast R1 University.</li> </ul>
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• Extensive experience in change management, operational efficiency, and implementing large transformation projects</li> </ul>		
	<p><b>Art Stephens</b> Statewide Higher Education System Subject Matter Advisor</p>	<ul style="list-style-type: none"> <li>• Art is a Director in Deloitte Consulting's Technology Strategy and Architecture practice focusing on the public sector. He has over 25 years of experience in State Governments and Higher Education, and has significant experience in IT strategic planning, business process reengineering, IT organizational design, and large scale systems development and implementation.</li> <li>• For over three years, Art served as Vice Chancellor for Strategic Initiatives for the Pennsylvania State System for Higher Education (PASSHE) where he established the IT strategic direction and implemented initiatives (e.g., student information systems, data management program, disaster recovery and shared services strategies, user friendly applications) for a 14-university public higher education system to enhance learning and improve efficiency.</li> </ul>
<p><b>Key Qualifications</b></p> <ul style="list-style-type: none"> <li>• Over 25 years of experience in State Government and Higher Education initiatives</li> <li>• Served as Vice Chancellor for Strategic Initiatives for the Pennsylvania State System for Higher Education (PASSHE)</li> </ul>		

## 4.C Terminations, Litigation and Debarment

***During the last five (5) years, has the Bidder had a contract for services terminated for any reason? If so, provide full details related to the termination.***

In the past five (5) years, Deloitte Consulting has performed under many hundreds of contracts, task orders, work orders and/or statements of work with public and private sector clients across the United States. It is not uncommon for our contractual arrangements to permit termination or cancellations for convenience, insufficient funding, and default.

Deloitte Consulting does not centrally track contract terminations or cancellations. As such, while there have likely been non-performance (i.e., convenience) related terminations in the preceding five (5) years, we are unable to identify the specific number of such terminations.

With respect to default terminations in the state and local practice, to the personal knowledge of the Deloitte Consulting LLP Principal submitting this proposal, there have been no default terminations in the preceding five (5) years.

***During the last five (5) years, describe any order, judgment or decree of any Federal or State authority barring, suspending, or otherwise limiting the right of the Bidder to engage in any business, practice, or activity.***

Deloitte Consulting LLP has not been subject to any orders, judgments or decrees that suspended, debarred, or otherwise limited its rights to pursue any business, practice or activity.

***During the last five (5) years, list and summarize pending or threatened litigation, administrative or regulatory proceedings, or similar matters that could affect the ability of the Bidder to perform the required services. The Bidder must also state whether it or any owners, officers, or primary partners have ever been convicted of a felony. Failure to disclose these matters may result in rejection of the bid proposal or in termination of any subsequent contract. This is a continuing disclosure requirement. Any such matter commencing after submission of a bid proposal, and with respect to the successful Bidder after the execution of a contract, must be disclosed in a timely manner in a written statement to the Board.***

Deloitte Consulting LLP, as one of the leading providers of consulting services, is routinely involved in complex consulting projects, often involving large-scale systems implementations and multiple service providers. Although we are justifiably proud of our record of client satisfaction, such projects do occasionally give rise to disagreements over contract requirements, and we are occasionally, though rarely, involved in litigation with clients pertaining to our consulting services. We do not believe that such matters will affect our ability to provide consulting services, or that they will affect our ability to serve the Board or the state in connection with this proposed engagement. Deloitte Consulting LLP has not been convicted of a felony and, to the personal knowledge and understanding of the request by the Deloitte Consulting LLP Principal that is responsible for submitting the proposal, no owners, officers, or primary partners have been convicted of a felony

***During the last five (5) years, have any irregularities been discovered in any of the accounts maintained by the Bidder on behalf of others? If so, describe the circumstances of irregularities.***

To the personal knowledge and understanding of the request by the Deloitte Consulting LLP Principal that is responsible for submitting the proposal, there have been no irregularities in connection with accounts that may have been maintained by Deloitte Consulting LLP.

## 5 Statement of Scope

### Our understanding of the Program

Higher education institutions face tremendous financial and operational pressures impacting their core mission to educate, research, and serve. Universities, both public and private, must grapple with industry-wide challenges, including decreasing funding from state and federal sources; volatility in endowment and investment uncertainty; stagnant tuition revenues due to political pressure; rapidly changing student needs; and structural model inefficiencies. Given the complexity and severity of these issues, many universities are seeking to pursue initiatives similar to the Iowa's public universities.

In the face of these significant challenges and pressures, Iowa's public universities must continue to drive towards meeting three key needs:

- **College Affordability** – Ensuring that tuition is affordable and financial assistance available for academically qualified Iowa residents
- **Efficient Operations** – Launching efficient and productive operational activities on each campus and system-wide
- **Educational Attainment** – Providing a world-class education to all students, including traditionally underrepresented minorities, including distance and life-long learning opportunities

Although the universities in the Iowa state system have undertaken several initiatives to lower cost and make a college education more affordable, tuition remains high, being 14<sup>th</sup> highest nationally<sup>2</sup> for a state whose incomes are only 25<sup>th</sup> highest in the nation<sup>3</sup>. Combine this cost and income disparity with the fact that Iowa has one of the nation's lowest in-state enrollments for public universities and the 4<sup>th</sup> lowest graduate retention rates<sup>4</sup> and the narrative for Iowa's public universities is that not all Iowa residents can afford the education and the out-of-state students who can afford it usually leave the state once they graduate. As such, the Board and the universities need to not only address the growing need to reduce costs to become more efficient and affordable, but also improve academic outcomes for Iowa residents as a crucial part of the state's economy.

### Our understanding of the Scope

Our understanding of the scope of the program is based on the desire of the Board to seek a consulting partner to support the assessment of how well the universities are aligned with their mission and where opportunities for efficiencies and transformation may be present. The scope of this

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<sup>2</sup>Source: State Higher Education Finance Report for FY12 released by the State Higher Education Executive Officers (SHEEO)

<sup>3</sup>Based on US Census data

<sup>4</sup>Source: Forbes Online 2009. University of Iowa was used as a proxy for universities in Iowa.

program can be described in terms of the functional areas under consideration, the colleges and programs under review, as well as the key requirements and deliverables.

### Functional Areas in Scope

The Board has listed several areas that it expects to be considered for review. In addition to these areas, we suggest another area, Advancement, to add to the review. This recommendation is based on our prior experiences with other higher education institutions where we have found strong opportunities for cost savings and revenue generation.

The table below describes the functional areas we consider in scope for this program. Because our project experiences and resulting insights give us a clear set of hypotheses about where the largest opportunities are likely to reside, our assessment in some of the functional areas identified below will be at a more comprehensive level than for others. For example, functional areas such as HR, IT, Finance, and Facilities tend to generate the most opportunity and will therefore be assessed in greater detail.

Functional Area	Suggested Areas of Review
<b>Human Resources</b>	<ul style="list-style-type: none"> <li>• Organizational and Employee Development</li> <li>• Recruitment and Onboarding</li> <li>• Consolidation of Services</li> <li>• Employee Service Center/Customer Support</li> </ul>
<b>Student Services/Academic Support Programs</b>	<ul style="list-style-type: none"> <li>• Financial Aid</li> <li>• Student Career Counseling/Placement</li> <li>• Student Billing</li> <li>• Registrar/Transcript Processing</li> </ul>
<b>Marketing &amp; Advertising</b>	<ul style="list-style-type: none"> <li>• Brand Awareness</li> <li>• Market segmentation</li> </ul>
<b>Information Technology Services</b>	<ul style="list-style-type: none"> <li>• Infrastructure and System Architecture</li> <li>• Campus Support/Help Desk Services</li> <li>• Enterprise Systems</li> <li>• Email/Active Directory Services</li> <li>• IT Product Standardization and strategic sourcing</li> <li>• Security</li> </ul>
<b>Finance &amp; Administration</b>	<ul style="list-style-type: none"> <li>• Accounts Payable/Expense Processing</li> <li>• Sourcing &amp; Procurement</li> <li>• Budgeting</li> <li>• Treasury Operations</li> <li>• Accounts Receivable</li> <li>• Cash Management</li> </ul>
<b>Academic Programs</b>	<ul style="list-style-type: none"> <li>• Competitiveness and Demand</li> <li>• Productivity and Efficiency</li> <li>• Alignment with Mission and Strategy</li> <li>• Duplication</li> <li>• Academic Scheduling and Resource Stewardship</li> </ul>
<b>Research</b>	<ul style="list-style-type: none"> <li>• Staffing</li> <li>• Reporting Efficiencies</li> <li>• Technology Transfer and Licensing</li> <li>• Pre-Award Support Model</li> </ul>

Functional Area	Suggested Areas of Review
	<ul style="list-style-type: none"> <li>• Post-Award Support Model</li> </ul>
<b>Facility Operations, Maintenance, and Construction</b>	<ul style="list-style-type: none"> <li>• Facilities Planning</li> <li>• Space Development and Utilization</li> <li>• Stewardship</li> </ul>
<b>Auxiliaries</b>	<ul style="list-style-type: none"> <li>• Residence Services</li> <li>• Athletics</li> <li>• Parking and Transportation Enterprises</li> <li>• Utility Systems</li> <li>• Student Unions</li> </ul>
<b>Advancement</b>	<ul style="list-style-type: none"> <li>• Fundraising Staffing Model</li> <li>• Campaign Effectiveness</li> </ul>

**Table 7. Academic and Administrative Areas for Review**

Additional detail and insights—including examples of key challenges and opportunities found on other higher education engagements—can be found in Appendix O.

### Colleges and Programs

The assessment will focus on the three public Iowa universities: University of Iowa (UI), Iowa State University (ISU) and the University of Northern Iowa (UNI) and excludes the University of Iowa Health System and Iowa’s special schools. Within the three universities in scope, our focus will be on the undergraduate schools, programs, and departments. Many of the colleges may provide a combination of undergraduate and graduate degree programs and services. In these cases, we shall focus primarily on the undergraduate portion of their programs. Colleges and schools that are exclusively for graduate degree programs and services will not be the focus of this program.

### Key Requirements and Deliverables

Below is a summary table that describes our understanding of the key requirements and deliverables of this program, based on information the Board has provided in the RFP. Further detail regarding the proposed program activities and deliverables can be found in the Methodology in Section 6.I.

Key requirement	How the Deloitte Team will address requirement
<b>Build a business case for cost savings</b>	Our approach describes how we will develop a series of business cases for prioritized opportunities in Phase Two of the program. These business cases will estimate potential cost savings and level of effort to implement the opportunity.
<b>Develop detailed recommendations, both short-term and long-term, including strategies for a more efficient environment</b>	The prioritization of opportunities will take into account implementation timeframes so as to allow a mix of both short-term and long-term opportunities. Recommendations will be developed for each prioritized opportunity to detail how the Board should proceed in implementing each opportunity.
<b>Identify opportunities for cost reduction</b>	In Phase One of the program, we will assess all academic and administrative functional areas in scope to identify opportunities for cost reduction.
<b>Develop an implementation roadmap to achieve desired results</b>	In Phase Two of the program, we will sequence each opportunity into an implementation roadmap that estimates the expected timeframes, dependencies, milestones, and other key factors for

Key requirement	How the Deloitte Team will address requirement
	implementing the opportunities in Phase Three.
<b>Provide a communications plan detailing key supporters, change management message, and engagement of campus stakeholders</b>	Our Organization Engagement workstream will develop an initial communications plan in Phase One. This plan will be refreshed in Phase Two based on the outputs of the As One survey.
<b>Provide a detailed action plan that can be implemented to move towards the overall objectives</b>	A detailed program action plan will be developed in our initial Phase Zero by working with the Board and key stakeholders through our Strategic Choices Lab.
<b>Provide metrics to enable the measure of success for each item proposed</b>	The business cases developed in Phase Two will identify key performance metrics to measure the success for each prioritized opportunity
<b>Provide process flow diagrams and written summaries of existing organizational structures/processes and opportunities for improvement</b>	We will document the current state structures and processes related to the prioritized opportunities in Phase Two. Our focus will be on processes that present an opportunity for improvement through business process redesign, technology enhancements, or other suggested improvements.
<b>Establish a timeframe for regular activity reports</b>	Our Program Management workstream will work with the Board to determine an appropriate schedule and cadence for activity and status reports to regularly assess the health of the program
<b>Provide a presentation to the Board regarding the findings and proposed action plan</b>	Our final Phase Two deliverable will be a presentation to the Board that summarizes the key findings from the prioritized opportunities, business cases, and implementation roadmap.

**Table 2: Key requirements and deliverables**

## Our Insights, Skills, and Tools

Our past engagements provide us with an array of insights, skills, and tools that can help the Board move swiftly in conducting the review and assessment, mitigate common areas of risk, and make sure that the recommendations and opportunities meet the Board’s expectations and objectives. In previous Section on Qualifications and Experience, we highlighted some key engagements that demonstrate our capabilities. In addition to those key qualifications, we would like to highlight how past experiences in aggregate can be used to make your program a success.

The table below illustrates the experience our team brings throughout all phases of the program from the initial assessment to solution design to implementation. Additional information regarding these qualifications can also be found in Appendix 0

	Assessment					Solution Design								Solution Implementation						
	Organizational and Operational Assessment	Cost Reduction Opportunities	Organizational Engagement	Business Case Development	Implementation Roadmap	Facilities Ops, Maintenance, Construction	Finance and Administration	Human Resources	Information Technology	Research	Sourcing and Procurement	Organizational Design	Revenue Generation	Academic Programs	Shared Services	IT Transformation	Strategic Sourcing and Procurement	Communications, Training, Change Management	Space Utilization and Scheduling	Academic Curriculum and Faculty Deployment
University of California – Berkeley**	X	X			X		X	X	X	X		X			X	X				
	X	X	X	X	X				X						X	X				
University of Texas at Austin*					X		X	X							X					
	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X			
Harvard University**	X	X		X	X				X			X			X	X				
Federal Government of Canada Deficit Reduction**	X	X	X	X	X															
University of Northern Iowa*		X				X													X	
Chabot-Las Positas Community College District*	X	X	X									X								
Large R1 Public Institution		X		X	X	X	X	X		X	X	X								
University of Iowa		X				X													X	
Mississippi Institutions of Higher Learning	X	X				X													X	
University of California – Los Angeles		X										X								
Education Institution	X	X		X			X	X	X		X	X	X	X	X	X	X			
Johns Hopkins University		X	X		X						X	X					X			
State University							X			X						X				
Higher Education Organization							X		X							X				
Dartmouth College			X		X	X	X				X	X			X		X	X		
City of Los Angeles, Office of the Mayor			X		X							X								

**Figure 6: Additional Higher Education and Public Sector Qualifications**

\*Indicates those qualifications highlighted in Section 4

\*\*Indicates those qualifications highlighted in Section 4 and listed as references in Section 7

Based on the experiences highlighted above, as well as from over 200 similar projects with higher education, public sector, and commercial clients, we have the required skills and knowledge to conduct the type of efficiency and transformation review program that the Board seeks. Our team knows what it takes to do a comprehensive, system-wide operational review for clients with the same degree of size and complexity as Iowa’s public universities. In particular, the highlighted projects above showcase a set of key skills, insights, and tools essential for Iowa’s success. These include:

**Key Insights**

- **Engage early and often** – Recent experiences at other universities have shown just how critical effective stakeholder engagement is to the success of a large transformational program. Identifying and engaging key stakeholders across all three campuses throughout the life of the program can help gather key inputs to support the assessment and solution design, create buy-in and support, and reduce risk. Our proposed team and methodology recognizes this by working closely with client functional counterparts throughout the length of the program. Additionally, our

proposed Organization Engagement workstream will create a tactical communications plan to support the delivery of target communications and interventions as needed.

- **Leave no stone unturned** – We are aware that the universities have already accomplished significant cost savings and efficiencies across many academic and administrative areas. With many of the quick wins and clear opportunities already exhausted, the Board will need a team that has the know-how to be able to drive further savings through novel and innovative approaches. Our team has the breadth and depth to deliver these improvements, having solid experience in areas such as shared services design and implementation, strategic sourcing, and academic course schedule optimization.
- **Tailored solutions to individual needs** – Although many challenges can be common across administrative functions, programs, and departments, effective solutions may vary depending on each group's unique needs. This is especially true for academic programs where the highly specialized nature of teaching and research must be taken into account. Having worked closely with many higher education clients, we can address the specific needs of different stakeholder groups and develop tailored solutions to maximize savings and revenue opportunities.

### **Key Skills**

- **Program Management** – We understand the importance of effective program management as a discipline and a core component of the program. In our experience, program management can often be a weak point in a program if leadership does not recognize its criticality or assign the right resources and skillsets to manage workstreams. We bring the rigor and discipline on program management based on leading practices from hundreds of prior engagements. More information regarding our approach to program management and governance can be found in the Methodology section.
- **Enterprise Cost Reduction** – Our team possesses deep experience in cost management advisory work for higher education and public sector clients. In addition to the core team we have proposed, our subject matter advisors bring detailed knowledge and insights across all of the functional areas in scope. Many have come from higher education clients themselves and bring hands-on experience. This leads to a distinctive breadth of capabilities that is multi-disciplinary and enables our team to provide broader, innovative cost management solutions. We also recognize that cost reduction programs can be notoriously difficult to implement successfully factors such as flawed execution or unintended negative consequences (e.g., increased error rates or lower customer service). Through our past experience in carrying out similar cost reduction engagements with higher education clients, we can support the Board in avoiding common pitfalls and position each university for success.
- **Service Delivery Transformation** – The work we have performed for higher education and public sector clients demonstrates our capabilities around comprehensive, fundamental transformations of core programs and services. Our team brings the skills to help the Board define, establish, maintain, and continuously improve a customize service delivery model for each university and academic or administrative function to meet strategic objectives. We have the capabilities and skills to support the Board in various transformative efforts to reduce costs and improve revenues, such as shared services, outsourcing advisory, vendor management, contact center transformation, and compliance and risk management. Furthermore, we have worked with

organizations throughout all phases of the service delivery transformation lifecycle, so we understand the not just how to design what the future looks like, but how to build it as well.

## Key Tools

- **IndustryPrint** - IndustryPrint is Deloitte's time-tested business process modeling method, tool, and collection of cross-functional business process designs. It captures Deloitte's best knowledge of business process "Prints" for more than 30 industry segments, including Higher Education. The repository of IndustryPrints provides a starting point for business process design and transformation efforts. The Higher Education IndustryPrint can be used to accelerate the documentation and analysis of the current state business processes at all three universities as well as support the identification of business process improvement opportunities across all major administrative and academic functions.

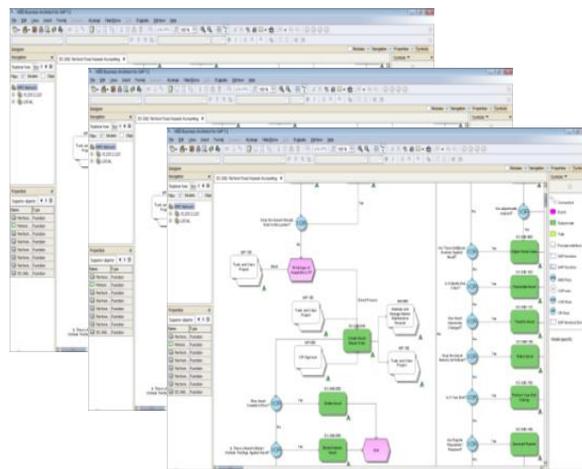


Figure 7: Industry Print

- **Enterprise Value Map (EVM)** - Designed from a client's point of view, the Enterprise Value Map (EVM) is a practical, one-page management framework that shows how organizations create value (value drivers) and key improvement levers (e.g., business processes, asset mix, and organizational capabilities). The tool helps our team and our clients organize, discuss, and prioritize improvement opportunities that deliver maximum value in terms of revenue growth, operating margin, asset efficiency, and university mission. Our EVM tool is customized for higher education institutions and can be used to rapidly structure and identify key improvement opportunities to drive improvements under areas deemed strategic priorities by the Board.

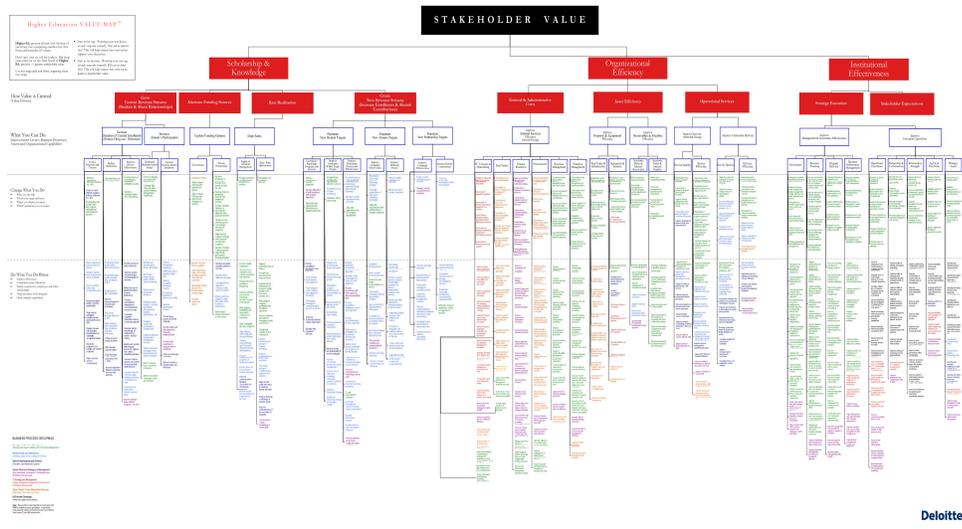


Figure 8: Enterprise Value Map

- ValuePrint** – ValuePrint is an Excel-based business case development tool designed to help clients determine and measure the business value of investments. The tool offers detailed templates which can be used to jumpstart a business case, automatically consolidate cost and benefit information, and quickly generate report-ready graphs and incremental financial statements. In addition, the tool allows for tracking of planned versus actual costs and benefits over time. In addition to the tool, Deloitte has a set of Financial Impact Templates customized for public sector and higher education clients. These Financial Impact Templates be used to accelerate the development of the business cases and quantify the potential savings and revenue opportunities.

Deloitte. Cost Financial Impact Template		Return to Main Menu	Include in Consolidation:	Yes			
Cost FFT Title: Program Management		Cost FFT Number:		P1			
Client Sponsor: Jggy Javellana		FFT Author: Lisa Dubay-Albert		Team Name: I			
Description: Team to over see implementation and rollout of "Line of Sight" projects							
Capitalized Expenditure Description				Projected			
Category	Cost Type	Depreciation Horizon	Year of Expenditure Start	Depreciation %			
Low					High		
Insert Row	Delete Row						
One-Time Costs				Projected			
Description	Category	Cost Type	Year of Cost	Low	High		
P1 - People (Internal)	(-) SG&A Expenses->Lab	Labor - Internal	Year 0	\$25,000	\$1,100,000		
P1 - People (Internal)	(-) SG&A Expenses->Lab	Labor - Internal	Year 1	\$93,150	\$10,000		
P1 - People (Internal)	(-) SG&A Expenses->Lab	Labor - Internal	Year 2	\$63,550	\$50,000		
Insert Row	Delete Row						
Recurring Costs				Projected			
Description	Category	Cost Type	Cost Starting Year	Low	High		
Insert Row	Delete Row						
Projected Annual Improvement							
Projection Option	% of Contingency for Year	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
High	100%	\$1,100,000	\$25,000	\$50,000	-	-	-
Projected Annual Improvement		Year 6	Year 7	Year 8	Year 9	Year 10	Sum of 10 Years
Projected Yearly Expenses		0%	0%	0%	0%	0%	2,475,000
Actual Annual Improvement							
Update Actuals	Actual Yearly Expenses	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
		Year 6	Year 7	Year 8	Year 9	Year 10	Sum of 10 Years
Support for Contingency (i.e., justify it)							

Figure 9: ValuePrint

In the following section, we will provide more detail around our proposed approach and methodology to show how we use the insights, skills, and tools described to execute the program and meet the objectives the Board has set forth. In addition, we also provide more background on our past experience and subject matter knowledge for the each of the key academic and administrative functional areas under review.

# 6 Methodology

## 6.A Conceptual Approach

A primary role of the Iowa's University system is to produce degree-holding graduates who meet educational needs. The second, critically important role is meeting its research mission is meant to produce advances in knowledge that help mankind, and make the educational experience more robust. To produce those outputs, three universities each use existing knowledge along with three key inputs – students, faculty, and staff along with the facilities and infrastructure that enable the education process. The Board governs over the three universities in this process. This input/output model is represented in the below graphic.

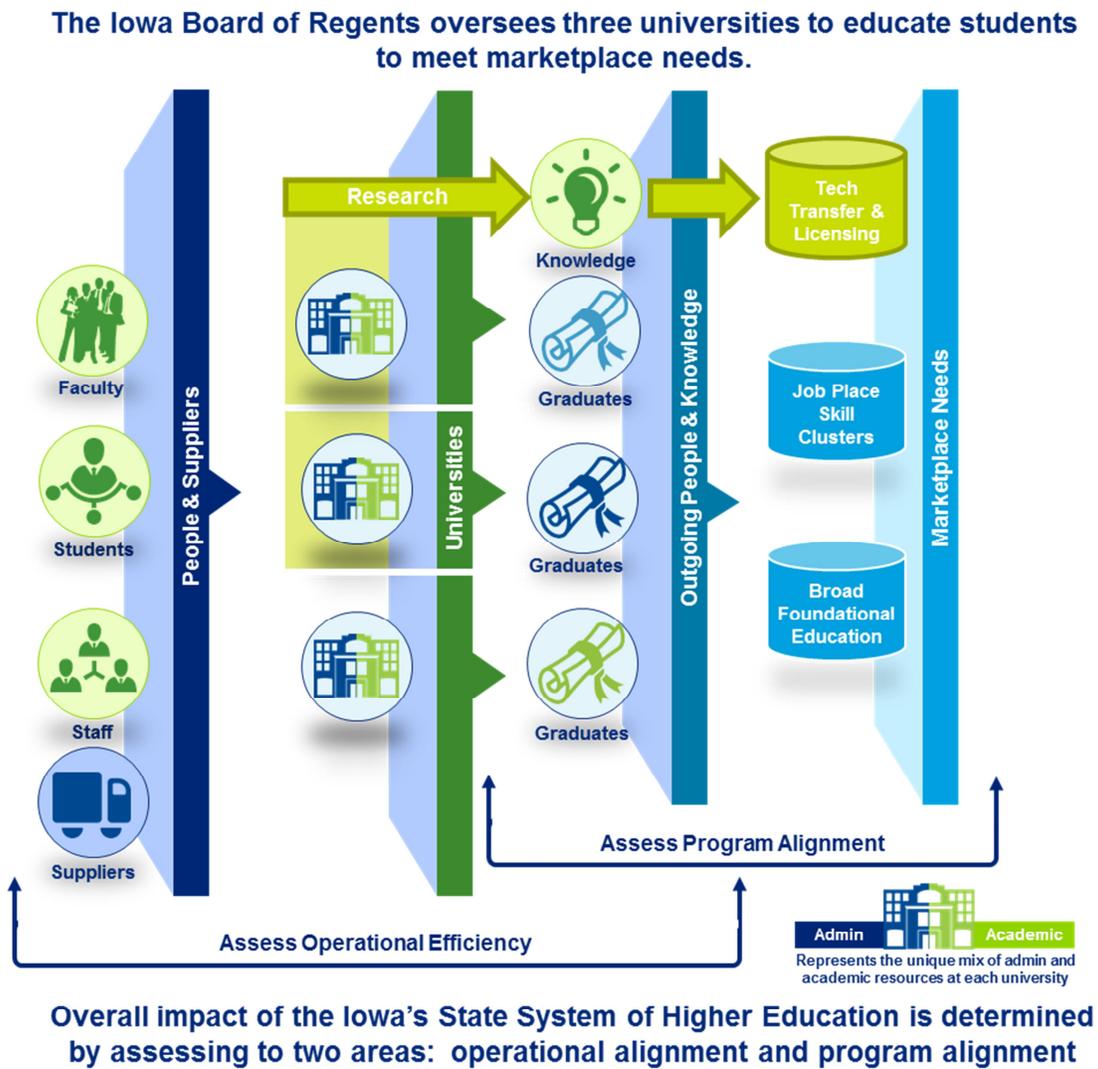


Figure 10: Iowa's State System of Higher Education Input/Output Model

Each state university offers its own set of programs that result in converting students to degree-holding graduates, providing basic educational needs, and producing new knowledge and insight through research. Further, each university has a mix of resources across both the academic and administrative sides, as depicted by the shading of the university icons in the graphic.

While each university's leadership team tries to manage its own set of resources, capabilities, and outcomes, the Board is the only entity ultimately responsible for the performance of the entire state-wide system.

To assess the degree to which the Iowa system is performing as needed, there are two aspects that need to be explored: program alignment and operational efficiency.

**Program Alignment** - When considering program alignment, we ask the question: Is there sufficient alignment between what Iowa's educational degree programs produce versus what the state of Iowa needs in terms of skilled and highly educated graduates?

Viewed through the lens of an input/output model, if the higher education system in Iowa is producing many more or many less of certain degree types because of its curriculum offering, it could affect the overall efficiency of the educational system. The more the degrees granted (the supply), aligns with the economic and social positions being created in the state economy (the demand), then the more efficient the higher education system can be. If the system does not recognize fluctuations over time in the demand for graduates, or if it is slow in responding to those changes, then the overall system will not be satisfactorily efficient. Hence, we have devoted a portion of our approach to determine the degree of alignment, as well as evaluate the processes needed to maintain alignment on an ongoing basis.

Assessing the degree of alignment will determine if Iowa needs any adjustment, or alteration in its higher education strategic plans, since faculty-related costs represent approximately one-half of system costs. Possible outcomes could range from modifying curriculum offerings, faculty deployment, use of adjunct faculty, class location and schedules – all of which hold the potential to improve the productivity of the teaching process.

**Operational Efficiency** - When considering operational efficiency, we ask the question: Are there improvements in the way each of the universities, individually or collectively, can accomplish the same or better outcomes, but while consuming fewer resources?

This aspect is essentially the productivity aspect of the input/output model. This can include such topics as underlying cost structure, overhead and purchased costs, administrative arrangements, and faculty deployment, including course loads and class sizes, etc.

**Our Approach** - Our approach addresses both teaching and administrative productivity and efficiency with parallel work steps as outlined in the remainder of this section.

Iowa will need to accomplish these adjustments while addressing the needs and interests of all the key stakeholder groups. Our approach as outlined below, specifically engages each stakeholder group in the process of diagnostic analysis, opportunity identification and sizing, and recommendation formulation and implementation. As has been witnessed by similar efforts at other Big Ten Universities, the success of this program's like this include students, faculty, staff, unions, suppliers,

donors, and the public. Without a consulting firm that knows how to collaboratively manage the involvement of stakeholders in the program, the Board will have tremendous challenges in executing their vision.

Finally, the Deloitte Team's approach will produce three key advantages for the Board:

- Opportunities of Greater Value – by concentrating early on larger opportunities, being fact-driven, proving hypotheses before making recommendations for change, engaging university faculty and staff, and applying lessons from prior large-scale multi-year enterprise-wide improvement programs, the Deloitte Team can deliver maximum value to the Board for its investment in consulting support
- Increasing the Speed to Impact – because we understand Iowa, invest in engaging those affected by potential changes, have deep experience in implementing what we recommend, capture the tangible results promised, and have a tested program management approach, we will produce results with your organizations more quickly than our competitors
- Lower Risk to the Board – because of our focus on early engagement of the stakeholders in the process, our experience in driving similar cost reduction programs, and the experience of the people with programs like the Board's, the Deloitte Team can drive a process that produces less risk for the Board and the universities, in a variety of dimensions beyond program execution risk

## 6.B Approach Overview

Program success for Iowa depends upon conducting an objective system-wide operational and programmatic review to identify opportunities to decrease costs and increase efficiency and effectiveness in support of Iowa's overall educational mission and strategy. It is critical that this review is conducted in close collaboration with campus stakeholders.

We recognize the importance of this initiative to the State of Iowa, and take our role in the program success very seriously. As a result, we thought hard about the approach that will work best for a program of this importance, visibility, and complexity. We focused on Iowa's immediate need to conduct a successful program and achieve its goals, and also considered these needs within the context of a changing Higher Education landscape. We drew heavily from our "tried and true" methodologies developed and refined over the last 20 years based on our practical experience leading more than 300 efficiency and transformation reviews and implementations across various industries, including higher education and the public and commercial sectors.

### Our Methodology

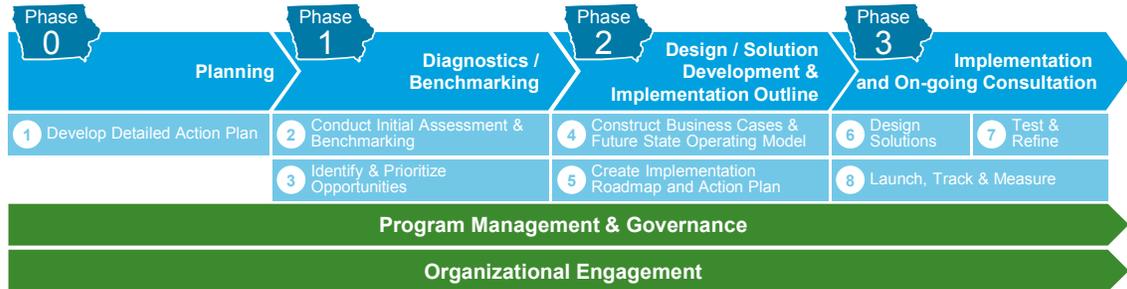
To best address Iowa's needs for a comprehensive review across all three universities, we tailored a methodology to allow maximum results within the defined timeframe while also supporting the critical need to engage administrators, faculty, staff, and students throughout the program. This methodology was tailored exclusively for Iowa based on your specific needs and incorporates broad and deep analysis, a people-centric



- Our methodology supports **comprehensive analysis, true collaboration, and concrete results**
- We use a **core shared methodology** across review areas to **promote program cohesion and clear deliverables**
- We **expand our core methodology** when **unique tools, inputs, and outputs** are needed **within review areas**

organizational engagement approach, and top-notch program management.

Our methodology is founded on an objective and collaborative approach that builds on leading practices across efficiency and transformation reviews in Higher Education and other industries, and incorporates the templates, accelerators, and tools needed to support program success. Our approach mitigates engagement risk and accelerates delivery which will ultimately increase quality while reducing time and costs. A high-level graphical depiction of the methodology is shown below:



**Figure 11: The Deloitte Team’s Core Methodology for Iowa’s Efficiency and Transformation Review Program**

In the remainder of this section, we provide detail on the “core” methodology depicted above. This includes our detailed approach to Phases Zero, One, Two, and Three, as well as our overarching approach to Program Management and Organizational Engagement. This detail includes the key objectives, activities, and deliverables that are shared across the administrative and academic areas under review. ***Following the detailed description of this core shared methodology for Phase One, we also included an overview of each of the administrative functions and academic areas that will be addressed in our review and highlighted any unique tools, methods, and outputs that will be incorporated for these areas.***

An overview of each component of the core methodology is found below.

**Phase Zero, Planning**, will consist of working closely with the Board to gain alignment on a detailed action plan, the program vision and objectives, the scope of the Efficiency Assessment, the key stakeholders, the program governance structure, the program management structure and the data collection requirements. Our approach will commence with a no-cost facilitated alignment session called the Deloitte’s Strategic Choices Lab - an in-person and in-depth day-long session led by expert Deloitte facilitators with significant experience leading discussions with senior leaders regarding the strategic choices that shape the vision and mission our client organizations. The output from this session will help to finalize a more comprehensive detailed plan of action that focuses on the Board’s desired outputs from this program.

**Phase One, Diagnostics/Benchmarking**, will include a broad review across in-scope Administrative and Academic areas to identify and prioritize “quick win” and longer-term transformational opportunities to reduce costs and increase efficiency and effectiveness across Iowa’s universities. As a result of comprehensive analysis and targeted benchmarking, and an infusion of leading practices, the team will produce a comprehensive list of opportunities that could be implemented to reduce costs, increase revenue, and improve service within Iowa’s individual universities and across the entire system. Working with the Board, we will assist in the identification and prioritization of a high-

value list of opportunities that will be further assessed and evaluated during the next phase of the program.

**Phase Two, Design/Solution Development and Implementation Outline**, will include creating business cases for high-priority opportunities and working closely with leadership to develop a high-level future state operating model that will provide an overarching depiction of the key elements and changes to Iowa's university system that are envisioned as part of an overall transformation. Our team will develop business cases to further analyze the selected high-priority opportunities that may be part of the future transformation. In conjunction, our team will work with leadership to create a future state operating model that depicts a high level overview of the governance, organizational structure, processes, technology, and performance management for the transformed university system. This future state operating model will use the results of the Phase One diagnostic and benchmarking as key inputs for creating this transformational framework and will be updated as needed to reflect any changes that result from the deeper business case analysis.

The final list of high-priority opportunities will then be sequenced across a graphical implementation roadmap and built into a detailed implementation action plan. This detailed implementation action plan will outline the steps required to realize the cost savings, service quality improvements, and revenue generation opportunities identified in Phase One. Our team will continue to work closely with the Board and university representatives during this phase.

**If the Board chooses to conduct Phase Three, Implementation and On-going Consultation**, this support would focus on implementing the chosen improvement opportunities and realizing the benefits. This would include developing the detailed process designs and detailed organizational and technological requirements needed to implement the future-state operating model and associated improvement opportunities. To support ongoing implementation efforts, the team would establish a Results Management Office (RMO) to drive, coordinate, support, measure and track implementation activities; conduct knowledge transfer as needed; and provide focused support to realize outcomes in key areas and measure the success of the program.

In addition to Phases Zero, One, Two, and Three, our methodology includes workstreams for Program Management and Organizational Engagement as summarized below.

**Program Management & Governance** will support effective coordination and program communication across the workstreams, the universities, and the Board. Our Program Management Office (PMO) will provide the tools and processes to track program status, and will actively identify and resolve issues, identify and track risks, and manage deliverables. Our PMO is the "heart" of the program and keeps the engagement well-coordinated and running smoothly.

**Organizational Engagement** will focus on a strategy and planning to connect with faculty, staff, and students of the Iowa system. This includes helping each workstream make sure representative voices are heard throughout the course of the program, and also assisting the Board with creating a communication plan to guide the two-way communications that are critical for program success. With three universities and multiple stakeholder groups to consider, a clear and organized communications approach is critical to the success of this endeavor. Our Organization Engagement (OE) leader will work hand-in-hand with the Board in the early phases of the program to craft a tactical

communications plan that can guide communications execution throughout Phases One and Two of the program.

Each of the phases previously described are detailed in the sections below. This includes the associated steps, objectives, activities, and deliverables for each phase.

## 6.C Phase Zero: Planning (4 weeks)



**Figure 12: Phase Zero of the Deloitte Team’s core methodology**

During the Phase Zero, the Planning phase, we will work closely with the Board’s program management structure to finalize the planning for this program. This would include at a minimum the following individuals:

- Chair – Regent Larry McKibben
- Regent Milt Dakovich
- Executive Director Robert Donley
- Mark Braun, Chief of Staff, University of Iowa
- Miles Lackey, Chief of Staff, Iowa State University
- Kelly Flege, Director of Business Operations, University of Northern Iowa
- Board of Regents President Bruce Rastetter (ex-officio)
- Board of Regents President Pro Tem Katie Mulholland (ex-officio)

In addition to the members listed above, we would also identify members in each university to form subcommittees to support ongoing program management and governance activities. Our program management approach is described in more detail later in this section.

This phase consists of one primary step:

- **Phase Zero, Step 1: Develop Detailed Program Action Plan** – During this step we will develop a plan that contains the objectives, phases, steps, activities, milestones, timelines, resources, and assumptions for the Program.

Based on our extensive experience leading similar programs, we find that strategic visioning, planning, and preparation are all essential activities prior to the start of any major initiative. To help our clients confirm their most critical organizational challenges discuss and explore key choices that

affect these challenges, and then construct detailed action plans to implement their key choices, Deloitte routinely conducts Strategic Choices Labs to begin a program. As such, we would hold a Strategic Choices Lab with the Board and other identified stakeholders from the three universities prior to Phase One of the program. This Lab is part of our initial Phase Zero planning where we would finalize the Detailed Program Action Plan, confirm program scope, and conduct an initial stakeholder analysis.

The Strategic Choices Lab is based on the premise that strategy can best be expressed as an integrated set of choices in response to viable options, not just as declarations of intent. The Strategic Choices Lab is designed to identify and prioritize the strategic choices required to run a successful program. Examples of these decisions and choices include defining the program governance structure, establishing measures of success, and finalizing the scope of the review. The content of the lab will be customized to meet program needs and will help clarify how leadership decisions map back to the goals and desired outcomes of the program and how taken together they shape and reinforce the overarching program strategy. Deloitte has invested heavily in the development of the Strategic Choices Lab because we recognize the importance of helping our clients gain alignment on critical issues and choices before they make considerable investments of time and money in long-term transformation programs.

- | Lab helps gain alignment on  |
|--|
| <ul style="list-style-type: none"> <li>• Program Objectives</li> <li>• Scope of the Efficiency Assessment</li> <li>• Universe of Key Stakeholders</li> <li>• Program Governance Structure</li> <li>• Program Management Structure</li> <li>• Data Collection Requirements</li> <li>• Detailed Action Plan</li> </ul> |

<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Gain alignment and understanding of key challenges</li> <li>• Identify and prioritize strategic priorities</li> <li>• Develop a Detailed Program Action Plan</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Develop Draft Detailed Program Action Plan</li> <li>• Schedule visits with all three Iowa universities to meet with key stakeholders</li> <li>• Conduct Strategic Choices Lab to review and validate Detailed Program Action Plan:               <ul style="list-style-type: none"> <li>- Frame</li> <li>- Explore</li> <li>- Execute</li> </ul> </li> <li>• Finalize Detailed Program Action Plan based on outputs of Lab</li> </ul>
<b>Key Deliverables</b>	<ul style="list-style-type: none"> <li>• Detailed Program Action Plan</li> </ul>

**Table 8. Phase Zero, Step 1 Objectives, Activities, Key Deliverables**

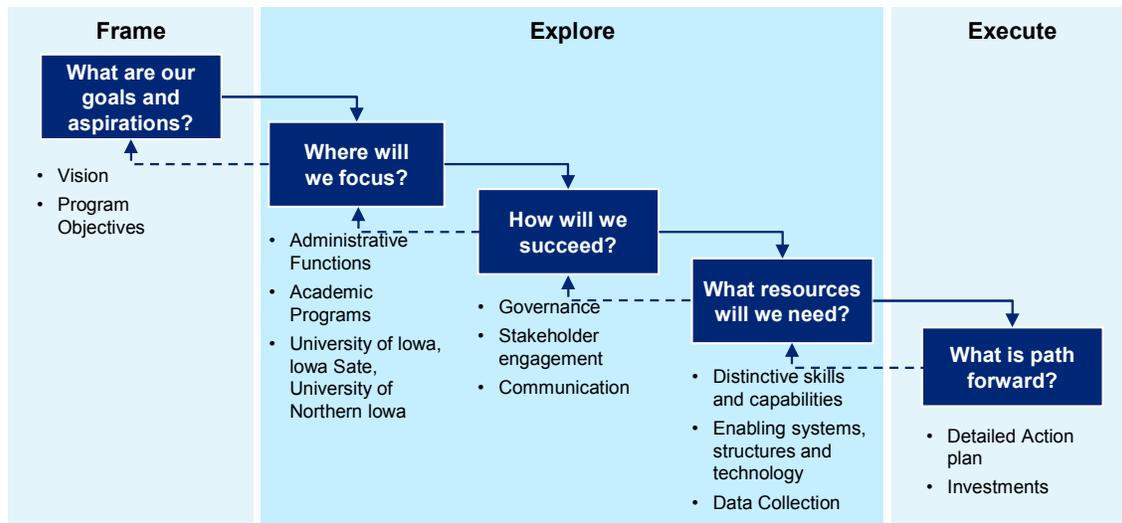
**Activities**

- **Develop Draft Program Action Plan** – In advance of the Strategic Choices Lab session, the Deloitte Team will work with the Board to develop a draft of the Detailed Program Action Plan that outlines the phases, steps, milestones, and other key components of the program. Participants of the Lab will receive excerpts from the Deloitte Team’s proposal that cover the topics listed below. All of these topics are fully covered in the Deloitte Team’s proposal but will be summarized in a Lab package for all participants. In addition to these excerpts, participants will also receive a draft

of the proposed Detailed Program Action Plan to be reviewed during the session. The draft will include the following:

- Program Objectives
  - Scope of Efficiency Assessment
  - Key Stakeholder Groups
  - Governance Structure
  - Program Management Approach
  - Data Collection Requirements
  - High-Level Program Action Plan (based on the proposed high-level approach and timeline outlined in the Deloitte Team's proposal)
- **Schedule Visits to Iowa's Universities** – As the draft of the Detailed Action Plan is developed, our team will work closely with the Board to schedule visits to all three of Iowa's universities. These visits will be conducted during Phase One of the program. During these visits, members of the Deloitte Team's program leadership and functional specialists will meet with designated university representatives to discuss program goals and activities, discuss data collection needs, informally explore hypotheses, and establish the working relationships that will enable ongoing program success. More detail regarding the site visits, interviews, and data collection approach can be found in the following Phase One section of our Methodology.
  - **Conduct Strategic Choices Lab** – The Lab will be conducted on-site at the Board's facilities in a round-table discussion format facilitated by skilled Deloitte facilitators experienced through hundreds of similar sessions with the senior-most leaders in our client organizations. The Lab will be conducted over the course of a full day structured to allow time to cover the Framing, Exploring, and Execution portions of the lab that are pictured in the diagram on the following page. The most significant portion of the time will be spent fine-tuning the program's action plan. We will work with the Board in advance to determine the participants for this session but at a minimum the attendees should include all of the members of the management structure recently identified by the Board and listed in Table 10 as well as members of each university subcommittee.

The Strategic Choices Lab is structured around three key concepts: 1) Frame 2) Explore and 3) Execute.



**Figure 13: Deloitte's Strategic Choices Lab key concepts**

### Frame

In this segment of the lab, we identify the big open questions stemming from internal and external changes, trends and uncertainties. We review the critical uncertainties and trends and discuss their impact on higher education in Iowa. The goal is to establishing explicit alignment among session participants regarding key challenges and objectives to be addressed by the program.

### Explore

In this segment of the lab, we identify and articulate the strategic choices that affect program success. This will be the choices that define the scope of the program. The specific scope of the program and the areas targeted for assessment, including the specific academic and administrative areas will all be discussed to gain further alignment and agreement that the targeted scope will address the challenges identified in the Framing segment. In addition to facilitating discussions about scope, we will also confirm key stakeholders, the program governance structure, and data collection requirements.

### Execute

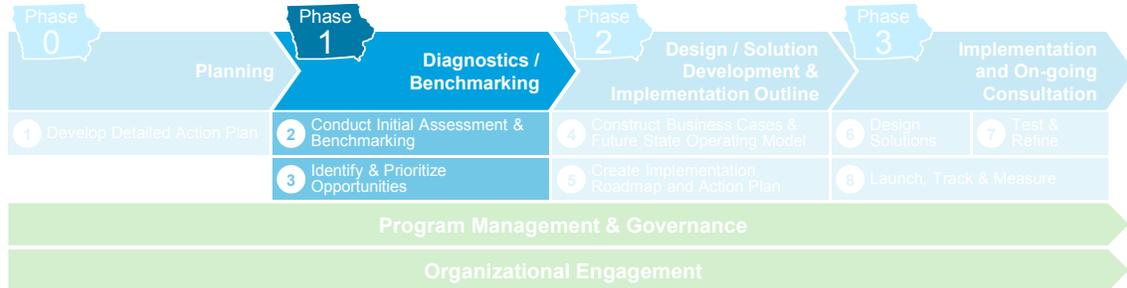
During this segment, we will align on a draft of the detailed action plan for executing the assessment based on the scope identified in the Explore segment. The action plan will be drafted prior to the session and will contain all of the key action steps, deliverables and resource requirements and will be finalized using inputs from the Strategic Choices Lab.

### Deliverables

- **Final detailed program action plan** – The Detailed Program Action Plan will document the intermediate actions that are required to be implemented to achieve the overall program objectives, as well as detail the objectives, phases, steps, activities, milestones, timelines, resources, and assumptions for the Program. The Action Plan will include metrics to enable the Board and the Deloitte Team to monitor and measure the success for each proposed items. A draft of the Action Plan will be shared with Lab participants prior to the session and finalized based on the findings and outputs of the Lab. The Action Plan will be developed in either Microsoft Excel or

Microsoft Project and will be used by the program team to continuously track and manage the Program throughout each phase.

## 6.D Phase One: Diagnostics/Benchmarking (10 Weeks)



**Figure 14: Phase One of the Deloitte Team's core methodology**

During the Phase One Diagnostic/Benchmarking stage we will work with the Board and representative stakeholders from all three universities to conduct a comprehensive assessment and jointly develop and prioritize opportunities to obtain cost efficiencies and achieve administrative and academic transformation. Phase One is divided into two key steps:

- **Phase One, Step 2: Conduct Initial Assessment & Benchmarking** During this step we will use a hypothesis-based approach to identify and quantify a comprehensive list of potential opportunities across all review areas in scope.
- **Phase One, Step 3: Identify & Prioritize Opportunities** During this step we will conduct additional review and analysis of identified opportunities to establish and prioritize a catalogue of opportunities that are aligned with the Board's strategic objectives

### Phase One, Step 2: Conduct Initial Assessment & Benchmarking (8 Weeks)

During Step 2, we will collect and analyze available performance and financial data and meet with key university stakeholders to develop a strong understanding of the current state across identified functions. Our initial assessment will be guided by a variety of sources, including data and inputs from each of the three universities and the Board, input from Deloitte Team Subject Matter Advisors, past project experience, leading industry practices, and Deloitte's Global Benchmarking Center and other benchmarking sources to determine the key opportunity areas across the functions in scope. The Deloitte Team will leverage prior experience and proprietary tools as accelerators so that a comprehensive review of the in scope areas can be performed in a short time period.

An overview of the objectives, activities, and deliverables for this step are outlined below:

<b>Objectives</b>	<ul style="list-style-type: none"> <li>Identify opportunities to reduce costs, improve service delivery, and generate revenue across Iowa's universities</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>Conduct Program Kick-off and data requests</li> <li>Conduct onsite meetings at each of Iowa's three universities to familiarize key stakeholders with the program and to elicit input</li> <li>Develop list of high-level efficiency and transformation hypotheses</li> <li>Collect and analyze data to document current state baseline (financial, organizational, operational, and technological), identify key challenges, key strengths, and potential improvement areas</li> <li>Identify leading practices and performance benchmarks</li> <li>Test and validate hypotheses against current state assessment</li> <li>Develop catalogue of all identified opportunities</li> </ul>
<b>Key Deliverables</b>	<ul style="list-style-type: none"> <li>Program Overview Presentation</li> <li>Catalogue of opportunities to reduce costs, improve service delivery, and generate new revenues</li> </ul>

**Table 9. Phase One, Step 2 Objectives, Activities, Key Deliverables.**

### **Activities**

**Conduct onsite meetings at each university** – Our initial assessment will begin with onsite meetings with key representatives from each university. The list of representatives to meet with at each university will be confirmed with the Board during program planning discussions but could include a variety of administrators, faculty, and staff. Meetings will familiarize representatives with the program and will also be used to elicit general ideas and input from university representatives. These meetings will be an important forum to allow the Deloitte Team to establish relationships with key university representatives and for university representatives to learn more about the program and provide input. Specifically, the objectives of these meetings are to:

- Introduce key representatives from each university to the program team and to one another
- Review the program scope, approach, and timeline, at a high level
- Confirm the availability of relevant data and documentation (e.g., previous reports, evaluations, data files, statistical analysis, financial and budgetary information, existing strategic plans, etc.) and confirm the contacts for data collection activities
- Elicit information from university representatives on key challenges and improvement ideas
- Establish an environment conducive to ongoing collaboration

Illustrative List of Potential Participants at Meetings at Universities		
University of Iowa	Iowa State University	University of Northern Iowa
<ul style="list-style-type: none"> <li>• President</li> <li>• Executive VP and Provost</li> <li>• Sr. VP and Treasurer</li> <li>• VP, Research &amp; Economic Development</li> <li>• VP, Human Resources</li> <li>• VP, Student Life</li> <li>• Associate Provosts</li> <li>• Associate Vice President/Director of Administration &amp; Planning</li> <li>• Deans (selected colleges and schools)</li> </ul>	<ul style="list-style-type: none"> <li>• President</li> <li>• Senior VP and Provost, Division of Academic Affairs</li> <li>• Senior VP, Division of Business &amp; Finance</li> <li>• Senior VP, Division of Student Affairs</li> <li>• Senior Policy Advisor on Economic Development</li> <li>• Treasurer</li> <li>• Asst. VP, Institutional Budgeting</li> <li>• Assoc. VP, Business and Finance</li> <li>• Assoc. VP, HR (interim)</li> <li>• Assoc. VP, Facilities, Planning &amp; Management</li> <li>• Deans (selected colleges and schools)</li> </ul>	<ul style="list-style-type: none"> <li>• President</li> <li>• Executive VP and Provost</li> <li>• VP for Administration &amp; Financial Services</li> <li>• VP for Student Affairs</li> <li>• Director, HR Services</li> <li>• Director, Business Operations</li> <li>• Assistant Provost for Research and Sponsored Programs</li> <li>• Deans (selected colleges and schools)</li> </ul>

**Table 10. Potential Participants at Meetings at Universities.**

- **Develop list of high-level efficiency and transformation hypotheses** – Based on the Action Plan developed in Phase Zero, and aligned with the overall strategic vision and goals of the Board, the team will develop and refine a list of hypotheses that outline potential opportunities to reduce costs, improve service delivery, and generate new revenue. To make sure the list is comprehensive, and to reduce the time required to generate this list, the Deloitte Team will leverage our past experience with higher education, public sector and commercial clients to draft an initial list of hypotheses. Some examples of efficiency and transformation hypotheses that we have tested with other clients within higher education include:
  - Rationalize application portfolio and improve IT portfolio management
  - Optimize academic program schedules and class configurations
  - Further increase staff coverage ratios and spans of control
  - Enhance strategic source procurement of materials and services (e.g., telecoms, subscriptions, transportation, utilities, professional services)
  - Reduce payroll leakages (e.g., fraud, abuse, off-cycle checks)
  - Centralize and improve annual fundraising efforts and online giving approach
- **Identify leading practices and performance benchmarks** – The team will identify, collect, and validate leading financial and performance benchmarks to assist in determining the degree to which individual Iowa universities and the state’s system as a whole compare to peers across the higher education, public sector, and commercial industries. The Deloitte Team’s prior experience conducting organizational effectiveness assessment as well as ongoing research and industry surveys conducted by the Deloitte Global Benchmarking Center (GBC) will accelerate the identification and selection of appropriate leading practices and performance benchmarks. Using a proprietary database of over 100 high-value performance measures, our Higher Education benchmark will streamline the data collection process and help pinpoint key improvement

opportunities. A small list of examples of higher education industry leading practices and benchmarks that will be considered include:

- Administrative staff coverage ratios
- Manager spans of control
- Number of grants per research administration staff
- Use of cost/benefit analysis to initiate grant pursuit
- Use of shared services to deliver administrative services
- Share of external procurement that is strategically sourced
- Strategic use of workforce planning to forecast staffing needs
- Number of benefits officers per faculty and staff
- Number of AP transactions performed per Finance staff

• **Collect and analyze data to document current state baseline and identify key challenges, key strengths, and improvement areas**

– The Deloitte Team will use structured information requests to collect a comprehensive and targeted set of data from each university to document the current state baseline for in-scope areas. The focus will be on material required to support the analysis of the agreed-upon list of hypotheses. The types of data requested from all three universities will be very similar to support as close of an “apples-to-apples” comparison across the administrative and academic review areas as possible. For example, detailed human resource data (e.g., job titles, job classifications, job descriptions, salary, benefits, etc.), financial data (e.g., school and divisional operating statements, financial statements) and operational performance data (e.g., number of HR benefits transactions, number of grants reviewed) will be collected from each university and analyzed. During our analysis, we will endeavor to collect as much systems-based data as possible to minimize time commitments on the part of individuals who may have to provide information from their computers or personal hard-copy files. Some of this data for the University of Iowa and the University of Northern Iowa may already have been provided through previous work performed by Ad Astra and can serve as a starting point for creating a baseline for academic efficiencies. Additional examples of the data that would be collected include:

- Systems-based data, examples include:
  - Accounts Payable
  - Budget reports
  - Sponsored accounting reports
  - Financial transactions
  - Program descriptions
  - Course enrollments

**Global Benchmarking Center (GBC)**



- Deloitte's GBC collects data across seven business functions and offer industry-specific peer comparisons across more than 100 high-value performance benchmark measures in their continuously expanding proprietary database
- Deloitte's GBC conducts an annual benchmarking survey of higher education institutions to measure process efficiencies, costs, and cycle times relative to industry peers, enabling our clients to identify areas of improvement
- The GBC's Higher Education benchmark measures an institution's process efficiencies, costs, and cycle times relative to industry peers, identifying areas of improvement.

- Individual requests (via email, phone, or part of scheduled interviews), examples include:
  - Organizational charts
  - Vendor contracts
  - System diagrams
  - Application inventories
  - Summary reports
  - Procedure manuals and guides

As part of this analysis, the Deloitte Team will work closely with university representatives to clarify and validate data where needed. The assessment of the current state across functional areas will be used to create a current state baseline and to identify and evaluate key challenges, strengths, and improvement areas both within individual schools and across the entire system. This comprehensive baseline of the current state will be used as a framework to guide the development of future state opportunities and also to measure the performance of the universities to track program success. This analysis also plays an essential role in the next activity to assess Iowa against industry benchmarks.

- **Test and validate hypotheses and develop opportunity catalogue** – Hypotheses will be tested and validated against the current state assessment and benchmark data in all in-scope administrative and academic review areas. Hypotheses will be tested by reviewing the current state data against known leading practices and benchmarks. Proven hypotheses are areas in which one or more of the universities are under-performing against peers and/or against targets and thus represent potential improvement opportunities. This will result in the identification of potential improvement opportunities and creation of a draft of an opportunity “catalogue” or menu.
- **Develop catalogue of all identified opportunities** – Once each hypothesis has been tested, the results will be documented in a catalogue of opportunities for ease of reference and prioritization during the next step in Phase One. This catalogue will contain the following categories:
  - Opportunity description (cost reduction and/or revenue generation)
  - School and functional area, including lead administrator(s) accountable for each area
  - Baseline spend (revenue)
  - Potential implementation costs, including preliminary high-level estimates of new staffing and technology costs
  - Estimated implementation timeframe (Quick Win, Medium Term, Long Term)
  - High-level range of annual savings (revenue) estimated to accrue from full implementation of each opportunity
  - Anticipated qualitative benefits to faculty, staff, administration and students
  - Potential implementation risks, including internal cultural considerations as well as any required policy or legislative changes

#### ***Deliverables***

- **Program overview presentation** – This presentation will be used during meetings at each university to describe the program objectives, scope, approach, structure, and timeline, The



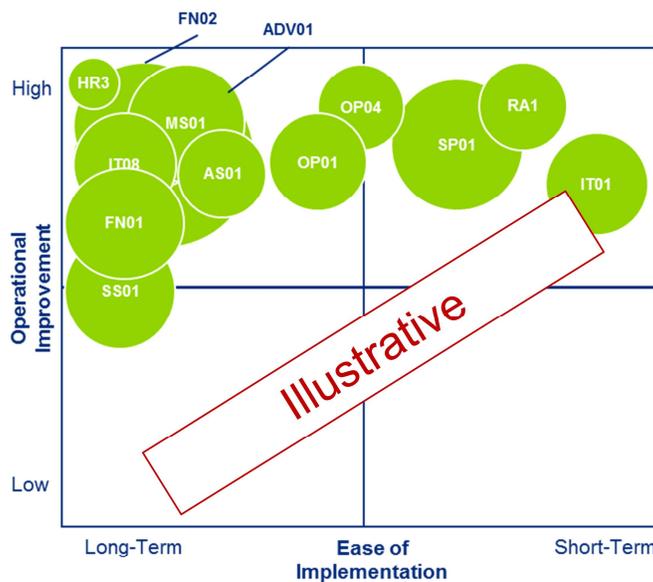
An overview of activities that will occur in Step 3 is provided below:

<b>Objectives</b>	<ul style="list-style-type: none"> <li>Identify a focused list of prioritized opportunities to guide Phase Two activities including the development of a future state operating model and more detailed business cases</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>Define prioritization criteria, including risk assessment</li> <li>Review, validate, and prioritize opportunities with Iowa leadership</li> </ul>
<b>Key Deliverables</b>	<ul style="list-style-type: none"> <li>Prioritization criteria and matrix</li> <li>Prioritized list of opportunities to reduce costs, generate new revenue, or improve service delivery</li> </ul>

**Table 11. Phase One, Step 3 Objectives, Activities, Key Deliverables**

**Activities**

- Define prioritization criteria, including risk assessment** – The program team will work with the Board to identify and develop the appropriate prioritization criteria to assist in the comparison and prioritization of opportunities. Opportunities can be sorted by functional area (e.g., HR, Sourcing and Procurement, Research Administration) to assist comparison and prioritization, and may also be further divided into categorized based on whether they generate cost savings, generate new revenue or result in cost avoidance. In our experience, opportunities are best evaluated across three dimensions which can be shown graphically (see Figure 16 below):
- Ease of Implementation (horizontal) – expected level of effort required to fully implement each opportunity, including use of resources, adoption of new technology and processes
- Operational Improvement (vertical) – expected tangible and intangible improvements to operational performance, efficiency and effectiveness across the school or function
- Size of Impact (bubble) – estimated cost savings, new revenue or cost avoidance that is expected to be realized as a result of full implementation.



Note: This is a preliminary prioritization of the top opportunities identified. Further prioritization will take place as more analysis and assessment on the opportunities are conducted. Prioritization criteria includes size of dollar impact and whether the opportunity is a key component of the future operating model.

**Figure 16: Example of an Evaluation of Opportunities Against Prioritization Criteria**

- Review, validate, and prioritize opportunities with low leadership** – To validate that the appropriate opportunities are selected for further analysis and assessment, the Deloitte Team will work with the Board’s program management team to identify those opportunities that most closely fit with the strategic objectives and goals described in the Program Action Plan, including the Board’s overall goal of streamlining operations and increasing cost effectiveness and the likelihood of realizing benefits and the ability to complete the items during the period of the program. A high-level summary presentation of all opportunities measured against the decision criteria will be provided to the Board to accelerate the decision making process. The Deloitte Team will lead a half-day working session to present, discuss, and select those opportunity worthy of further consideration during the next phase. It is our expectation that between 10-20 high priority opportunities will be selected for further detailed analysis through business case development.

**Deliverables**

- Prioritization Criteria and Matrix** – The identified prioritization criteria will be weighted according to the Board’s priorities and a matrix will be developed to evaluate each opportunity. The weightings and scoring methodology are flexible so that the Board can adjust prioritization as needed based on changes to the Board’s strategy and/or objectives.

	Ongoing Savings Opportunities	Benefits to Faculty/Staff	Disruption to Faculty/Staff	Complexity of Technology Change	Process/Policy/Non-Technology Changes	Implementation Priority	Dependency on Integrated Shared Services
Accounting Transactions	○	●	●	●	○	Medium	●
Accounts Payable	●	●	●	○	○	High	●
Procurement	●	●	○	●	○	High	●
Planning, Budgeting & Forecasting	●	○	○	○	○	Medium	●
Travel & Expense	●	●	●	●	○	High	●

**Figure 17: Example of a Prioritization Criteria Matrix**

- Prioritized list of opportunities to reduce costs, generate revenue, or improve service delivery** – Each of the opportunities identified and selected by the Board will be collected and documented in a single Microsoft Excel document, and form the launch point for additional analysis in the next phase of work. The list will include an opportunity description, key findings from the first phase of work, an estimate of the potential cost and/or revenue impact, and an estimated implementation timeline. In addition to the information on each opportunity documented in the original catalog developed in the previous step, this revised list of prioritized opportunities will also document the weighted prioritization evaluation and any additional considerations from the Board and other stakeholders regarding implementation.

#	Opportunity Name	Finding	Opportunity	Potential Annual Savings*	Implementation Timeframe
IT01	Implement IT Governance	The leadership and advisory groups that meet to discuss IT and share ideas do not have decision making authority over IT or the ability to implementing required standards and enterprise level IT requirements.	Implement institution wide IT Governance with decision making authority. Build tools and processes that enable identification and development of enterprise wide IT needs, manage an enterprise wide portfolio of investments and control spending.	\$0.6M - \$3M (avoidance)	Short Term
IT08	Rationalize application portfolio	The proliferation of unique applications used by the university is extensive. There are different LMS systems, document management applications, time tracking applications, and web content management tools in use. Spending on software at the university has grown by more than 15% over the past three years to more than \$6M.	Conduct an application audit to identify which applications should be rationalized. Rationalize applications and re...	\$0.5M - \$1M	Long Term
SP01	Strategically source categories	Significant savings from sourcing have already been achieved by the Procurement organization. There are still savings opportunities on key categories based on benchmarking.	Consolidate into logical, market-based categories and strategically source. Consider for initial execution: Professional Services, Lab Consumables, General Consumables, Electricity, Domestic Gas, Building Services, and HR Benefits	\$7M - \$14M	Short-Medium Term
FN02	Reduce duplication of Finance Function	Finance functions are duplicated across several administrative units and at the school and system level. This requires a high degree of knowledge for these areas and also decentralizes processing of many transactions. Additionally, there is a large volume of data warehouse users (1,036), suggesting units are using too many resources to manage budgets/reporting.	Consolidate finance function to reduce/eliminate redundancy and revise reporting access to ensure only designated resources are monitoring budgets. Potential functions that could be consolidated include transactional tasks such as budget compilation, accounts payable (operations), travel/expense reimbursement and report generation and monitoring. Revise report access so only designated resources are tracking budget vs. actual.	\$0.86M - \$1.7M	Medium Term

Figure 18: Example of a Prioritized List of Opportunities

## 6.E Phase Two: Design/Solution Development and Implementation Outline (11 weeks)

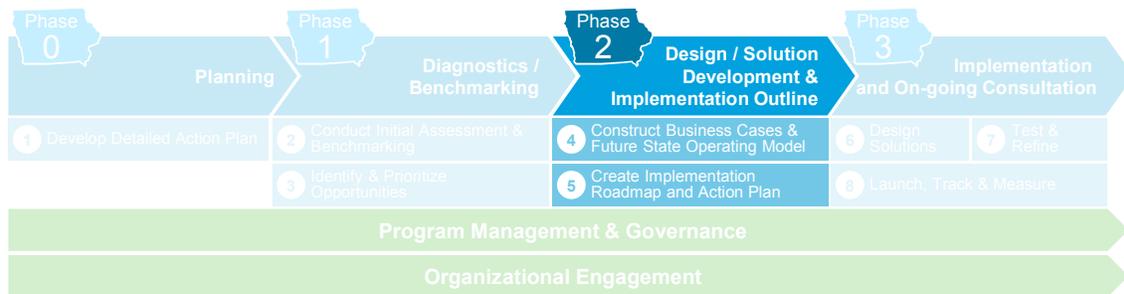


Figure 19: Phase Two of the Deloitte Team's core methodology

During the Phase Two Design/Solution Development & Implementation Outline stage we will continue to work with the Board and representatives across all three universities to develop detailed business cases, an enterprise future state operating model and an implementation action plan based on the list of prioritized opportunities identified in Phase One. Phase Two is divided into two key steps:

- **Phase Two, Step 4: Construct Business Cases and Future State Operating Model** develop a business case for each of the prioritized opportunities to quantify the estimated impact, as well as identifying the operating model elements that may need to be established or modified to realize successful implementation
- **Phase Two, Step 5: Create Implementation Roadmap and Action Plan** further refine and develop the action/implementation plans outlining the steps and activities required for the Board to achieve the cost savings, quality service improvements and revenue generation opportunities identified in Phase One

**Phase Two, Step 4: Construct Business Cases and Future State Operating Model (8 Weeks)**

During Step 4, a selection of the high-priority opportunities identified during Step 3 will each be developed into a business case to more accurately quantify the magnitude of estimated savings/revenues, as well as expected implementation costs. Each business case will include benefits associated with efficiency and effectiveness gains, implementation costs, recommendations and risks and mitigation strategies for each of the initiative areas over a specified period of time. The creation of the business cases will be an iterative process – the Deloitte Team will work with the Board and university representatives to develop and refine identified opportunities to create the business case inputs.

Using input from the Board and key leadership stakeholders, the Deloitte Team will construct a future state operating model to provide the contextual framework for the proposed changes described in the business case. While not formally required in the request for proposal, our prior experience with higher education clients suggests that a future state operating model acts to bind together disparate business cases into a coherent picture, ensuring that proposed solutions complement and build on one-another.

An overview of the main objectives and activities for this step is provided below:

<b>Objectives</b>	<ul style="list-style-type: none"> <li>Quantify the estimated impact and effort required to implement each of the prioritized opportunities, using detailed business cases</li> <li>Identify specific recommended changes, and a detailed implementation roadmap to describe how the desired results can be achieved</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>Gather detailed data and conduct additional consultations with university representatives</li> <li>Document existing organizational structures/process flows for key areas of potential change</li> <li>Establish metrics to measure opportunity success</li> <li>Analyze data and develop business cases</li> <li>Develop future state system-wide operating model</li> <li>Review and refine business cases and operating model based on leadership input and vision</li> </ul>
<b>Key Deliverables</b>	<ul style="list-style-type: none"> <li>Current State Organizational Structure / Process Flows for key areas of potential change</li> <li>Business Cases</li> <li>Enterprise Operating Model</li> </ul>

**Table 12. Phase Two, Step 4 Objectives, Activities, Key Deliverables.**

**Activities**

- Gather detailed data and conduct additional consultations with university representatives –** Targeted data requests and ongoing consultations will be required to collect additional information required to develop detailed business cases. While the specific information that will be required and requested will not be known until the list of prioritized opportunities has been identified, information will likely be required from all three universities.

## Collecting Data: The Deloitte Team Method

Three key methods will be used to collect the information from the three primary sources:

- Formal data requests (from IT Systems)
- Any information coming from IT Systems will be collected via a formal data request from the Deloitte Team to the university functional leads. In many cases, the university functional and academic leads will have to work with IT or others familiar with the systems housing the data. In those cases, the Deloitte Team functional or academic lead will work jointly with the university functional or academic lead and the individual(s) providing technical systems support.
- Interviews (via phone, e-mail, or face-to-face)
- Interviews will be used to identify, collect and validate files from personal computers, hard-copy archives (personal or centrally located) or individual personnel knowledge. The Deloitte Team functional and academic leads will work with the functional and academic university leads to identify and align on a list of individuals to be contacted for interviews. The functional and academic leads from the Deloitte Team and the universities will also coordinate the scheduling of all interviews.
- Internet-based Electronic Surveys
- In order to achieve consistency in the collection of qualitative information that comes directly from individual personnel knowledge, surveys may also be used. Surveys are the most effective way to check for consistency in the collection of qualitative information from a large group of individuals.

Once collected, the Deloitte Team will conduct a high-level assessment of the data received. This will involve working with the university functional and academic leads to validate the information collected. This includes validating what has been collected as well as validating situations where the desired data is not available.

- **Document existing organizational structures/process flows** – To assist in the identification of existing strengths and challenges facing the three universities, the Deloitte Team will work with selected functional experts and university staff to document process flow diagrams and written summaries of the existing organizational structure/processes. To reduce unnecessary effort, only the list of priority opportunities will be examined, ensuring the Deloitte Team focuses on processes identified by the Board as being of high value.
- **Establish metrics to measure opportunity success** For each business case, three to five quantitative performance metrics will be identified. These performance metrics will be based on expected data collection capabilities in the future state, and may include proxy measures were required. These performance metrics will form the basis of ongoing performance management efforts by the Board and each university, including monitoring and tracking implementation of the identified recommendations.
- **Analyze data and develop business cases** Once all current state data, leading practices and benchmarks have been collected, they will be analyzed by the Deloitte Team and used to develop a business case for each of the identified priority opportunities. The findings of the business case will then be used as the basis for the final recommendations and implementation roadmap developed in the next step of this phase.
- **Develop future state enterprise operating model** Based on the recommendations flowing from the business case, changes to the operating model of one or more Iowa universities may be required. These changes could touch on all aspects of the enterprise operating model (see graphic below), including: strategic vision, governance, people, process and technology, structure

or financial and performance management. Given our past experience, it expected that the majority of changes will likely focus on elements related to people, process and technology. The Deloitte Team will conduct an operating model visioning session that will help outline the strategic vision and guiding principles for the Future State Operating Model. Working closely with the Board, the Deloitte Team will develop and finalize a future state operating model reflecting the proposed changes.

- **Review and refine business cases and operating model based on leadership input and vision** Once the business cases and operating model have been developed, a comprehensive review of the recommendations and findings will be performed in concert with the Board and other key stakeholders. Any updates and validation that is required will be performed, including collecting supplemental data and conducting targeted analysis. Once approved, the business case and future state operating model will be used as inputs to develop the implementation roadmap.

### Deliverables

- **Current state organizational structure / process flows for key areas of potential change –** Working in concert with stakeholders from each university, the Deloitte Team will develop a process flow diagram for each identified priority opportunity. In addition to current state flow process diagram, the Deloitte Team will also develop written process descriptions, key enablers and a roles/responsibilities matrix.

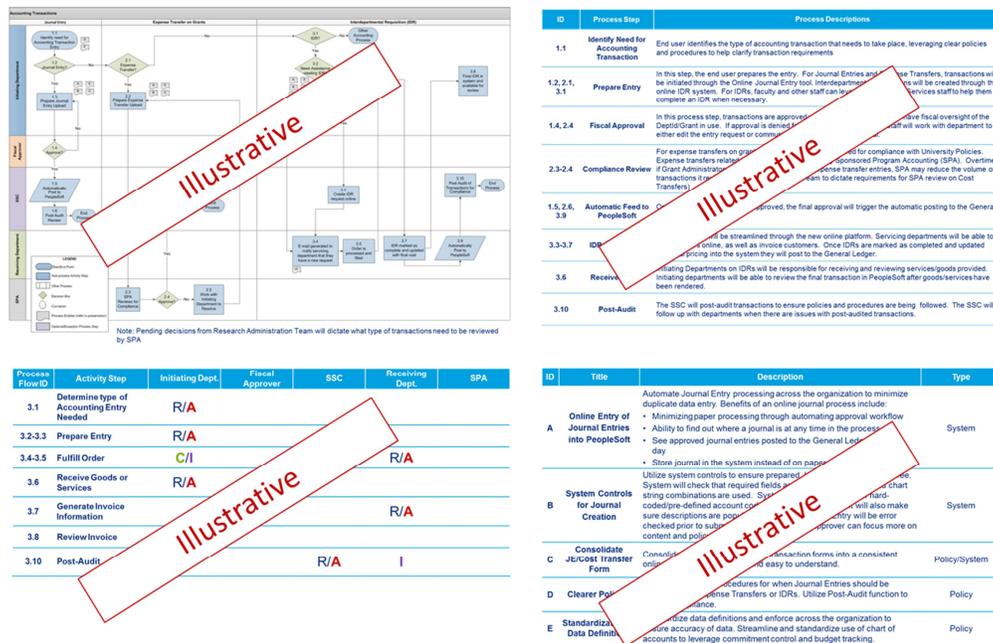
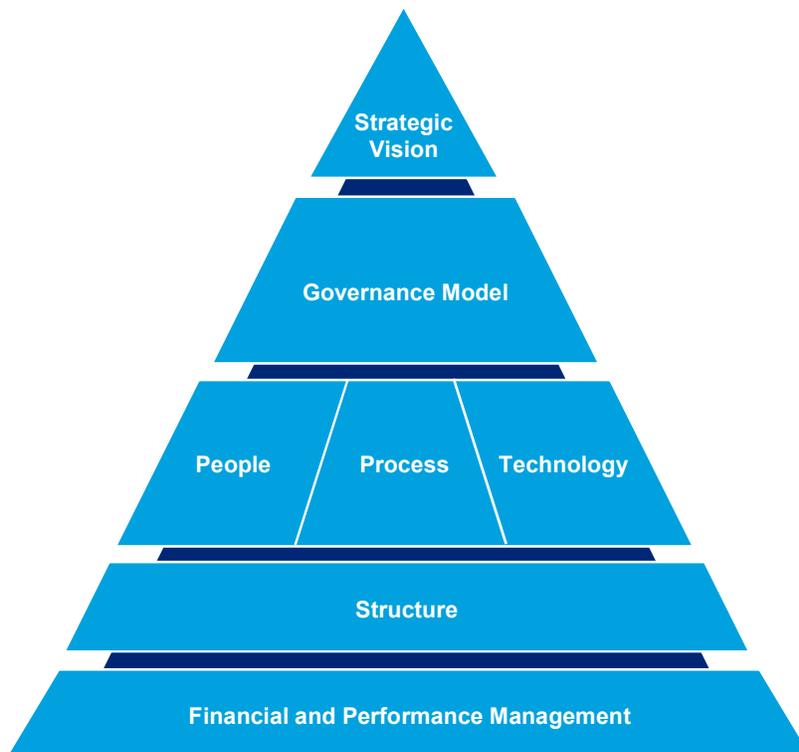


Figure 20: Example Current State Process Flows for Key Areas of Potential Change

The organizational structure will focus on key elements of the organization, including: structure, core processes, staffing levels, performance levels, technology, and cost structure. The Deloitte Team will use Deloitte's Organization Operating Model to evaluate the current state, including strengths and opportunities for improvements, those areas that are sufficient as they current exist. The Operating Model will also be used as the basis to describe the future state based on implementation of the identified opportunities. This model has been used in many prior engagements with higher education clients, and is built around several key elements, including:

- **Strategic Vision:** Describes high-level strategic objectives and principles for the future state operating model
- **Governance Model:** Describes the mechanism by which decisions are made and issues are resolved
- **People, Process & Technology:** Presents a view of the target organization, high-level processes, and technology components that support the organization, including both academic and administrative functions
- **Structure:** Identifies how the organization is physically organized and arranged across geographies, hierarchies, and reporting relationships
- **Financial and Performance Management:** Offers a mechanism for measuring the success of the defined business strategies including identifying a preferred financial model, identifying an approach to Service Level Agreements (SLAs), and identifying and tracking performance metrics



**Figure 21: Organization Structure and Operating Model**

- **Business cases** – Each business case will be constructed in Microsoft Excel (see Figure 22 below), and estimate current baseline spending, implementation costs and future state spending (including staffing levels), as well as allowing the Board to perform scenario testing. Statewide and opportunity-specific assumptions will be incorporated to check for consistency across the business cases and account for information that is either unavailable or not cost-effective to collect.

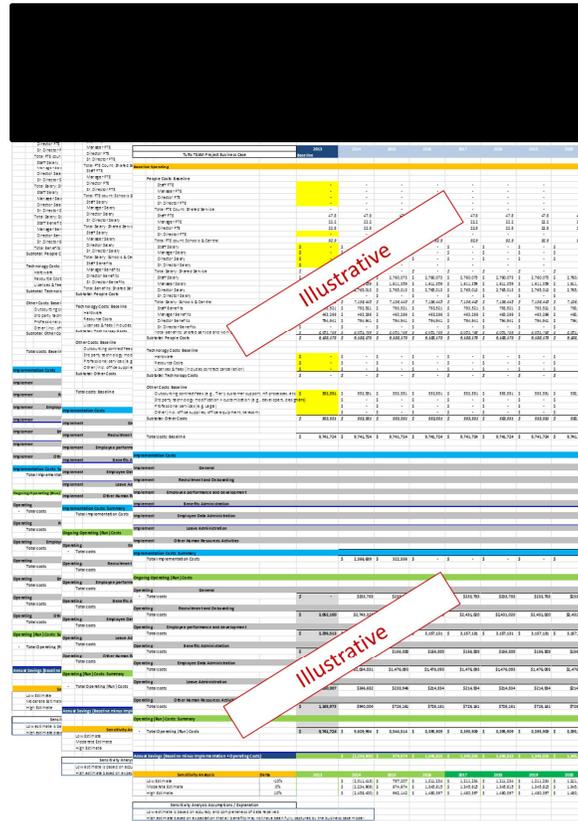


Figure 22: Example Identified Opportunity Business Case

**Phase Two, Step 5: Create Implementation Roadmap and Action Plan (3 Weeks)**

During Step 5, a detailed implementation roadmap and action plan will be developed to support the Board and each university in its efforts to implement the agreed upon recommendations articulated in the business cases. The Deloitte Team will work with the Board to finalize business case assumptions and develop the sequencing for implementation timing, based on the articulated strategic objectives and goals. Supporting the implementation timelines for each recommendation will be an associated action plan that outlines the implementation tasks, laying out the key activities and resources required to successfully implement the business case recommendation. Implementation timing and sequencing will take into account a variety of critical enablers, including: value, priority, dependency, risk, ease of implementation, recruiting and training, infrastructure and technology build out, communications, and stabilization.

An overview of the main objectives and activities for this step is provided below:

<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Create an implementation action roadmap to realize the proposed recommendations</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Develop implementation roadmap and action plan</li> <li>• Review and validate with the Board and university representatives</li> <li>• Final presentation of findings to Board</li> </ul>
<b>Key Deliverables</b>	<ul style="list-style-type: none"> <li>• Implementation roadmap and action plan</li> <li>• Presentation of findings to the Board and Final Report</li> </ul>

Table 13. Phase Two, Step 5 Objectives, Activities, Key Deliverables

## Activities

- Develop implementation roadmap and action plans** –Based on the findings of the business case for high-priority opportunities, the Deloitte Team will develop a detailed implementation roadmap and action plan to enable the Board to realize the estimated benefits. The scope of this work will include all priority areas identified by the Board. Each action plan will identify the timeline, dependencies, technology requirements, identified operating model gaps (e.g., people, process and technology), key activities and resources required to successfully implement each recommendation. The implementation roadmap will provide a summary of the timing and sequencing of work required to implement the recommendations identified across the action plan. In collaboration with the Board, the Deloitte Team will identify key performance metrics that can be used to track and measure ongoing efforts to implement each opportunity during Phase Three.
- Review and validate with key stakeholders** – the Deloitte Team will work with the Board and other key university stakeholders to review and validate the roadmap and action plans and to determine what additional information may be required.
- Final presentation of findings to Board** – A final presentation will be made to the Board at the end of Phase Two to present the findings of the Deloitte Team and to share the final implementation roadmap and action plans created based on each of the business case recommendations. Our Team will work with the Board to determine what additional briefings may be required to socialize the final report and build support for the recommendations among key stakeholders.

## Deliverables

- Implementation roadmap and implementation action plans** – The implementation roadmap and implementation action plans will be the final output of Phase Two, and will be developed by the Deloitte Team in close consultation and collaboration with the Board and key identified stakeholders. Each implementation action plan will roll up into the single consolidated implementation roadmap, and will describe the key elements required to successfully implement each recommendation (e.g., timeline, dependencies, technology requirements, operating model gaps activities and resources). The Deloitte Team will provide a presentation to the Board regarding the findings of the program, and the proposed implementation roadmap and implementation action plans. Following the presentation, the Deloitte Team will prepare and submit a final report to the Board.

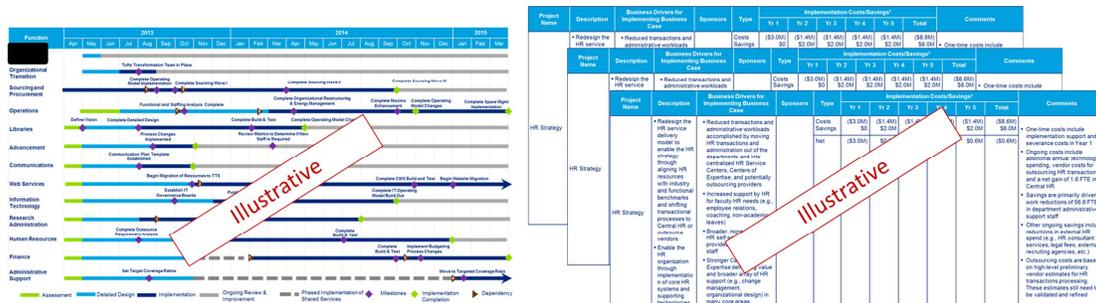


Figure 23: Example High-Level Implementation Roadmap and Action Plans

# Proposed Program Timeline

■ Proposed Duration 
 ◆ Deliverable 
 ◆ Status Updates

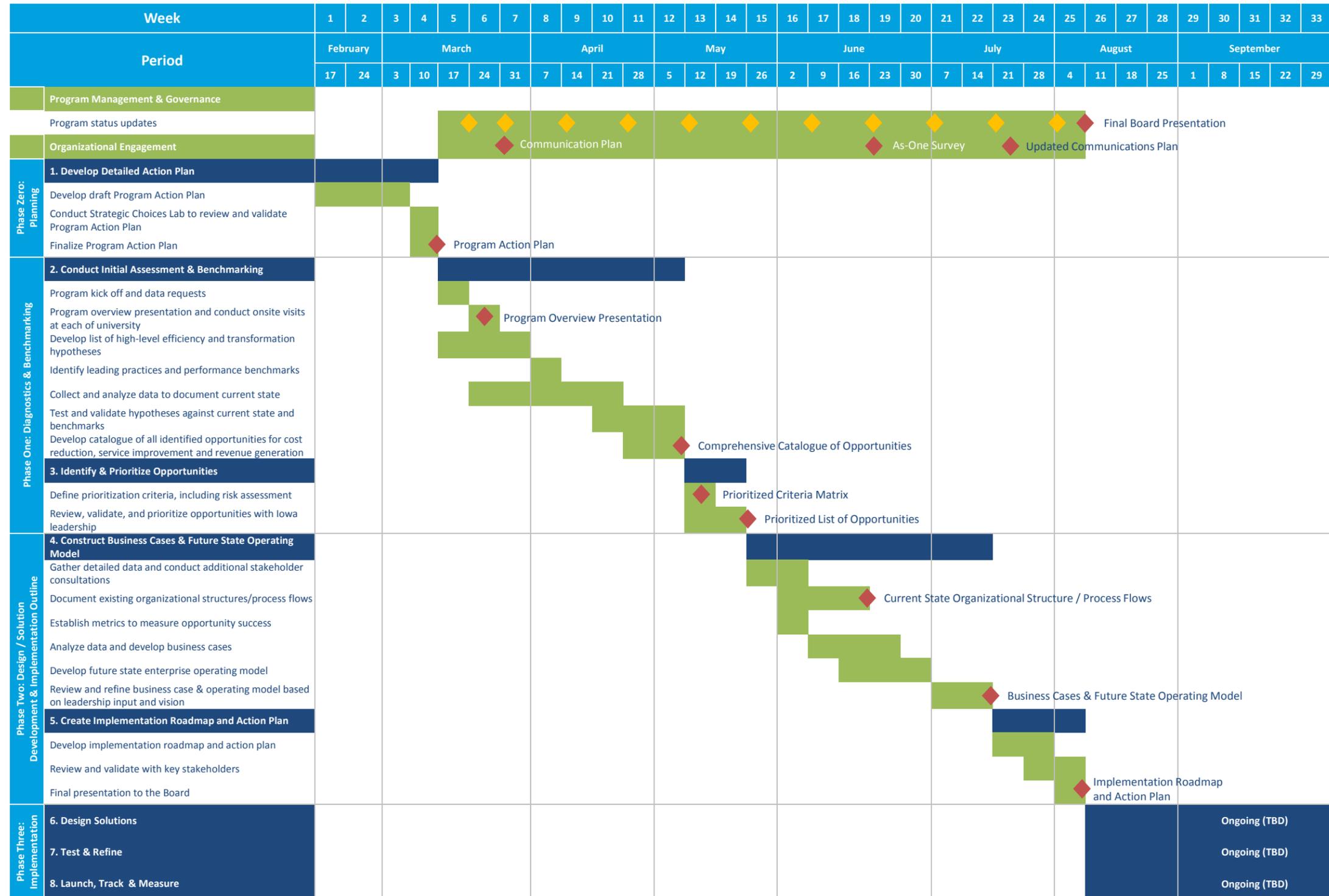


Figure 24: Proposed Program Timeline

## 6.F Phase Three: Implementation and Ongoing Consultation



**Figure 25: Phase Three of the Deloitte Team's core methodology**

At the option of the Board, the Deloitte Team will drive and support action plan implementation to assist the Board with realizing program results. In Phase Three, the Deloitte Team will transition from leading a Program Management Office to establishing a Results Management Office (RMO) to guide and drive implementation and efficiency realization. The Deloitte Team will work with the Board and an expanded group of university faculty, staff, and students to develop detailed designs of the recommendations and solutions the Board has selected to pursue and support the implementation of the future state design. Throughout implementation, we will support the Board in managing and tracking implementation costs and savings to track the realization of benefits and measure tangible results of the program. The Deloitte Team has supported hundreds of our clients in performing organizational and operational transitions/transformations; an illustrative list of our experience can be found in the qualifications section of this proposal, including where we have performed similar work for other higher education institutions. No work will be done as part of this phase without approval and direction from the Board.

A very high-level overview of the main objectives and activities for this step is provided below:

<b>Objectives</b>	<ul style="list-style-type: none"> <li>As required, provide the Board with the support and tools required to design, test and launch a suite of future state solutions based on the recommendations presented in Phase Two</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>Establish Results Management Office (RMO)</li> <li>Design detailed solutions</li> <li>Test and refine solutions</li> <li>Launch, track, and measure</li> </ul>
<b>Key Deliverables</b>	<ul style="list-style-type: none"> <li>To be determined in collaboration with the Board based on the recommended changes described in Phase Two.</li> </ul>

**Table 14. Phase Three Objectives, Activities, Key Deliverables.**

### Activities

- Design solutions** – Turning the implementation and action plan from Phase Two into tangible changes on the ground requires a focused and committed effort. The specific activities and resources performed by the Deloitte Team will depend upon the final recommendations the Board approves for implementation. However, our extensive implementation experience has shown that there are some common activities that will assist and enable the transition from implementation design into reality.

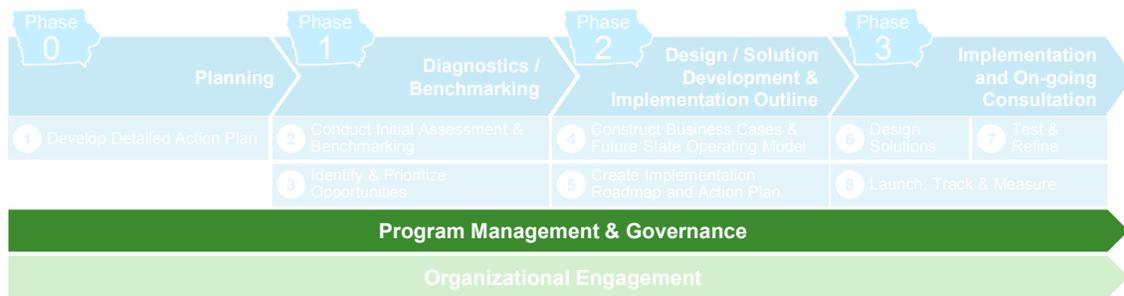
From a program perspective, and building on our understanding of how the Board wishes to be supported, the Deloitte Team would continue to provide on-going implementation management through an established RMO. This would allow the Deloitte Team to support overall implementation efforts as well as to identify and tackle issues, mitigate risks and track results against plan.

As a first step, the Deloitte Team will establish and engage university working groups to provide on-going support, as needed, to further refine business and business requirements. (Note: Depending on the program configuration finalized for Phases One and Two the working groups may be the same or expanded versions of established subcommittees.) The Deloitte Team will plan and conduct detailed designed sessions for in-scope opportunities with these groups, including detailed organizational design, working in close partnership with the appropriate Human Resources officials. Based on the input from these sessions the Deloitte Team will develop a suite of materials and outputs critical to successful implementation, such as:

- Detailed staff activity analysis of work performed to identify and evaluate the level of effort performed across the organization and to determine future resource needs
  - Future state process maps
  - Business and technology requirements, including gap analysis and desired user access and interface
  - Policy and process redesign
  - Support materials such as procedure manuals and policy guides
  - Workforce transition strategy, including staff qualifications, job descriptions and staffing levels
  - Support materials, such as change management strategies, communication materials
- **Test and refine solutions** – Testing beta versions of the proposed solutions provides the chance to test design assumptions against the reality of university staff and faculty user experience. Testing can reveal issues related to technical capabilities, policy and process redesign, and the level of user acceptance and buy-in, can be identified. Refinement of the proposed solutions will then be made to address these issues. As a result, both small and large issues are resolved before a costly roll-out of a solution across one (or multiple) university campuses.
  - **Launch, track, and measure** – Once tested and identified issues have been addressed, solutions are ready to be formally launched as sequenced across the action plan. The Deloitte Team will establish a performance management framework to enable the Board to track and measure performance outcomes to validate the solutions satisfy the desired objectives. This framework can be used long after this program has formally ended. Measuring performance is a critical element of the implementation process, allowing the Board to determine whether the solution delivered the promised value.

In addition to the objectives, activities, deliverables, and tools described in each of the phases, we understand that success of the program is dependent on ongoing and effective program management and organizational engagement. The following sections will detail our approach to program management, governance, and organizational engagement to highlight how we deliver tangible results quickly while proactively mitigating risk.

## 6.G Program Management & Governance



**Figure 26: Program Management & Governance of the Deloitte Team’s core methodology**

Based on our experience, we believe it is critical to approach Iowa’s efficiency and transformation review as a program, not a project. This distinction is important to the success of large-scale and transformative initiatives such as this because it drives effective governance, disciplined planning and execution, and the realization of results.

A well-run Program Management Office (PMO) is at the center of our approach. The Deloitte Team’s PMO will work closely with the Board to drive comprehensive analysis and enact transformational change. Through this partnership, the Board will consistently gain insight to make critical decisions that impact the success of the program. The objectives of a programmatic approach include:

- **Effective Structure:** To plan, manage, and monitor execution of all key activities
- **Collaboration and Leadership:** To promote standardization, consistency, and quality across all workstreams
- **Rigorous Tools and Processes:** To manage the program effort, including:
  - Program charter
  - Deliverable templates
  - Work plans/ Roadmaps
  - Program status reporting
  - Program dashboards
  - Issue and risk management
- **Effective Program Communications:** To keep Board leadership apprised of needs and outputs throughout the program and to seek Board input throughout for key decisions



- Our methodology provides a modular, flexible, and scalable foundation for managing project activities, including process, people, and technology dimensions of business transformation initiatives
- Our approach is designed to be tailored to meet your needs and provide a framework and roadmap for managing the program
- The method is supported by a rich collection of tried and tested deliverables, detailed procedures, templates, tools, and accelerators that are organized by project phase, discipline, and sub-discipline

- **Results-Driven Management:** To provide the flexibility needed to support success across the entire program lifecycle from inception to completion

<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Establish an effective Program Management structure</li> <li>• Promote collaboration and leadership</li> <li>• Employ rigorous tools and processes</li> <li>• Deploy effective program communications</li> <li>• Support results-driven management</li> </ul>
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Establish and run the Program Management Office (PMO)</li> <li>• Establish and support Program Governance Structure</li> <li>• Establish deliverable acceptance criteria and process</li> </ul>
<b>Key Deliverables</b>	<ul style="list-style-type: none"> <li>• Project Management Center</li> </ul>

**Table 15. Program Management and Governance Objectives, Activities, Key Deliverables.**

### **Activities**

- **Establish and run the Program Management Office (PMO)** – The Deloitte Team takes a comprehensive, standards-based view of program management, supported by leading technical tools, experienced coaching, and training. Our approach to program planning and execution provides the discipline needed to facilitate timely and quality completion of all tasks and deliverables.

### **Program Management Capabilities and Tasks**

The PMO will manage day-to-day coordination across workstreams and validate that consistent tools and approaches are being used. The programmatic approach to project planning and execution will help to:

- Avoid collisions across multiple workstreams
- Clearly define workstream-level business cases, key milestones, interdependencies and accountabilities
- Use consistent approaches and standard tools for work/work plan management and benefit tracking
- Manage standard, rigorous status and issues reporting within each workstream
- Validate quality assurance is exercised and actions challenged

An overview of the main program management capabilities the Deloitte Team will bring are outlined below:



**Figure 27: Program Management Capabilities**

In addition to the capabilities outlined above, we envision the main program management activities for the Iowa program to consist of the following:

- **Program Planning:** The Deloitte Team PMO will develop an initial draft of the program action plan described in Phase One. The plan will be finalized and approved by the Board and the Deloitte Team engagement managers at the beginning of the program. This will allow for monitoring of the progress of the program against the plan as well as clearly defining responsibilities for both parties.
- **Status Discussions:** We will schedule weekly or biweekly meetings focused on program status to support timely discussion on tasks, analytical outputs or identification and resolution of issues and risks.
- **Status Reporting:** The Deloitte Team will develop periodic status report to formally communicate program progress in the form of outputs, deliverables, task status, and open issues. We will jointly work with the Board to develop the report formats that will work best for leadership.
- **Issue Tracking and Resolution:** The Deloitte Team is committed to the prompt identification and resolution of issues that may arise during the course of a program. We leverage issue log

templates for issue tracking, escalation, and resolution. We firmly believe in an open atmosphere where issues are regularly aired and discussed.

- **Establish and support Program Governance Structure** – A programmatic approach to governance will enable the Board to organize and orchestrate multiple workstream initiatives under one structure, while proactively addressing issues, risks, and decisions. As presented in Section 4 , we propose a governance structure that is Board-led, with a decision making process that integrates reporting and risk management across all workstreams.

Please see the Personnel section (4.B) and Figure 5 to view our proposed governance structure.

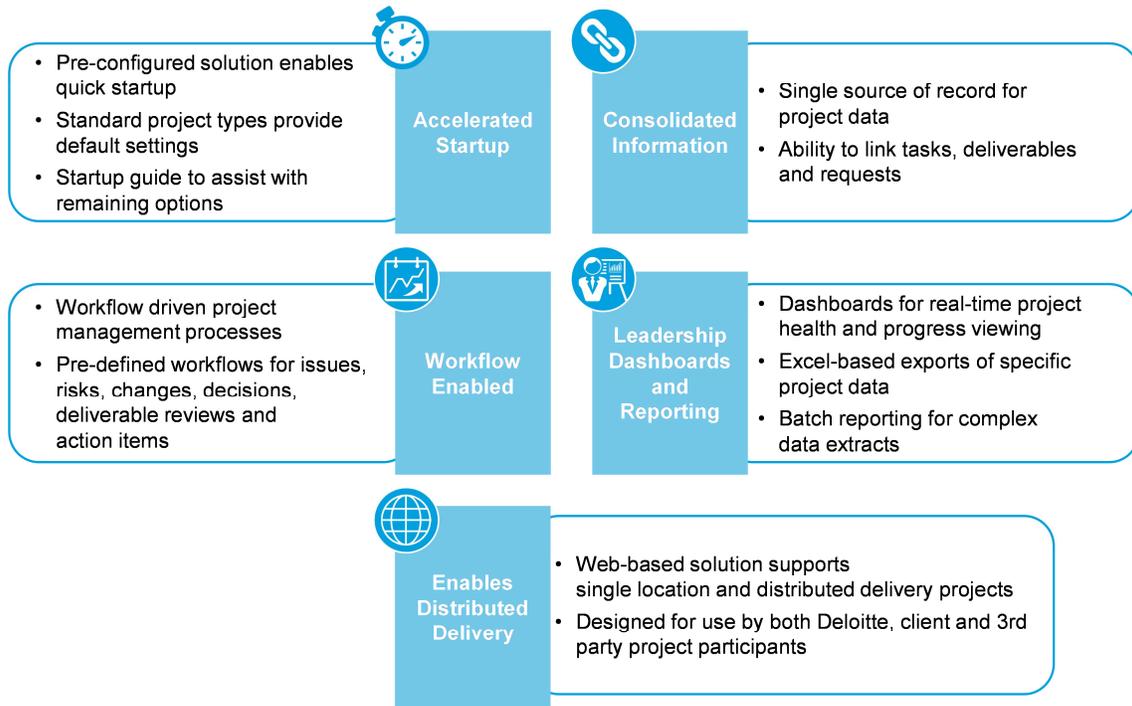
- **Establish deliverable acceptance criteria and process** – During the development of deliverables, the program team will involve the Board’s program management structure and subcommittees in performing development and quality assurance tasks before the program team submits the deliverable to the Board to initiate the acceptance review process. The objectives of this involvement include:
  - Quality Assurance -- the more the Board and Deloitte mutually understand and agree upon the deliverable content the better the quality of the deliverable
  - Reduce approval time and cycles – client involvement in creating the deliverable and participation in proactive quality reviews during deliverable development reduces the length of the formal acceptance review process by building quality into the deliverable rather than correcting issues after the deliverable has been developed

In addition to the ongoing quality assurance tasks, we will work with the Board to define a process for deliverable acceptance and criteria for acceptance. This set of criteria will include items such as meeting formatting guidelines, addresses all key components of the deliverable requirements, follows defined process for client review and walk-through, etc. These criteria will be defined and agreed upon prior to the submission of any final deliverable.

### **Tools**

Throughout this program, we will use Deloitte’s Project Management Center (PMC) for planning and monitoring risks, issues, work plans/schedules, resource allocation, time tracking, and budgeting. This web-based tool will be used to manage both individual workstreams and the overarching program. The PMC provides a centralized platform to manage each phase of the program, delivering preconfigured dashboards for program start-up, redefining workflows, confirming easy accessibility and information-sharing among the parties, and producing real-time reports. The PMC tool will be provided to the Board at no extra cost.

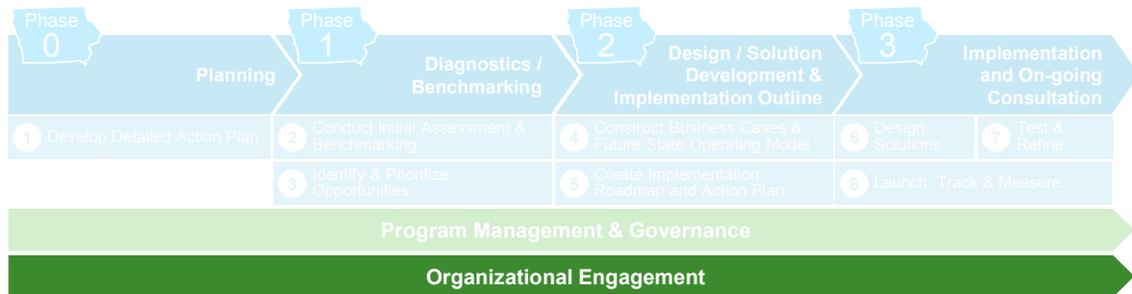
Key benefits of the PMC tool are highlighted below:



**Figure 28: Deloitte's Project Management Center (PMC) Tool**

In addition to PMC, the Deloitte Team will use its eRoom tool to store deliverables and collaboratively share documents. The eRoom system provides a single online location for all Iowa stakeholders to access, store, and control specific documents.

## 6.H Organizational Engagement



**Figure 29: Organizational Engagement of the Deloitte Team's core methodology**

Much like strong Program Management, a focus on Organization Engagement (OE), including communications, is critical to the success of such a large transformation. Recently, the higher-education industry has seen how a lack of engaging faculty and staff can derail an entire project. In our experience, successful programs include a core component focused on the people of the organization – understanding their perceptions, alliances, needs, issues, questions, and concerns, as well as the things they like and do not want to change, and creating communications and, potentially interventions, designed to target and address them in a meaningful way.

This section details how we will meet the Board's request for a Communications Plan, as well as our inclusion of Deloitte's proprietary As One survey as an input to the implementation decision-making process.

**Communications Planning** - The Communications Plan is a highly tactical document, containing a schedule of messages to be sent. It includes the What (type of information), When (timing), How (through what communications channel), and Who (which stakeholder groups) for each communication. Our Phase One approach is intended to cause as little disruption to existing communications mechanisms as possible so the plan will utilize existing communications channels, such as newsletters, websites, regularly scheduled meetings, etc. to deliver messages. This design allows each university to use the Communications Plan to deliver key messages without significantly impacting communication efforts, by developing communications in the format that best meets their needs. We expect Phase One messages to focus broadly on program awareness for most stakeholders while those participating in town halls and stakeholder interviews may have additional contact as they will be communicating directly with the functional teams as they collect and validate data. All stakeholder outreach will be coordinated through the PMO, as to not over-burden faculty, staff, and students with multiple or redundant requests, and respect academic and administrative obligations.

**As One** – During Phase Two, Step 4, it becomes important to understand how the Iowa system's various stakeholder groups perceive the program, as well as their level of commitment to the priorities of the program. To meet this need, Deloitte brings a one-of-a-kind organizational diagnostic tool known as As One. As One analyzes the Who (people), What (purpose), and How (productivity) of an organization using a web-based survey. By analyzing these organization components, we can "see" areas and levels of resistance and/or support across up to 10 standard and custom demographic dimensions. This "resistance/support" analysis becomes a valuable input to the implementation decision-making process in Phase Two, Step 5.

To deliver the survey, the OE team will collaborate with the Board and key stakeholder groups, such as the Unions, to configure the web-based Survey Designer tool, launch the survey to a representative sample of stakeholders across all three universities, and monitor the As One survey. After the survey closes, we will use a proprietary group of algorithms to analyze the data. The results of this analysis are then returned in a one-of-a-kind interactive interface, which is shared in a live two-hour "rumble session" with the Board and other key program leadership.

At the end of Phase Two, the Deloitte Team will work with the Board to update the Communications Plan, addressing any gaps and needs identified in the As One results. Additional information about As One may be found in Appendix 11.A.

Although, not requested at this time, the As One results may also assist in the design and creation of targeted and appropriate people-focused interventions to drive successful transformation adoption. Interventions, in this context, include any people-related activities, other than communications, that will assist in the adoption of change - such as change networks, self-service/online content, and training. We anticipate all three of these, plus other interventions, to be needed for this program during Phase Three.

An overview of the objectives, activities, and deliverables for OE are outlined below:

<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Establish an effective communications plan</li> <li>• Assess Organizational Culture and Engagement for resistance and support</li> <li>• Provide Organizational insights to assist in opportunity selection</li> </ul>
<b>Activities</b>	<p><b>Phase One</b></p> <ul style="list-style-type: none"> <li>• Develop Communications Plan</li> </ul> <p><b>Phase Two</b></p> <ul style="list-style-type: none"> <li>• Configure As One Survey</li> <li>• Conduct As One Survey</li> <li>• Analyze As One Survey results</li> <li>• Present As One Survey results to the Board (Rumble Session)</li> <li>• Update Communications Plan, based on As One results</li> </ul>
<b>Deliverables</b>	<p><b>Phase One</b></p> <ul style="list-style-type: none"> <li>• Communications Plan</li> </ul> <p><b>Phase Two</b></p> <ul style="list-style-type: none"> <li>• As One Results Presentation</li> <li>• Updated Communications Plan</li> </ul>
<b>Tools</b>	<ul style="list-style-type: none"> <li>• As One Survey &amp; tools</li> <li>• Organizational Change Management templates</li> </ul>

**Table 16. Organizational Engagement Objectives, Activities, Deliverables, and Tools.**

**Activities**

- **Develop Communications Plan** – The Deloitte Team will work with the Board to develop a program-level communications plan. It will include the stakeholders validated during the Phase Zero Strategic Choices Lab and will leverage existing communication channels at the Board level, as well as at each university. The Communication plan will include:
  - Delivery Month
  - Delivery Date(s)
  - Stakeholder Group(s) (Faculty, Staff, Students, etc.)
  - Frequency (weekly, monthly, quarterly, etc.)
  - Channel (newsletter, email, website, town hall, staff meeting, press release, etc.)
  - Type of Communication (FAQ, program update, functional update, etc.)
  - Objective/Key Message
  - Owner (who is responsible to develop content)
  - Approver (who can approve content for sending)
  - Sender (who is responsible to deliver/send the communication)
- **Configure As One Survey** – The Deloitte Team will use the program strategic direction developed during the Phase Zero Strategic Choices Lab, as well as the prioritized list of opportunities to configure the As One Survey using our Survey Designer tool. During this time, we will work closely with the Board, as well as any other relevant stakeholder groups (i.e., Unions) to validate and approve language, timing, and terms of use. Once configuration is approved, the survey may be issued.

- **Conduct As One Survey** – The Deloitte Team will work with the Board to identify the compilation of a representative sample of stakeholders across all three universities. Once the sample guidelines are established, each university can then compile a (random) email list to meet those needs. The Deloitte Team will work within the Board and Universities’ communications processes to draft & approve an email invitation(s) to the survey for issuance. Once the survey is issued during Phase Two, Step 4, the Deloitte Team will manage the survey process and provide customer service for questions and issues.
- **Analyze As One Survey results** – Once the survey has closed, the Deloitte Team will use our proprietary algorithms and analytics to determine key findings and results from the survey data. We will develop a core results presentation and prepare the questions and activities for the Rumble Session.
- **Present As One Survey results to the Board (Rumble Session)** – During Phase Two, Step 5, the Deloitte Team will present the As One results to the Board in a two-hour session known as a “rumble session.” During this time, we will start with the core results presentation and then lead the group through a facilitated series of questions using a live interface to slice and dice the survey data and results. The questions and activities during this time are focused on the program’s strategic direction set during the Strategic Choices Lab and the list of opportunities being considered for implementation.
- **Update Communications Plan, based on As One results** – Near the end of Phase Two, the Deloitte Team will update the Communications Plan, based on gaps and needs identified in the As One results.

***Deliverables***

- **Develop Communications Plan** – The Communications Plan will be a MS Excel document containing details about key messages to be issued during the program including the timing, intended audience, delivery channel, and parties responsible for each communication.
- **As One results** – The As One results will be delivered during a two-hour “rumble session” using a live analytics interface. Core results will be compiled ahead of time in a PowerPoint presentation and provided to the Board during the session. Key outputs from the session will be recorded and provided to the Board post-session in either MS Word or PowerPoint.
- **Updated Communications Plan** – The updated Communications Plan will be a refreshed version of the original communications plan in MS Excel, with updates based on gaps and needs identified in the As One results.

## 6.1 Deliverable Summary Table

The table below summarizes the deliverables for each phase of the program and provides a description of each deliverable.

Deliverable	Description
<b>Phase Zero: Planning</b>	
<b>Final Detailed Program Action Plan</b>	The Final Detailed Action Plan will document the intermediate actions that are required to be implemented to achieve the overall program objectives, as well as detail the objectives, phases, steps, activities, milestones, timelines, resources, and assumptions for the Program. The Action Plan will include metrics to enable the Board and the Deloitte Team to monitor and measure the success for each proposed items. A draft of the Action Plan will be shared with Lab participants prior to the session and finalized based on the findings and outputs of the Lab. The Action Plan will be developed in either Microsoft Excel or Project and will be used by the Program team to continuously track and manage the Program throughout each phase.
<b>Phase One: Diagnostics/Benchmarking</b>	
<b>Program Overview Presentation</b>	This presentation will be used at the kick-off meeting to validate program scope, objectives, and timeline, as well as to review key elements of the program with the Board and other stakeholders including the organizational engagement approach, communications, identification and scheduling of interviews, and data collection. The Deloitte Team will work with the Board to confirm the timeframe to provide regular activity reports relevant to the agreed upon scope of work, including the format of any status update. The intent of the presentation and meeting is to align expectations and understanding of the program at the very outset.
<b>Catalogue of opportunities</b>	The output of this phase will be documented in Excel to provide a single location for all relevant information related to each opportunity. In our experience, a higher education institution the size of the Iowa university system will likely result in the identification of more than 150 opportunities. The graphic below shows the first page of an illustrative catalogue of opportunities.
<b>Prioritization Criteria and Matrix</b>	The identified prioritization criteria will be weighted according to the Board's priorities and a matrix will be developed to evaluate each opportunity. The weightings and scoring methodology are flexible so that the Board can adjust prioritization as needed based on changes to the Board's strategy and/or objectives
<b>Prioritized list of opportunities to reduce spend, generate revenue or improve service delivery</b>	Each of the opportunities identified and selected by the Board will be collected and documented in a single Microsoft excel document, and form the launch point for additional analysis in the next phase of work. The list will include an opportunity description, key findings from the first phase of work, an estimate of the potential cost and/or revenue impact, and an estimated implementation timeline. In addition to the information on each opportunity documented in the original catalog developed in the previous step, this revised list of prioritized opportunities will also document the weighted prioritization evaluation and any additional considerations from the Board and other stakeholders regarding implementation.
<b>Communications Plan</b>	The Communications Plan will be a MS Excel document containing details about key messages to be issued during the program including the timing, intended audience, delivery channel, and parties responsible for each communication.
<b>Phase Two: Design/Solution Development and Implementation Outline</b>	
<b>Current State Organizational Structure / Process Flows for Key</b>	Working in concert with Iowa stakeholders, the Deloitte Team will develop a process flow diagram for each identified priority opportunity.

Deliverable	Description
<b>Areas of Potential Change</b>	<p>In addition to current state flow process diagram, the Deloitte Team will also develop written process descriptions, key enablers and a roles/responsibilities matrix.</p> <p>The organizational structure will focus on key elements of the organization, including: structure, core processes, staffing levels, performance levels, technology, and cost structure. The Deloitte Team will use Deloitte’s Organization Operating Model to evaluate the current state, including strengths and opportunities for improvements, those areas that are sufficient as they current exist. The Operating Model will also be used as the basis to describe the future state based on implementation of the identified opportunities.</p>
<b>Opportunity Business Cases</b>	Each business case will be constructed in Microsoft Excel (see figure below), and estimate current baseline spending, implementation costs and future state spending (including staffing levels), as well as allowing the Board to perform scenario testing. Statewide and opportunity-specific assumptions will be incorporated to check for consistency across the business cases and account for information that is either unavailable or not cost-effective to collect
<b>Implementation Roadmap and Action Plans</b>	The implementation roadmap and action plans will be the final output of Phase Two, and will be developed by the Deloitte Team in close consultation and collaboration with the Board and key identified stakeholders. Each action plan will roll up into the single consolidated implementation roadmap, and will describe the key elements required to successfully implement each recommendation (e.g., timeline, dependencies, technology requirements, operating model gaps activities and resources).
<b>Final Presentation to the Board</b>	This presentation will be used at the final meeting of Phase Two, and serve to summarize the findings and output of the Deloitte Team, specifically the implementation roadmap and action plans. The intent of the presentation is to make sure the Deloitte Team has met the Board’s expectations, resolve outstanding questions or issues, and to discuss potential next steps in advance of the beginning of Phase Three.
<b>As One Results Presentation</b>	The As One results will be delivered during a two-hour “rumble session” using a live analytics interface. Core results will be compiled ahead of time in a PowerPoint presentation and provided to the Board during the session. Key outputs from the session will be recorded and provided to the Board post-session in either MS Word or PowerPoint.
<b>Updated Communications Plan</b>	The updated Communications Plan will be a refreshed version of the original communications plan in MS Excel, with updates based on gaps and needs identified in the As One results.

**Table 17. Summary of Deliverables.**

## 6.J Our Functional Depth

In the remainder of this section, we highlight our administrative and academic function-specific knowledge and a targeted approach to each of the key areas of interest outlined by the Board. As described at the very beginning of our Methodology section, each of the review areas will follow the phases and steps outlined in our Core Methodology. Additionally, embedded within each step we bring knowledge, tools, and resources specific to each administrative and academic review area that will be critical to conducting a comprehensive and focused assessment.

Below are a set of descriptions that highlight the Deloitte Team’s experience and key differentiators in each administrative and academic area under review. This detail is provided to show our experience

across these areas which we will bring to the diagnostic/benchmarking phase and throughout the life of the program. Additional information on our capabilities and knowledge in each functional review area can also be found in Appendix 11.D.

## Finance

Finance in higher education is often complex, with many additional critical intersection points with research administration, student financial services, and endowment management. The competitive climate of higher education has put additional pressure on finance organizations to be efficient and effective in managing their limited financial resources. Decreasing federal and state funding, along with volatile endowment returns, has forced institutions to not only rethink how they manage their back office functions, but how they manage their overall financial portfolio and risk tolerance. Universities often struggle with enacting change within their finance organizations due to the decentralized nature in which many institutions operate in.

The Deloitte Team has deep functional experience in finance and has worked with a myriad of institutions on finance transformation and process improvement. We have the ability to address the wide spectrum of Finance needs, including finance strategy, finance operations, integrated performance management and risk management. Deloitte has a comprehensive Finance Transformation Practice that has developed multiple tools to accelerate the review and improvement of Finance Functions. Our broad finance and higher education experience allows us to quickly identify the leading challenges and opportunities that our clients face.

### Deloitte Differentiators

- **FAST Methodology:** Proprietary approach and set of tools for rapid Finance assessment and improvement
- **Leading Practices in Finance Portal:** A website gathering and exchanging all leading practices and learning within the firm
- **Finance Diagnostic Tool:** A tool for assessing current state capabilities of the Finance function and identifying areas of improvement

We understand that each of the universities have already pursued several opportunities to generate savings within the Finance function, such as international receivables, departmental cash deposits, and greater use of ACH. Our team can support these efforts even further by identifying areas where the universities can consolidate or coordinate efforts to leverage even greater economies of scale. As an example, the University of Northern Iowa currently manages and invests with the University of Iowa endowment, saving fund management fees. We believe that other opportunities exist to consolidate tasks and activities and drive greater savings.

### Sample Hypotheses:

- Budgeting process could implement incentives to encourage efficiencies and revenue generation
- Process redesign can reduce cycle times in key areas (e.g., financial close, procure-to-pay)
- Improving use of self-service and electronic payments and leveraging common financial systems (e.g., student billing, vendor accounts)

### Finance-Specific Data Collection

- Deloitte's GBC Higher Ed Benchmark for Finance
- Accounts Receivable data
- Travel and Expense data

- Sponsored Awards data (e.g., grant expenditures)
- Payroll data

#### **Potential Areas of Analysis**

- Integrated Performance Management (IPM) review of the planning, budgeting & forecasting process
- Review of Budgeting funding model
- Assessment of Risk Management Function

#### **Sample Benchmarks**

- Efficiency Measures (e.g. close cycle for monthly and fiscal year close)
- Effectiveness Measures (e.g. Expense Process Cycle Time, etc.)
- Number of Accounts Payable (AP) staff per transactions processed
- Share of invoices paid by ACH/EFT as compared to check
- Share of invoices processed electronically

#### **Leading Improvement Opportunity Examples**

- Establish and enforce single location for accounts receivables to improve collections
- Standardize gift award lifecycle and process
- Accounts receivable processing performed by a central shared-services organization
- Budget process driven by top-down targets derived from strategy, resources of the firm, and expectations of stakeholders such as capital markets

### **Sourcing and Procurement**

The sourcing and procurement function is responsible for activities related to the management of expenditures with external suppliers of goods and services. The activities performed can be defined within the context of what is commonly referred to as the source to pay process lifecycle, where goods and services are sourced (Supplier Identification and Contracting--Sourcing) orders are placed for the goods and services (Purchase Order Processing) and suppliers are paid (Invoice Processing).

Effective execution of the source-to-pay process lifecycle is crucial, since for most universities more than 40% of the operating budget consists of expenditures to external suppliers. For that reason many of the institutional and state-system efficiency audits making headlines in higher education concur that reducing external spend is the largest opportunity for administrative savings.<sup>5</sup>

#### **Sample Savings Hypotheses:**

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<sup>5</sup> University Business Executive Roundtable. Disciplining University Spend. Strategies and Best Practices for Achieving Savings from On-Contract Purchasing. 2009 The Advisory Board Company

### **Sourcing Levers**

- Large, multi-university supply agreements that have not been comprehensively sourced (across the system or within a university) within the last 2 years can be strategically sourced and “marked-to-market” to drive incremental savings
- Consortium contracts can be benchmarked to identify incremental savings opportunities from better pricing driven by more favorable business terms and service levels unique to the Iowa system versus business terms resulting from a compromise of all parties involved in the consortium. Consortium contracts are also not always sourced with the same frequency as stand-alone contracts, so there may be opportunity to independently source categories underlying the consortium contracts and benefit from current market prices
- Expenditure categories can be strategically combined to drive greater savings (e.g. source medical, biological, radioactive, solid and recycling waste as a single category instead of individually)

#### **Deloitte Differentiators**

- One of the world's largest sourcing and procurement practices, with more than 1,100 experienced practitioners
- Practitioners experienced in navigating the regulatory requirements associated with higher education and public sector procurement
- Expertise in more than 250 expenditure categories, including those important to higher education (e.g. Lab Supplies, Subscriptions, etc.)
- Recognized leader in the use and implementation of tools and technologies that maximize value along the entire source-to-pay process lifecycle
- Acknowledged by Kennedy Research as having some of the broadest and deepest supply chain capability in the industry

### **Process Levers**

- Purchase order execution activity can be strategically coordinated to drive greater efficiency and increase discounts by optimizing economic order quantities (i.e. combined purchases at the university level and system wide)
- Consumption patterns can be modified to reduce cost (i.e. identify over-specification of service levels and modify accordingly to reduce cost)
- Early payment discounts can be assessed to identify opportunities to renegotiate and standardize payment terms in the current low interest rate environment, where it is beneficial to pay suppliers early in exchange for discounts

### **Procurement-Specific Data Collection**

- Accounts Payable Data
- E-Procurement transaction-level data (e.g. Ebuy, etc.)
- P-Card Data
- Travel & Entertainment Card Data
- General Ledger Data (with GL Account descriptions)

### **Potential Areas of Analysis**

- Spend Diagnostic to validate current cost reduction efforts and identify opportunities for incremental category-specific savings (University-specific and aggregate across universities)

- Procurement Function Review to validate current operating model and identify opportunities for service delivery optimization (University-specific and system wide). Includes review of current service delivery models (e.g. centralized versus decentralized) as well as a review of key sourcing and procurement processes (e.g. Spend Analysis, Strategic Sourcing, PO Processing, Supplier Management, Master Data Management, etc.) policies and technology usage

#### **Sample Benchmarks**

- **Efficiency Measures:** (e.g. .Expenditures Managed per Procurement FTE, POs Processed per Procurement FTE, Procurement Operating Budget as a Percentage of Total Expenditures, Cost to Process a PO, etc.)
- **Effectiveness Measures:** (e.g. Savings as a Percentage of Total Expenditures, PO Process Cycle Time, RFP Process Cycle time, etc.)

### **Student Services & Academic Support Programs**

Student Services and Academic Support Programs encompass a series of functions including, but not limited to, financial aid, student career counseling & placement, student billing, and registrar/transcript processing. Such functions are typically provided by a variety of offices including the Office of the Bursar, the Student Financial Aid Office, and Career Services.

#### **Potential Areas of Analysis**

- Instituting the “Common Application” to streamline admissions processes and utilize existing online based resources to reduce administrative costs
- Developing incentive based programs to supplement campaign efforts encourage student participation in electronic bill payment services.
- Identify solutions to alter the course inventory change process and catalog production cycle to be more flexible, responsive and agile to meet campus needs
- Creating an active marketing campaign to champion Career Guidance services through social media (e.g. Facebook, Twitter, etc.) and other web-based offerings
- Identifying additional areas to automate routine-tasks across all academic support programs (i.e. financial aid, student billing, etc.)

#### **Sample Benchmarks**

##### ***Financial Aid***

- **Access to financial resources:** (e.g. average student debt upon graduation, % of students served, % of gift aid recipients, % of loan recipients, % of students employed by institution, average need not met by financial aid accepted)
- **Education to students and families about options:** (e.g. % of parents in attendance to information sessions, student loan default rate)
- Satisfaction of financial aid services and educational opportunities (e.g. customer service survey results)
- Compliance with applicable law, regulations, and policies (e.g. audit)

### ***Student Career Counseling & Placement***

- Assist students with career decision making (e.g. number of students served)
- **Provide cooperative education and internships** (e.g. number of for-credit students, zero-credit students, and employers)
- **Provide job search services** (e.g. number of mock interviews, employers at fairs, on-campus interviews, % of students employed post-graduation, % of students attending graduate/professional school post-graduation)
- **Maintain positive employer relations** (e.g. number of employers posting jobs and internships, number of jobs and internships more broadly, number of employer visits\_

### ***Registrar & Transcript Processing***

- **Average response time document requests:** (e.g. processing time for transcripts, academic records, course information)
- **Available physical resources and room utilization** (e.g. rate of room utilization across the instructional day)
- **Satisfaction of Registrar services and performance** (e.g. student satisfaction survey results)

### ***Student Billing***

- **Collections** (e.g. timely receipt of outstanding student payments due to the University)
- **Payment Mechanisms** (e.g. % of payments received via student account systems, check/cash, credit card, etc.)
- **Credit Card Processing** (e.g. compliance with credit card processing standards)
- **Distribution of Financial Information** (e.g. % of statements distributed to students electronically)
- **Student Receivables** (e.g. number of past due accounts)

## **Human Resources**

The management and support of employees in a university environment is inherently complex. Supporting staff, faculty, contractors, and union employees spread out across multiple campuses presents a daily challenge to higher education institutions. As such, an efficient and effective human resources organization is pivotal for Iowa's universities to not only attract and retain top talent, but also to achieve their core mission, as a skilled and motivated workforce form the backbone of any successful organization. Based on our experiences, we have found many universities struggle to keep up with the rapidly changing landscape of human resources and the emerging trends many are still struggling to adopt, such as robust performance management, online staff development, and the shift towards strategic HR business partners. These are some of the many areas our team would help the Board explore to improve services and reduce costs in all three universities.

The universities have already made significant improvements to their human resources function to drive cost savings, such as the implementation of early retirement incentive programs, the implementation of an employee self-service portal at the University of Iowa and Iowa State University, and the reduction of healthcare and benefits costs, particularly at the university of Iowa. Partnerships between universities, such as the shared applicant tracking system used by University of Northern

Iowa and the University of Iowa showcase how collaboration and shared systems between universities can reduce costs as well as standardize processes and user experiences. These types of partnerships serve as a strong template for further partnerships to achieve greater savings. We would work with each university as well as the universities as a whole to drive further efficiencies in areas such as staff training and development, compensation, employee HR services (e.g., customer support).

**Sample Hypotheses:**

- Benefits vendors and administration of benefits plans can be further consolidated across universities
- Consider opportunities to outsource or offshore some Human Resources functions (e.g., payroll)
- Further integrate recruitment and personnel management processes and systems to source internal candidates from all three universities

**Human Resources-Specific Data Collection**

- Recruitment and hiring data and metrics
- Benefits administration and plan costs
- Compensation plan structure and costs

**Potential Areas of Analysis**

- HR Service Delivery Maturity Assessment
- Review of Shared Services model and additional opportunities

**Sample Benchmarks**

- Efficiency Measures (e.g. cost per payslip)
- Effectiveness Measures (e.g. time to hire, etc.)

**Leading Improvement Opportunity Examples**

- Increased support for business development and partnerships to commercialize research
- Restructuring and consolidation of pre-award and post-award support

**Academic Programs**

Our team brings deep experience in various aspects of academic programs including resource stewardship, scheduling, and mission realignment. These services can enable the Board to effectively allocate academic resources, improve labor market outcomes and economic opportunity, and contribute to critical higher education initiatives across all three universities. For example, our team can provide insight around academic scheduling and resource costs to optimize course schedules and reduce facilities costs. Through the use of labor market and program analysis, we can also work with the Board to improve student outcomes, and reduce inefficiencies due to curriculum duplication, overlap, and wastage.

**Deloitte Differentiators**

- **#1 Global HR Technology and Transformation Practice** in breadth and depth of capabilities in Kennedy: HR Technology and Transformation Consulting Marketplace Report 2010-2013
- The **Enterprise Value Map™ for Human Capital** demonstrates ways that shareholder value can be increased through Talent Strategies, Learning & Development, Change Management / Transformation, Organization Strategies, Employee Rewards & Benefits, Governance, Risk & Compliance, and HR Strategy & Services.
- The **HR Service Delivery Model** provides a framework for considering all of the elements required to provide HR services from an end-to-end perspective.
- **InfoHRm**: A database of HR benchmarks, which include data on demographics, workforce profiles (such as staffing rates and tenure), mobility, workforce development, and many others

Academic programs are the heart and soul of a university. Any proposed changes – even if only minor modifications – can result in lengthy academic debates about the merits of the changes. For faculty, the words “efficiency” or “faculty productivity” are often viewed suspiciously because they appear to potentially infringe on the essence of academic freedom. Thus, we recognize that any successful changes to academic programs require clear vision and leadership, transparency regarding the approach and objectives, and close engagement with key stakeholders. Understanding the unique attributes of each university not only helps to preserve their specialties and expertise, but also enables us to tailor solutions to their particular situations and conditions.

### Deloitte Team Differentiators

Deloitte’s team member, KH, has two proprietary tools that are relevant to this program:

- Strategic Cost Management Model: a tool to help universities focus on their core mission and program delivery, looking at both revenue and cost-reduction tactics
- Q<sup>2</sup> Focus Groups: an in-depth, disciplined interview strategy developed by KH Consulting Group to obtain both quantitative and qualitative perspectives

Below is a brief overview of the elements of Iowa’s academic programs that we will analyze as part of this program and the improvements to curricula, schedules, and programs we typically find to gain efficiencies, improve services, generate revenues, and achieve the universities’ mission.

### Academic Programs Review

Academic programs are core to the mission of every university. As such, any review of academic programs will impact the strategic approach for managing the programs linked to university missions. Our experience will help the Board identify both inefficiencies and revenue-generating opportunities across all three universities. Using a specialized Strategic Cost Management model<sup>6</sup> that was developed by our team and used at a variety of higher education clients, we will help the Iowa universities to focus on their core mission and delivery of academic programs that result in student success.

Our review includes defining which academic programs are core to the university mission; collecting and analyzing data on program revenues and costs; stratification of programs as “essential”, “supports essential”, and “value-add”; and an identification of essential programs to preserve. The outputs of this analysis will help the Board determine and prioritize changes to its academic programs to reduce costs and generate revenues without adversely affecting student learning or research. We will address this, first, more generally in Phase I. Then, we can continue with additional, more detailed analyses (at the program level as necessary), along with working sessions with university officials and faculty in Phase II, to develop solutions.

### Academic Resource Stewardship & Scheduling

We believe that scheduling plays a strategically important role in higher education. Effective allocation of academic resources by the academic departments can greatly contribute to critical higher education initiatives. Specifically, course offering schedules should maximize faculty time, existing

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<sup>6</sup> Developed by Deloitte subcontractor, KH Consulting Group

academic space, and the instructional week for the benefit of the students. Effective allocation of resources enables the following:

- Institutions can support enrolment growth with existing faculty and academic space resources, deferring or eliminating unneeded construction costs
- Institutions can control spending and tuition increases while increasing productivity, reducing wasted expenses in adjunct instruction and unneeded construction
- Students can get a conflict-free schedule of the courses required to make progress to completion

**Sample Hypotheses:**

- Utilization of academic space on all campuses is not optimized
- Academic schedules can be revised to improve efficiency and reduce waste
- Course offerings can be refined to improve offering efficiency and reduce instructional costs
- Academic programs can be restructured to match competitiveness and demand
- Academic programs can be realigned to better match each university's mission and strategy
- Productivity and efficiency improvements can be gained through refinements such as elimination of duplication in programs

**Academic Resource Stewardship & Scheduling -Specific Data Collection**

- Space utilization (overall, primetime)
- Course demand by course/campus
- Accreditation site visit reports
- Academic program profiles
- Student profile (enrolments, learning outcomes, etc.)
- Course profile (courses offered, class sizes)

**Potential Areas of Analysis**

- Identification of revenue-generating opportunities in academic programs
- Distance learning opportunities
- Elimination of unfunded mandates
- Review of grants to check for positive return on investment
- Academic resource utilization in a historical schedule
- Academic space capacity, highlighting existing bottlenecks and growth capacity
- Enrolment capacity (growth) strategies outlining optimal capacity of existing space and faculty resources
- Elimination of adjunct instructional waste and/or unneeded academic space construction

**Sample Benchmarks**

- Faculty workload indicators

- Quality measures (e.g., student satisfaction)
- Standards of timeliness
- Methods of leadership and faculty development
- Academic space utilization compared to peers, including the assessment of existing capacity and capacity opportunities
- Course offering efficiency and instructional costs compared to peers, including the assessment of cost savings opportunities

## Marketing & Advertising

We recognize that establishing an “Iowa Brand” and improving the promotion of the state’s universities is a high priority for the Board. The marketing and advertising function is responsible for promoting the state’s universities and helping to establish a system-wide “brand.” As Higher Education becomes increasingly competitive, activities ranging from “roadshows” to improved web-based advertising (e.g. website enhancement, Facebook, Google, etc.) can work in concert to promote clear and consistent messaging to prospective students, families, and the public more broadly.

With an ever increasing variety of learning approaches, marketing and advertising is crucial to inform students how their options align to their unique learning styles. Both for-profit and not-for-profit institutions are paying closer attention to their marketing departments and the messages they develop. Effective marketing, particularly in the context of a public university system, can result in more allocations for public state universities by local and state governments. This can be done by building a network of support by demonstrating to the public how the state can benefit from improved public higher education.<sup>7</sup>

### Potential Areas of Analysis

The myriad of challenges facing higher education with regard to marketing opens the door for multiple areas of analysis:

- Developing Key Performance Indicators (KPIs) and evaluation techniques to better determine the effectiveness of marketing initiatives enabling universities to allow, and re-allocate expenditures to make sure each dollar is well spent
- Performing rigorous market segmentation research to enable Universities to develop “audience-specific marketing” efforts to better target messages and materials, both for niche programs and for the institution as a whole
- Sharing costs and making strategic use of available resources both within the marketing department and across other organizations can mitigate resource issues

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<sup>7</sup> University Business Executive Roundtable. Disciplining University Spend. Strategies and Best Practices for Achieving Savings from On-Contract Purchasing. 2009 The Advisory Board Company

- Increasing emphasis on technology as a means to expand messaging beyond traditional boundaries (e.g. geographic, cultural, etc.)

### Sample Benchmarks

- **Qualitative Measures:**
  - **Word of Mouth:** How well your content is passing from person to person through recommendations (e.g. content in email, blogs, Twitter, Facebook)
  - **Brand Awareness:** Students and parents ability to not only recognize your institution, but also their opinions on said brand (e.g. results from focus groups, phone interviews, surveys)
- **Quantitative Measures:**
  - **Return on Marketing Investment:** To determine if investment in marketing is producing the desired revenue targets (e.g. revenue generated minus your marketing investment divided by the marketing investment)
  - **Cost Per Click:** The cost each time a visitor clicks on a paid search advertisement (e.g. price you pay for each click on an ad through Google, Yahoo, Bing, Facebook, LinkedIn)
  - **Conversion Rate:** How well a website enables visitors to take an action (e.g. divide the number of visitors who took an action on your site by the total number of visitors)

## Technology

The Deloitte Team’s IT transformation methodology for Higher Education is based on the understanding that while certain parts of an institution’s IT operation may be studied or assessed separately, they still have dependencies on other facets of the IT operation within the university and across the university system. And it follows that resulting transformation in one area may significantly affect other areas. In addition to being interrelated to themselves, these different IT areas must also align to the business and IT strategies, so that none of them are considered in a vacuum.

Through extensive IT assessment and transformation experience across 200+ higher education institutions, we have found that using an IT Transformation framework that clearly defines technology strategy, business strategy, and the requisite IT operating model that results as the foundation for the work helps to understand, and capitalize on, these interrelationships. The following figure depicts these high level relationships.

### Deloitte Differentiators

- Ranked #1 by Kennedy Research and Gartner in IT Strategy and Planning Services
- Deep IT strategy, planning and implementation experience across 200+ Higher Education institutions
- Successful IT transformation experiences at the University of California Berkeley, Northeast R1 University, and numerous public and private institutions
- Our tried and tested tools and accelerators that will allow us to hit the ground running on Day 1



**Figure 30: IT Operating Model Interdependencies**

### **Sample Hypotheses**

- Efficiencies and cost savings can be realized across the universities through increased collaboration
- Each campus could leverage the solutions and expertise of the others while still maintaining a level of independence to implement their unique requirements.

### **IT-Specific Data Collection**

- IT Infrastructure
- IT Applications
- IT Governance
- IT Finance
- IT Change Management and Communications
- IT Workforce Development

### **Potential Areas of Analysis**

- Gain additional understanding of existing initiatives and how to leverage them
- ITIL service management processes
- Applications and infrastructure costs
- Assessment of opportunities completed to date

### **Sample Benchmarks**

- Efficiency measures (e.g., cost per user, monthly calls per help desk agent)
- Effectiveness measures (e.g., Average network traffic per month)

### **Leading improvement Opportunities Examples**

- Consolidation of administrative systems
- Standardization of IT service management

## **Research Administration**

Competition for research funding has become increasingly difficult over the past five years, with more institutions competing for a shrinking pool of research funds. Universities often struggle with

developing streamlined processes that support Principal Investigators' needs, while simultaneously minimizing the overhead incurred at the institution level. The desire to support faculty at the local level often supersedes the need for efficient processes that are in compliance with state and federal regulations. Effective research administration functions must not only support Principal Investigators through all phases of the award lifecycle, both pre-award and post-award, but must also facilitate technology transfer and licensing to grow university revenues through commercialization of their research.

Some improvements to the research administration function, such as the new intellectual property model at Iowa State University, and the web-based reporting system to manage regulatory workload have already enabled the universities to realize savings and efficiencies. The Deloitte Team's broad research administration experience, in both higher education and clinical research institutes, allows us to quickly identify additional organizational, process, and technology related challenges and opportunities the universities face regarding research administration to improve their competitiveness and support cutting edge research. Our experience includes a deep understanding of all aspects of the research function, including pre-award, post-award, and compliance, and commercialization. We are uniquely positioned to help the Board deal with the complexities of today's research environment, from risk mitigation to trainings to business development.

#### **Sample Hypotheses:**

- Research administration staffing levels and skillsets are not aligned to the needs of the universities
- Opportunities for greater collaboration and integration across universities, schools, and departments to support more competitive, interdisciplinary research projects
- Improvements to pre-award processes and operating model may improve proposal success rates

#### **Research Administration-Specific Data Collection**

- Number of research administration support staff per Principal Investigator
- Grant award expenditures
- Proposals submissions and success rates
- Patents and licensing agreements

#### **Potential Areas of Analysis**

- Assessment of proposal development resources and support
- Review of technology transfer and licensing functions
- Regulatory compliance review of pre- and post-award processes

#### **Sample Benchmarks**

- Pre-award measures (e.g., proposal success rates, late internal submission rates)
- Post-award measures (e.g., number of no-cost extensions)

#### **Leading Improvement Opportunity Examples**

- Increased support for business development and partnerships to commercialize research
- Restructuring and consolidation of pre-award and post-award support

## Facility Operations, Maintenance and Construction – Facilities Planning, Space Development and Utilization, Stewardship

Higher education institutions face diverse and complex challenges as they strive to maintain, expand or renovate their campus infrastructure. An integrated and inter-disciplinary approach to facilities management includes aspects of operations, maintenance, space, infrastructure assets, and staff, and their associated activities that optimize facility efficiency and usage. Facilities stewardship involves a strong and pervasive commitment to optimally leveraging capital investments to create high-functioning and attractive campuses that provide services that stakeholders value.

The Deloitte Team has deep functional expertise in the facility operations, maintenance and construction areas, and has worked with many institutions on program transformation, process improvement, controls analysis and performance management. The Deloitte Team will perform an end-to-end review of these functions, focusing on the relevant processes, organization, technology, and metrics. Our recommendations will consider both the university's external environment as well as internal constraints.

### Sample Hypotheses:

- The lifetime of expensive facilities equipment and building assets could be lengthened by optimizing maintenance procedures
- Facility space may be inadequately utilized
- Returns on capital investment may be increased by improving analysis of project costs and controls before, during, and after construction activity
- Facility operations may be decentralized and inefficient
- Service providers may be fragmented, leading to inconsistent quality and subpar volume discounts

### Facilities & Construction-Specific Data Collection

- Facilities and capital projects portfolio information

### Potential Areas of Analysis

- Facilities organizational competencies and structure to improve performance
- Capital project costs and schedule control systems to reduce costs and mitigate risks

### Sample Benchmarks

- Benchmarks for facility operations, maintenance and construction from multiple sources including IFMA, BOMA, Whitestone, and Corenet Global

We recognize that the institutions are already pursuing a number of different facility efficiency efforts, including capital project and budgeting systems (BuildUI), space management systems (SIMS), energy efficiency (LEED certifications and use of renewables), and database of equipment and maintenance records. We intend to consider and build upon these activities as we conduct our analysis.

### Deloitte Differentiators

- Established industry thought leaders and subject matter specialists
- Suite of workplace strategies that increase utilization of assets and improve stakeholder productivity and satisfaction
- Team member accreditations include: AIA, CCE/A, CCIM, LEED AP, MCR, PE, PMP and SLCR
- Access to the Enterprise Value Map™ - Tool to determine what investments are accretive and the relative value of competing investments across the portfolio so that they can be prioritized

## Auxiliaries – Residence Services, Athletics, Parking and Transportation Enterprises, Utility Systems and Student Unions

A higher education institution's auxiliaries are important focus areas as they augment the educational experience and influence the campus environment. Institutions aim to provide services that foster an environment of comfort and learning. The planning and maintenance of auxiliaries often poses many challenges, such as unplanned growth, increasing costs, and conflicting stakeholder priorities. While athletics programs, student unions and residence halls are used as a recruiting tool for the university, heralded as a point of prestige, and valued by most stakeholders, increasing costs and reduced budgets are forcing universities to explore opportunities for efficiency in these areas.

The Deloitte Team has worked with many institutions to effectively plan and manage these auxiliary areas. The goal of the Deloitte Team is to build upon current successes and identify additional process, organizational, technology and cost savings opportunities that can improve services and service levels and reduce costs.

### Sample Hypotheses:

- Programs and services at auxiliaries may not be tailored to what matters most to stakeholders
- Existing space may be improperly utilized
- Construction and moving costs could be avoided by improving parking and transportation services
- Utility costs could be better contained by undertaking initiatives to reduce demand, negotiate better rates with providers, and review utility bills to make sure they are correct

### Auxiliaries-Specific Data Collection

- Service levels and operating costs
- Capacity utilization

### Potential Areas of Analysis

- Operating model improvement
- Innovative energy management initiatives for reducing costs and carbon footprint
- Opportunities to standardize service quality to improve student experience

### Sample Benchmarks

- Operational best practices

We understand that there are already initiatives to make auxiliaries operate as efficiently as possible, including retrofitting energy consumption devices to accept renewables, designing and implementing an award winning energy control center, and building new energy plants. While energy efficiency is important, we believe there are other opportunities for the auxiliaries, including matching services offered with stakeholder requirements and maximizing space utilization. Similarly, we note that a rigorous internal and external audit function for review of cash receipts, travel and purchases already exists for Athletics, therefore, we will explore other administrative areas for creating efficiency.

### Deloitte Differentiators

- Unique portfolio of competencies and ability to integrate services to provide a breadth of perspectives and insights to create greater value and return on investment
- Experience in managing multiple stakeholder groups with unique and conflicting priorities
- Comprehensive transformation tools and accelerators to quickly and efficiently assess services, identify improvement opportunities and effectively implement changes

## Advancement

Recognizing Iowa State University completed an \$800+ million campaign in 2011 and the University of Iowa has recently launched a new \$1.7 billion ('For Iowa. Forever More.') capital campaign, we believe there is likely work to be done around assessing current state of Iowa university Advancement operations and fundraising capacity.

The Deloitte Team has conducted several similar assessments for other universities utilizing advisors with deep knowledge of higher education institutional advancement, including a recent engagement for Northeast R1 University which included an Advancement function review, and a recent CRM Transformation engagement for the University of Wisconsin Foundation. In many cases, several million dollars of potential additional fundraising capacity has been identified, obtainable through a combination of recommended operational and performance management improvements.

Our proposed approach for Iowa would be to review Advancement operations, past fundraising performance, and estimated future capacity for all three universities in order to make recommendations related to campaign sizing and optimizing operations.

### Sample Hypotheses:

- Centralize disparate Advancement activities to improve efficiency (e.g., direct mail and stewardship reporting)
- Increase fundraisers' focus on core fundraising activities by reassigning non-fundraising duties to other resources
- Rebalance size of fundraiser portfolios and establish clear performance expectations related to number of monthly visits and solicitations according to the gift officer's area of focus

### Advancement-Specific Data Collection

- Number of prospect visits
- Number of solicitations
- Number of direct mail vendors

### Potential Areas of Analysis

- Peer school benchmarking of staff productivity, performance metrics, and roles and responsibilities for performance-based management
- Analysis of non-fundraising duties of front line fundraisers to determine what can be reassigned or centralized
- Analysis and consolidation of direct mail activity and contracts
- Analysis of rated prospect capacity and rebalancing of prospect portfolio assignments

### Sample Benchmarks

- Efficiency Measures (e.g. mailings per stakeholder)
- Effectiveness Measures (e.g. dollars per living graduate)

## 7 References

We have included references for representative engagements that collectively demonstrate our key capabilities: organization and operational assessment, cost reduction opportunities organizational engagement, business case development, and implementation roadmap. These references are intended to serve as an illustrative sample of our experience serving similar clients, and more detailed information for each qualification is included in Section 4. For additional qualifications, please see Appendix O.

<b>#1: Organization Strategy, Shared Services and Performance Improvement</b>	
<b>Client Organization</b>	Northeast R1 University
<b>Reference Name:</b>	[REDACTED]
<b>Reference Contact Information:</b>	[REDACTED]
<b>#2: Design and Implementation of Administrative Service Centers for Finance, HR IT and Research Administration</b>	
<b>Client Organization</b>	University of California, Berkeley
<b>Reference Name:</b>	[REDACTED]
<b>Reference Contact Information:</b>	[REDACTED]
<b>#3: Comprehensive IT Assessment</b>	
<b>Client Organization</b>	Large University System
<b>Reference Name:</b>	[REDACTED]
<b>Reference Contact Information:</b>	[REDACTED]
<b>#4: Federal Government Deficit Reduction</b>	
<b>Client Organization</b>	Federal Government of Canada
<b>Reference Name:</b>	[REDACTED]
<b>Reference Contact Information:</b>	[REDACTED]

Table 18. References for Representative Engagements

## 8 Sample Documents

Sample Documents can be found in full after the Appendix.

Sample Document	Description
<b>Award Setup Process Guide</b>	An example of a Research Administration process guide prepared for a state university client
<b>Business Case Summary</b>	Overview of key cost-saving business cases identified for a private university client
<b>Communications Plan Screenshots</b>	Example of a comprehensive communications plan for a client
<b>Educational Master Plan</b>	Example of an Academic analysis deliverable
<b>Operating Model Analysis and Improvement Opportunities Report</b>	Example of a current state assessment, final deliverable from Phase One of a private university client project

**Table 19. Sample Documents**

## 9 Cost of Services

Deloitte has carefully reviewed the requirements of the RFP and understands the strategic importance of this initiative to the Board. We have proposed a team of our experienced and skilled practitioners with deep experiences in enterprise cost reduction, implementation and operations in higher education. We are confident that these qualified resources in concert with our collaborative approach, commitment to quality, and competitive pricing provide the right combination to successfully deliver the results desired by the Board. Our cost of services estimate is based on:

- Our analysis of the information provided in the RFP and associated Questions and Answers provided by the Board
- Effort required to successfully complete similar efficiency and transformation reviews for other higher education clients

### 9.A Proposed Cost of Services

The table below represents our proposed cost of services for Phase One and Phase Two specified in the RFP. Per the RFP, we propose a fixed price for Phase One and have provided an estimated cost of services that is Time & Materials based for Phase Two. Phase One and Two estimates are both exclusive of expenses. As presented in Section 6 of this document, we project a Phase One effort of 10 weeks and a Phase Two effort of 11 weeks in duration for a total duration of 21 weeks or approximately five months for the effort requested by the Board in the RFP. The description below provides additional detail on cost of services for each phase.

RFP Phase	Total Proposed Cost of Services
Phase One	\$1,400,000
Phase Two	\$1,049,550

**Table 20. Proposed Cost of Services for Phase One and Two**

#### Phase One

As noted in Section 2, Executive Summary, and Section 6, Methodology, of this proposal response, we envision that as we engage in further discussions with the Board, finalize the detailed action plan, and discuss contractual terms, there may be some refinements required to our Phase One estimate. As presented in Section 6 - Methodology, Deloitte will invoice the Board using the following deliverable schedule over the 10 week period of performance that currently have scheduled for the phase.

Deliverable Schedule	% of Fees
<b>Communications Plan</b>	5%
<b>Program Overview Presentation</b>	10%
<b>Catalogue of opportunities</b>	30%
<b>Prioritization Criteria and Matrix</b>	25%
<b>Prioritized list of opportunities to reduce spend, generate revenue or improve service delivery</b>	30%

**Table 21. Proposed Deliverable Schedule**

**Phase Two**

To execute Phase Two, we propose a Time and Materials (T&M) structure. In a T&M structure, we bill at our standard hourly bill rates which are aligned to personnel by level (e.g., Manager, Senior Consultant, Consultant). This type of structure allows the most flexibility for programs with changing needs or where scope cannot be adequately defined to allow for a fixed price to be used. This estimate for Phase Two represents our best estimate.

Based on our previous experiences on similar projects, the estimate presented below accommodates for the continued development of an estimated 10-20 approved opportunities emerging from Phase One. This is based on our previous experience with other like projects. Per the intent implied in the RFP, once the Board has approved opportunities for Phase Two Deloitte Consulting will revise the detailed action plan to reflect the defined scope. In concert with the development of the revised detailed action plan, Deloitte will revise the estimated cost of services below and submit for Board approval. No work will begin on Phase Two until the Board has approved a revised detailed action plan; a revised estimated cost of services; and an estimate of expenses for Phase Two (see Section 9.B). Invoicing for Phase Two will be on a recurring basis once every four weeks until completion of the phase.

Level	Rate	Estimated Hours	Estimated Fees
Principal	\$450	54	\$24,300
Director	\$425	244	\$103,700
Sr. Manager	\$375	521	\$195,375
Manager	\$335	505	\$169,175
Sr. Consultant	\$295	739	\$218,005
Consultant	\$235	1021	\$239,935
Analyst	\$195	508	\$99,060
	<b>Total</b>	<b>3,952</b>	<b>\$1,049,550</b>

**Table 22. The Deloitte Team's Hourly Rates and Estimated Cost of Services for Phase Two**

Deloitte Consulting will work with the Board to help manage the scope of Phase Two to facilitate performance within the fee estimate, but the parties agree that actual fees may differ from this estimate. To further assist in the management of fees, Deloitte Consulting will formally notify the client when 75% of estimated Phase Two program fees have been expended providing activities and level of effort required to complete the tasks in an amended detailed action plan that has been updated to include the full scope of Phase Two. Deloitte Consulting will not exceed the approved fee amount without the Board's authorization and where the projected fees exceed the remaining authorized amount, unless otherwise approved by the Board, the parties agree that Deloitte Consulting will stop performance once the authorized fee amount is reached.

Should either party identify appropriate changes in scope or other issues that would affect the estimated total fees that party will inform the other party and the parties will discuss and agree on the impact on the fee estimate before implementing such changes.

**Phase Three:**

For the type of work envisioned in Phase III, Deloitte has engaged with clients using a variety of fee arrangements to meet their specific needs and available budgets. During the development of the scope and implementation details associated with Phase III, Deloitte will engage with the Board to discuss potential options for fee structure and then based on these discussions propose an appropriate fee structure for the engagement. Below are a few options that we have used with prior clients to provide you with a conceptual idea of how such arrangements work. These options are illustrative only.

**Option 1: Time & Materials, Not to Exceed**

This option is identical to what is presented for Phase Two where scope and detailed plan of action are defined. The Board and Deloitte agree upon a level of efforts and estimated cost of services executing as described above.

**Option 2: Time & Materials plus savings percentage:**

Our Time and Materials plus savings percentage would propose set fees to be paid in labor for a set number of hours of work at an agreed upon blended hourly rate. For this option, we include additional skilled resources to oversee and report on the savings and revenues realized for an agreed upon designated period after the phase begins. Our fees typically include providing overall support to the creation of Steering Committee documents, management reports, savings and revenue tracking and other program management support.

**Savings Percentage and Payment Points:** To determine the savings percentage, we estimate a percentage range and assume a range of savings are achieved within an agreed upon implementation timeframe. Savings payments are exclusive of the time and materials payments already paid. Deloitte would stop collecting payment after the Board has achieved an agreed upon level of savings with the agreed upon time period.

**Option 3: Expenses Plus Savings Percentage**

Our expense plus savings percentage would propose an even lower fee rate than Option 2 for an agreed upon number of hours which would actually be designed to cover Deloitte expenses only. These rates typically include labor and labor fringe only using figures approved by the Defense Contract Audit Agency (DCAA), one of the leading Federal Government oversight bodies on contractor cost management. No overhead or general administrative costs are incorporated into the rate structure. Like Option 2, we include additional skilled resources to oversee and report on the savings and revenues realized for an agreed upon designated period after the phase begins. Our fees typically include providing overall support to the creation of Steering Committee documents, management reports, savings and revenue tracking and other program management support.

**Savings Percentage and Payment Points:** To determine the savings percentage, we estimate a percentage range but higher than that proposed in Option 2 and assume a range of savings are achieved within an agreed upon implementation timeframe. Savings payments are exclusive of the time and materials payments already paid. Deloitte would stop collecting payment after the Board had achieved an agreed upon level of savings within the agreed upon time period.

## 9.B Expenses:

As noted above, our estimate for the cost of services is exclusive of expenses. Out of pocket expenses to include, but not necessarily limited to, travel and lodging expenses, communications charges and computer time and supplies, reproduction costs and all taxes, as applicable. Based on the information provided in the RFP and the requirement to develop a detailed action plan prior to contract award, we believe that the development of an estimate of expenses is more appropriate following the selection of Deloitte. Upon notification, Deloitte will develop an estimate of expense, in an agreed upon format and level of detail, for Phase One which will accompany the detailed action plan required by the RFP. Deloitte and our teaming partners will engage in no travel prior to Board approval of the estimate of expenses. Similarly, as we discuss and agree upon the scope of Phase Two, Deloitte will develop an estimate of expenses for Phase Two obtaining Board approval prior to any associated travel.

## 9.C Assumptions

The Deloitte Team's proposal is based on the following project assumptions. A deviation from the assumptions may cause changes to Deloitte's schedule, fees, level of effort or otherwise impact Deloitte's performance of the Services, and the parties will enter into a Change Order to reflect any adjustments to the scope of Services and/or pricing for such services as a result thereof.

- The Board, the associated Universities and their associated staffs will support the project scope, purpose, objectives and approach as agreed to in the Board approved detailed action plan and associated contract.
- The Board will provide a day-to-day qualified Program Manager at their level plus ensure that each University provides a qualified Program Manager as well as to work with the Deloitte Team to navigate the campus environment, schedule meetings, collect required data, and assist with the execution of the program.
- The Board and the Universities will provide access to program participants to meet the proposed program timeline, as established in the detailed action plan, and any necessary follow-up will be available during the program
- The Board will work closely with the Deloitte Team to 1) make timely decisions on outstanding issues, 2) participate in analysis and recommendation development activities; and 3) develop, review, and approve work products/deliverables
- The Board and Universities will confirm availability of and access to on-site workspace (e.g., cubes, conference rooms), and access to phones, Internet, and printers during site visits.
- The primary work location for the program will be a combination of the Board's office, all three University locations and the home offices of the Deloitte Team staff that are engaged on this effort. Work location for each week will be primarily determined in concert with the activities of the Board approved detailed action plan.
- When on-site, the Deloitte Team personnel will average of four (4) days a week (typically Monday through Thursday) and will work remotely from their respective local office on Fridays.
- The Deloitte Team will be given timely access to current state data related to the in-scope functions specified in this RFP and specified in the detailed action plan.

- The Board will provide Deloitte staff access to requested data and documentation in electronic format which provides ease of use and manipulation for analysis.
- The Deloitte Team will provide the outputs/deliverables as agreed upon in the Board approved detailed action plan.
- The Board will resolve any pushback or potential issues that are raised by the Universities, specific departments or other program participants/stakeholders.
- The Board will take the lead in communications with the Universities regarding their effort. Deloitte will support through the development of the communications plan as well as the program management and governance structure activities described in Section 6 Methodology of this document.
- The Board will take the lead in communicating with any type of employee organizations and any HR or Labor related matters associated with this program.
- None of the work envisioned to be performed under this engagement will create or otherwise give rise to an organizational conflict of interest that would preclude Deloitte from pursuing future work with the State of Iowa or the associated Universities included within the scope of this effort. The parties will confirm the same in the contract and/or identify any applicable limitations or other parameters.

## 9.D Change Orders

If any of the following events occur while the Deloitte Team is engaged to provide the services (each a “Change Order Event”), Deloitte Consulting shall be entitled to a Change Order to adjust the program’s requirements, timeline or deliverables and to compensate Deloitte for actual and anticipated additional effort at Deloitte standard billing rates, plus reasonable incurred expenses. Change Order events can include, but are not limited to the following:

- The scope, approach or timing of the Program or the Services change,
- Delays are encountered that are beyond the reasonable control of Deloitte
- A program assumption proves to be invalid,
- Client fails to meet its obligations as set forth herein.

Deloitte will notify the Board, in as soon as possible after becoming aware of a Change Order Event. Notwithstanding anything to the contrary in this Agreement, if the parties are unable to reach a complete agreement on a Change Order within 15 days of Client being notified of a Change Order Event, Deloitte may, at its option, suspend or terminate the Services upon written notice to OMB. Change Orders to this Agreement will only be effective when signed by authorized representatives of each party.

## 9.E General Business Terms

To accelerate the process of the Board and Deloitte agreeing to contractual terms upon notification of intent to award, we have included in Appendix 11.E Deloitte’s General Business Terms. Using the terms provided as a starting point, Deloitte has successfully negotiated contracts with nearly every State government in the US and hundreds of higher education institutions. We are highly confident in our ability to come to terms with the Board within the two weeks allotted in the RFP.

# 10 Assurances, Representations, and Authorization to Release Information

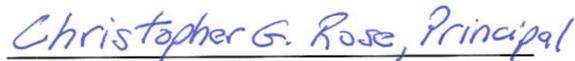
The Bidder hereby assures and represents with respect to this proposal that:

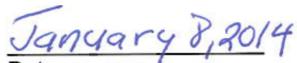
1. It possesses legal authority to submit this proposal; that a resolution, motion or similar action has been duly adopted or passed as an official act of the Bidder's governing entity authorizing the submittal of this proposal, including all assurances, representations contained herein, and directing and authorizing the person signing below to act in connection with the application and to provide additional information as may be required.
2. It will comply with all applicable federal and state equal opportunity and affirmative action requirements.
3. All statements and information made or furnished to the Board are true and correct in all material respects. Bidder has not knowingly made any false statements in its proposal. Bidder acknowledges that supplying any information determined to be false, misleading or deceptive will be grounds for disqualification from consideration.
4. Bidder hereby authorizes the Board to obtain information regarding its performance on other contracts, agreements or other business arrangements, its business reputation, and any other matter pertinent to evaluation and the selection of a successful Bidder in response to this Request for Proposal. It authorizes the Board to research the company's history, make credit checks, contact the company's financial institution, contact former and current clients of the company, and perform other related activities necessary for reasonable evaluation of this proposal.
  - The Bidder acknowledges that it may not agree with the information and opinions given by such person or entity in response to a reference request. The Bidder acknowledges that the information and opinions given by such person or entity may hurt its chances to receive contract awards from the Board or may otherwise hurt its reputation or operations. The Bidder is willing to take that risk.
  - The Bidder hereby releases, acquits, and forever discharges the State of Iowa, Board of Regents, their officers, directors, employees and agents from any and all liability whatsoever, including all claims, demands and causes of action of every nature and kind affecting the undersigned that it may have or ever claim to have relating to information, data, opinions, and references obtained by the Board in the evaluation and selection of a successful Bidder in response to this Request for Proposal.
  - The Bidder authorizes representatives of the Board to contact any and all of the persons, entities, and references which are, directly or indirectly, listed, submitted, or referenced in the undersigned's proposal submitted in response to this Request for Proposal.
  - The Bidder further authorizes any and all persons or entities to provide information, data,

and opinions with regard to the undersigned's performance under any contract, agreement, or other business arrangement, the undersigned's ability to perform, the undersigned's business reputation, and any other matter pertinent to the evaluation of the undersigned. The undersigned hereby releases, acquits and forever discharges any such person or entity and their officers, directors, employees and agents from any and all liability whatsoever, including all claims, demands and causes of action of every nature and kind affecting the undersigned that it may have or ever claim to have relating to information, data, opinions, and references supplied to the Board in the evaluation and selection of a successful Bidder in response to this Request for Proposal.

- A photocopy or facsimile of this signed Authorization is as valid as an original.

  
Signature

  
Type or Print Name, Title

  
Date

This form must be signed by an authorized representative of the Bidder and submitted to the Board along with Bidder's proposal.

RFP: Efficiency and Transformational Services for the Board of Regents

ENTITY: Board of Regents, State of Iowa

RFP RELEASE DATE: December 9, 2013

# 11 Appendix

## 11.A As One

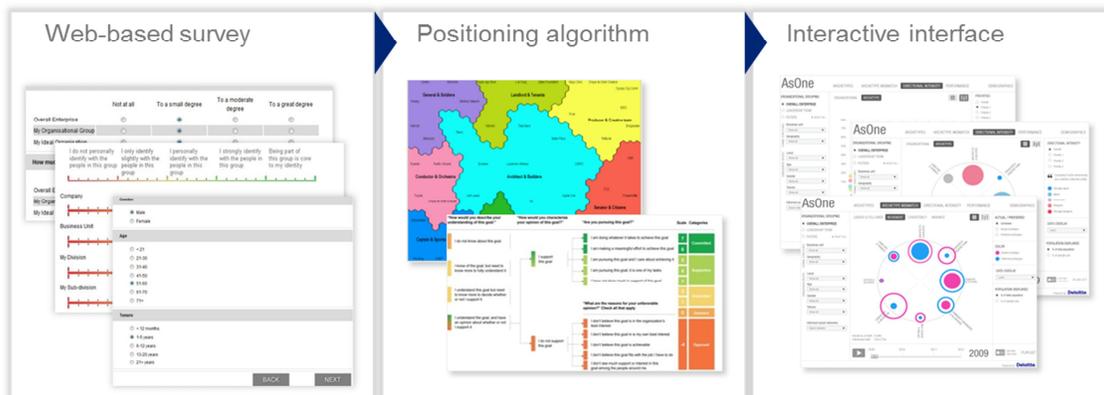
Several studies have found that transformation efforts more often fail because of people-related issues and that successful transformations focus on creating commitment towards a common set of objectives, minimizing resistance to change, and increasing the rate of adoption of recommended changes.

To create an impactful OE approach to mitigate Iowa's people-related risks, we need to understand clearly how the Iowa system's various stakeholder groups perceive themselves individually and work together as an over-arching organization. To meet this need, Deloitte brings a one-of-a-kind organizational diagnostic tool known as As One. As One analyses the Who (people), What (purpose), and How (productivity) of an organization using a web-based survey. By analyzing these organization components, we can design and create targeted and appropriate people-focused interventions to drive successful transformation adoption.

### The power of the diagnostic

The As One approach begins with a web-based survey to gather information from the full-spectrum of individuals within your organization. Once the survey is complete, data gathered is then pushed through a complex set of algorithms which synthesize and quantify organizational dynamics, once thought to be “soft” or unquantifiable. The results of this analysis are then returned in a one-of-a-kind interactive interface, which can be shared live with the Board and other key program leadership.

**The As One Diagnostic contains three steps.**



**Figure 31: As One Diagnostic**

These live sessions, known as “Rumble Sessions” provide real-time slicing and dicing of the results, and allow leadership to look at their organizational dynamics in ways never previously assessed and often overlooked.

## Understanding the Who, What, and How

As One assesses the current-state of three key measures: the Who (people), What (purpose), and How (productivity):

- **Who (People):** Assesses the *Shared Identity* of the organization – the affinity with a particular group who share common interests, needs and aspirations. Understanding which groups of individuals feel the strongest affinity indicates at what level change strategies will be most successful.
- **What (Purpose):** Assesses the *Directional Intensity* of the organization – the extraordinary effort concentrated on a specific priority. As One's approach gets beyond a general sense of engagement to a more specific measure of Directional Intensity concentrated on strategic priorities.
- **How (Productivity):** Assesses the *Common Interpretation* of the organization – the consistency and fit of archetype (i.e. common mental model). The importance of understanding archetypes is to identify which change and communication strategies will be most effective – depending on the archetype.

By assessing Shared Identity, Directional Intensity, and Common Interpretation we can then identify strong, stable organizational components, as well as weak link(s) and create targeted and efficient change interventions to move individuals and groups to acceptance and adoption of the transformation.

## 11. Additional Qualifications

Along with the qualifications and references included in Sections 4 and 7 respectively, we have included additional qualifications, which demonstrate our capabilities across a broader array of engagements. We have helped other Higher Education institutions and federal and state clients with a wide range of missions become more efficient and effective, from cutting hidden costs and managing operations differently to implementing technology solutions to improve financial management to developing change management tools and training curricula. As our qualifications indicate, we have expertise across a full suite of services, and our ability to provide effective end to end support has delivered thousands of successful transformations.

	Assessment					Solution Design								Solution Implementation						
	Organizational and Operational Assessment	Cost Reduction Opportunities	Organizational Engagement	Business Case Development	Implementation Roadmap	Facilities Ops, Maintenance, Construction	Finance and Administration	Human Resources	Information Technology	Research	Sourcing and Procurement	Organizational Design	Revenue Generation	Academic Programs	Shared Services	IT Transformation	Strategic Sourcing and Procurement	Communications, Training, Change Management	Space Utilization and Scheduling	Academic Curriculum and Faculty Deployment
University of California – Berkeley**	X	X			X		X	X	X		X			X	X					
[REDACTED]	X	X	X	X	X				X					X	X					
University of Texas at Austin*					X		X	X							X					
[REDACTED]	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Harvard University**	X	X		X	X				X		X			X	X					
Federal Government of Canada Deficit Reduction**	X	X	X	X	X															
University of Northern Iowa*		X				X													X	
Chabot-Las Positas Community College District*	X	X	X									X								
Large R1 Public Institution		X		X	X	X	X		X	X	X									
University of Iowa		X				X													X	
Mississippi Institutions of Higher Learning	X	X				X													X	
University of California – Los Angeles		X										X								
Education Institution	X	X		X			X	X	X		X	X	X	X	X	X				
Johns Hopkins University		X	X		X					X	X						X			
State University							X		X						X					
Higher Education Organization							X		X						X					
Dartmouth College			X		X	X	X				X	X		X		X	X			
City of Los Angeles, Office of the Mayor			X		X							X								

**Figure 32: Additional Higher Education and Public Sector Qualifications**

\*Indicates those qualifications highlighted in Section 4

\*\*Indicates those qualifications highlighted in Section 4 and listed as references in Section 7

## Administrative Services Review and Redesign: Large R1 Public Institution, School of Dentistry

### The Client

The client, hereafter referred to as “Large R1 Public Institution” is a large public research university.

### Related Key Capabilities

- Cost Reduction Opportunities
- Business Case Development
- Implementation Roadmap

### Challenge

Like many other organizations, the University and the School of Dentistry faced budgetary challenges due to rising cost structures and limited resources. The University hired Deloitte to conduct a review and redesign of administrative operations with the School of Dentistry. The University's goals for the project were to reduce administrative costs and improve customer service by adopting new organizational models, best business practices, process improvements based on reengineering, and fully utilizing the University's technology investments. The project included a current state assessment of the School's organization, people, processes, and technology, the development of a future state operating model and supporting business case, and the design of a high-level implementation plan.

### Scope of Engagement and Approach

- Conducted a review of the current state and to deliver recommendations for improvement for the following in-scope administrative operations at the School of Dentistry:
  - Finance / Accounting
  - Human Resources / Timekeeping
  - Purchasing
  - Research Grant Administration
  - Student Services
- Engaged stakeholders at all levels of the organization to achieve a comprehensive understanding of the current state
- Conducted a Visioning Session and periodic updates with senior leaders
- Led 17 individual interviews with Deans, Department Chairs and Department Administrators
- Held 10 process sessions with staff across departments
- Distributed data collection tools to each department for completion
- Conducted benchmarking interviews with other schools on campus and three outside universities.

### Key Objectives Achieved

- Identified opportunities within each in-scope function to reduce redundancies, improve consistency and standardization of administrative processes, and reduce spend by sourcing more strategically and instituting more effective demand management
- Developed recommendations for a future state organizational structure and business process based on shared administrative services, more effective spending, and greater efficiency
- Built a robust business case for change
- Developed a high-level implementation roadmap including both “Quick Win” and longer term opportunities for change

The roadmap provided would allow the School to achieve more than \$4 million in savings over five years through a 15% reduction in administrative staffing levels, business process improvements, and expanded use of sourcing and demand management strategies.

## High Level Cost Assessment of Support & Infrastructure Functions: Large R1 Public Institution Health System

### The Client

The client, hereafter referred to as “Large R1 Public Institution” is a large public research university.

### Related Key Capabilities

- Cost Reduction Opportunities

### Challenge

Health Reform will impose significant profitability challenges on healthcare providers, especially the Academic Medical Centers who need to fund academic and research enterprises through surpluses in clinical care. The university has identified an imperative to reduce annual operating expenses by \$200 million over the next three years. They wish to embark on a 3-year cost reduction program, beginning with support and infrastructural functions.

### Scope of Engagement and Approach

Conducted a finance-driven benchmarking effort across the clinical, academic and research enterprises for all support and infrastructural areas including:

- Biomedical Engineering
- Facilities (EVS, Plant Ops & Maintenance, Security , Utilities)
- Finance
- Food & Nutrition
- Human Resources and Employee training
- IT & Telecommunications
- Laundry & Linen
- Legal
- Materials Management
- Planning & Marketing
- Revenue Cycle

### Key Objectives Achieved

- Identified and quantified \$80-120M in potential cost structure improvements
- Working with the executive team to structure the improvement program and begin the design of specific changes to achieve the benchmark cost position

## Academic Scheduling Optimization & Student Course Demand Forecasting: University of Iowa

### The Client

The Office of the Provost provides academic leadership to the University. Its fundamental mission is to champion innovation and excellence in teaching, research, creative production, and service. The Spring 2009 task force on Undergraduate Education and Success included the following relevant charges:

- Expand access: A five-year plan for increased enrollments
- Promote success: A five-year plan to improve retention and graduation that provides incentives to and makes colleges accountable for meeting the targets

The metrics for gauging progress towards these goals include: (1) An increase in retention from 83% to 88% by 2016, (2) an increase in the six-year graduation rate from 65% to 70%, (3) a reduction in time to degree by 5%, and (4) increase enrollment of first-year first time undergraduate students by 100 each year through 2015

### Related Key Capabilities

- Cost Reduction Opportunities

## Academic Scheduling Optimization & Student Course Demand Forecasting: University of Iowa

### Challenge

- Enrollment growth of 4% from 2009 to 2010 and a target undergraduate enrollment of over 23,000 by 2015 (up nearly 10% from 21,176 in 2010)
- Limited large classroom and auditorium primetime availability
- Departmental room ownership of some classrooms
- The Provost's concern is having enough classes for incoming freshman classes

### Scope of Engagement and Approach

- Benchmark existing scheduling effectiveness of each academic unit related to course offerings supply versus student demand
- Highlighted course offering "change candidates" that would lead to improved alignment of faculty to student course needs
- Benchmark facility allocation using proprietary indicators of performance
- Quantify existing capacity in academic instructional space
- Identify existing bottlenecks that will limit growth opportunity
- Recommend strategies to improve capacity and align with strategic goals
- Recommended strategies to improve capacity focused on the mitigation of existing bottlenecks
- Presented performance indicators with peer comparison and related opportunities for improvement
- Scope the implementation of course demand forecasting and develop integration with MAUI Degree Audit

### Key Objectives Achieved

- Established the overall efficiency of client's course offerings at 64.31% (23.09 average census enrollment v. 35.90 average enrollment capacity per section) in the Fall 2010 term
  - This efficiency level was well below the industry mean of 76.31% (placing the client in the 13<sup>th</sup> percentile) and the like institution mean of 78.62%
  - Only 40.66% of the courses offered "balanced" with student demand (between 70 and 95% full at census date)
  - There was considerable opportunity remaining to improve to the goal utilization of 85% (which is 77<sup>th</sup> percentile)
  - Applying a \$4,000 per section adjunct instructional rate, improving to 70% course fill rate by reducing the number of net offerings by 447 would yield an instructional cost savings of \$1,788,000 per major academic term
  - Reduction Candidates (additional offerings of courses that are not statistically needed to meet student demand) amounted to 8.68% of the total offerings (478 of the 5,508 undergraduate offerings)
  - Elimination Candidates (boutique courses with on offering and very low demand) accounted for 1.20% of the schedule (66 offerings)
- Established classroom utilization in the Fall 2010 term of the hours during client's standard scheduling week as 50.06% v. industry mean of 47.97% (placing the client in the 55<sup>th</sup> percentile) and the like institution mean of 50.60%
  - Quantified in the seat fill in classrooms at 59.11% v. industry mean of 62.08% (placing the client in the 35<sup>th</sup> percentile) and the like institution mean of 61.96%, along with a software implementation solution to improve fill ratios
  - Identified a significant issue of "off-grid" classroom meeting pattern assignments during primetime at 60.29%, and the related capacity waste at 16.54%
  - Outlined capacity improving strategies that, cumulatively, could add up to 35.94% new usable classroom capacity. This additional capacity could support enrollment growth of up to 3,841 additional students)
  - Implementation of these strategies would save the client \$4.52M in construction costs and building maintenance over 10 years v. new construction to support this level of enrollment growth
- Modification of Academic Scheduling Policy to positively impact strategic goals
- Full Deployment of Astra Schedule for space optimization and modeling

## Academic Scheduling Efficiency & Effectiveness, Assessment & Implementation: Mississippi Institutions of Higher Learning

### The Client

The Board of Trustees is the constitutional governing body of the State Institutions of Higher Learning, Mississippi's public four-year university system. The system includes four research institutions and four regional institutions. Mississippi's public universities enroll more than 80,000 students and award more than 15,000 degrees each year.

### Related Key Capabilities

- Organizational and Operational Assessment
- Cost Reduction Opportunities

### Challenge

Increasing enrollment and reductions in state appropriations. System-wide enrollment has increased annually since 1994 and for the first time fall enrollment exceeds 80,000 students. In one year enrollment increased by over 4.7 percent from fall to fall, forcing the state to look at the efficiency of all operations, including academic operations.

At Mississippi State University, the goal was to significantly grow enrollments from 17,000 FTE to over 20,000 FTE without additional faculty or space investments. This was especially difficult because they already had significant space bottlenecks and much of the faculty believed that they were "out of space."

### Scope of Engagement and Approach

- Benchmark existing scheduling effectiveness of each campus related to course offerings supply versus student demand
- Highlighted course offering "change candidates" that would lead to improved alignment of faculty to student course needs
- Benchmark faculty allocation using proprietary indicators of performance
- Quantify existing capacity in academic instructional space
- Identify existing bottlenecks that will limit growth opportunity
- Recommend strategies to improve capacity focused on the mitigation of existing bottlenecks
- Presented performance indicators with peer comparison and related opportunities for improvement

### Key Objectives Achieved

- Ad Astra worked with the client to develop and implement a number of recommended strategies allowing the client to grow enrollment significantly with existing academic resources:
  - 4,200 more students were enrolled in 2011, compared to 2007
  - 10 fewer net classrooms are available now v. 2011
  - Reduced faculty investment now v. 2011
- Institutions developed goals that correspond to priorities and presented goals to IHL (short term - 1 year, mid-term: 3 year, long term: 5 year)
- Improved the overall efficiency of client's course offerings to 84.22% by Fall 2012 (32.13 average census enrollment v. 38.15 average enrollment capacity per section), just below our long-term goal of 85%
  - This efficiency level was well above the industry mean of 76.31% (placing the client in the 75<sup>th</sup> percentile) and the like institution mean of 78.62%
  - Applying a \$2,000 per section adjunct instructional rate, increased efficiency allowed an instructional cost savings of approximately \$750,000 per major academic term
- Improved classroom utilization from 46.60% the Fall 2007 term to 60.12% v. industry mean of 47.97% (placing the client in the 88<sup>th</sup> percentile) and the like institution mean of 50.60%
  - Identified multi-media bottleneck in a subset of classrooms causing bottlenecking, leading to an investment in technology that significantly contributed to usable capacity
  - Reduced "off-grid" classroom meeting pattern assignments during primetime at 23.72% (88<sup>th</sup> percentile), and the related capacity waste to 7.73% (91<sup>st</sup> percentile)
- Saved the client \$14.67M in construction costs and building maintenance over 10 years v. new construction to support this level of enrollment growth

## Responsibility Center Management (RCM) Model in Higher Education: University of California – Los Angeles

### The Client

The University of California at Los Angeles (UCLA) is a public research university located in Los Angeles, California. Established in 1882, UCLA boasts an endowment of nearly \$3B with over 4,000 faculty members serving over 40,000 students.

### Related Key Capabilities

- Cost Reduction Opportunities

### Challenge

UCLA was exploring the potential adoption of an innovative approach to managing revenues and expenses through Responsibility Center Management (RCM). UCLA Administration wanted to understand how other institutions using RCM handled administrative functions.

### Scope of Engagement and Approach

KH analyzed how RCM has been implemented and how “common good” and “administrative overhead” functions are handled with RCM at other universities. KH developed three case studies of successful RCM models in American higher education, including:

- University of Pennsylvania
- University of Southern California
- Indiana University

### Key Objectives Achieved

Common trends, benefits, and barriers were also identified across institutions. UCLA decided not to adopt RCM because of number of barriers it would face in making it meaningful and institutionalized.

## Enterprise Cost Reduction Program: Educational Institution

### The Client

The client, hereafter referred to as “Educational Institution” is a medium-sized liberal arts undergraduate college with five graduate and professional schools.

### Related Key Capabilities

- Cost Reduction Opportunities
- Organizational and Operational Assessment
- Business Case Development

### Challenge

The Educational Institution had faced several years of decreasing enrollment yields, flat tuition growth, and increased debt payments, creating significant deficits that placed the institution in precarious financial health. Deloitte was engaged to perform a cost reduction assessment at the enterprise level, including both academic and non-academic operations.

### Scope of Engagement and Approach

- Applied a top-down, data-driven approach, with a strong focus on governance, project management, and change management.
- Began with administrative operations to establish quick wins and achieve immediate savings to ease cost pressures, including business affairs, facilities, indirect spend, working capital, student life, and IT
- Built on the success of the administrative review to restructure academic operations, including rationalizing courses, departments, and majors; establishing faculty efficiency and productivity standards, and right-sizing and consolidating academic support infrastructure (admissions, libraries, career office, etc.).

## Enterprise Cost Reduction Program: Educational Institution

### Key Objectives Achieved

- Non-academic support functions (e.g., Facilities Management, Indirect Spend etc.) assessment resulted in ~19% reduction in annual operating costs.
- IT organization assessment resulted in ~16% reduction in annual operating costs.
- Academic business review resulted in ~15% reduction in annual operating costs.

## Change Management Support for SAP ERP Implementation: Johns Hopkins University

### The Client

Johns Hopkins University enrolls nearly 20,000 full-time and part-time students in the Baltimore-Washington area and employs 27,000 people in full-time, part-time and temporary positions. Together with the Johns Hopkins Health System they form the Johns Hopkins Institutions, one of Maryland's largest private employers.

### Related Key Capabilities

- Cost Reduction Opportunities
- Organizational Engagement
- Implementation Roadmap

### Challenge

Johns Hopkins recognized that for modern institutions of higher education and research to maintain their agility, growth, and competitiveness, technology goals must be aligned not only with internal business processes, but also with the interests of many diverse constituents in its community. There was a need to improve internal organizational processes and significantly enhance Johns Hopkins' ability to provide enhanced services to those individuals directly and indirectly impacted by the institutions.

### Scope of Engagement and Approach

- Worked directly with HR leadership to craft a Workforce Transition Strategy across all the institutions, involving changes to over 11,000 employees in the first phase
- Established over 26 Implementation Teams that became the cornerstone of the transfer of ownership from the project to the field
- Developed a more customized outreach and change management program including six independent hospital affiliates, 65 departments and 20 schools, appealing to and connecting with a diverse group of stakeholders (faculty, doctors, nurses, administrators, clinical research labs, University and Health System leadership, vendors, and grantors)

### Key Objectives Achieved

The Johns Hopkins community is well positioned to take advantage of an integrated back office system that lets the enterprise focus on research results and regulatory reporting in a time of limited federal funding. As a result of process standardization, the client was able to launch seven shared services organization: (1) AP, (2) AR, (3) Fixed Assets, (4) HR/Benefits, (5) Payroll, (6) Supply Chain, and (7) Grants.

## Implementation of PeopleSoft Campus Solutions for an Educational Institution: State University

### The Client

The client, hereafter referred to as “State University” is a large public university with more than 20,000 students

### Related Solution Design and Implementation Capabilities

- Finance and Administration
- Information Technology
- IT Transformation

### Challenge

The State University was embarking on an initiative to replace its Student, Human Resources, Payroll, and Finance operations systems. PeopleSoft has been selected as the software solution for Student, HR and Finance. Deloitte was engaged to assist with the implementation of PeopleSoft Campus Solutions for student processing. The project is being driven by both external and internal factors, including:

- Vendor de-support of their legacy Student Information System
- Fragile, aging, and inflexible architecture
- Technical difficulties which impede the rollout of new functionality
- Problematic system architecture

### Scope of Engagement and Approach

State University selected Deloitte as implementation partner for several reasons including our strong methodology for ERP implementation, Total Campus. The methodology is tailored to the specific needs of our higher education clients and enables business process change through a structured and detailed deliverable based approach. The scope of the implementation at the University includes the core PeopleSoft Campus solutions modules of:

- Campus Community
- Admissions
- Student Records
- Academic Advisement
- Student Financials
- Financial Aid
- Self Service

### Key Objectives Achieved

- Transformation and standardization of University-wide administrative processes
- Foster an environment of change to promote the creation of more efficient processes
- Continue to support compliance with external regulators

## Campus Solutions Implementation: Higher Education Organization

### The Client

The client, hereafter referred to as “Higher Education Organization” is a large public university with more than 20,000 students

### Related Solution Design and Implementation Capabilities

- Finance and Administration
- Information Technology
- IT Transformation

## Campus Solutions Implementation: Higher Education Organization

### Challenge

The client is one of the largest and oldest of the 11 institutions of higher learning in the State. The client's 15 colleges offer more than 275 undergraduate, graduates, doctoral, professional and specialist degree programs, including medicine and law. With over 40,000 students enrolled each semester, the student body is comprised of 75.7% undergraduate, 21.4% graduate and 2.9% unclassified. Women account for 55.7% of the enrollment, and minorities comprise 25.3% of total enrollment. The client launched this transformative project to replace an aging legacy system and improve the services students can access to manage their university experience, plan their degree program, financial aid and tuition payments.

### Scope of Engagement and Approach

- Guided the client through the implementation process using the Enterprise Value Delivery methodology
- Assisted in confirming functional requirements and defining scope.
- Utilizing Industry Print, the client was involved in the design of future processes
- Helped to re-examine student administration processes and make the necessary changes to improve the student experience.
- The project experienced the first go-live of the Course Catalog and Schedule of Classes on September 10, 2012. The go-lives continued with the student's bio demographic information and portal being released in December 2012, enrollment and registration functions along with financial aid in January 2013. Future functions to roll out include student financials (tuition payment, etc.) in July 2013, remaining student records functionality in September 2013 and finally the complete Admissions module early in 2014.

### Key Objectives Achieved

- Experienced the first go-live of the Course Catalog and Schedule of Classes on September 10, 2012.
- Continued with go-lives for student's bio demographic information and portal being released in December 2012
- Student financials (tuition, payment, etc.) modules rolled out in July 2013.
- Greatly enhanced services to students throughout the entire student lifecycle and gave faculty and administrators the tools needed to effectively manage all student records.

## Administrative Service Centers Design and Implementation: Dartmouth College

### The Client

Established in 1769 and a member of the Ivy League, Dartmouth features thriving research as well as graduate and professional programs, including the renowned Dartmouth Medical School, Tuck School of Business, and Thayer School of Engineering. Dartmouth has an annual operating budget of \$735M (FY09) and serves approximately 4,100 undergraduate and 1,700 graduate students.

### Related Key Capabilities

- Organizational Engagement
- Implementation Roadmap

### Challenge

Due to a decrease in endowment value of approximately \$1B, Dartmouth faced a multi-million dollar structural deficit. The college completed an analysis of cost reduction and revenue generation opportunities in recognition of this growing budget gap. In response, the college created the Strategic Budget Reduction Initiative (SBRI) to streamline administrative operations and close the budget deficit, while enabling continued investment in support of the school's academic mission.

## Administrative Service Centers Design and Implementation: Dartmouth College

### Scope of Engagement and Approach

Supported the SBRI's Administrative Restructuring Teams (ARTs) to redesign business processes, develop future state operating models, and assist with implementation. Specific areas of support included Finance, Strategic Sourcing/Procurement and Facilities. The objectives and scope for these areas are outlined below.

#### Finance:

- Conduct business process reengineering, including as-is assessment, to-be design, gap analysis, and BPR Recommendations for key business processes
- Create a detailed implementation plan and lead implementation working groups
- Conduct in-depth resource allocation analysis to detail current state staffing in relation to finance center transactions
- Develop operating manuals and detailed procedures
- Develop training materials
- Create a communications strategy and plan
- Provide project management support
- Manage information technology projects required for a successful finance center go-live

#### Procurement:

- Conduct spend analysis to create a cleansed baseline dataset
- Create a strategic sourcing plan to capture \$4 million to \$6 million of savings within two years
- Execute initial category sourcing plans and conduct rapid renegotiating efforts
- Support strategic sourcing efforts with Total Cost of Ownership modeling and analysis
- Implement several sourcing categories, including office supplies, multi-function devices/copiers, and painting services
- Provide onsite training and mentoring of the client staff on the sourcing methodology

#### Facilities:

- Strategy Phase
  - Assess current state work order management processes
  - Develop future state work order management processes
  - Conduct business and technology gap analysis
- Implementation Phase
  - Develop phased implementation plan
  - Manage the implementation of Phase 1 changes
  - Develop training materials and job aids
  - Assist in enhancing functionality of existing technology solution
  - Define management Reports
  - Develop policy and procedures manuals
  - Define functional requirements for technology upgrade

### Key Objectives Achieved

- Estimated \$6-8M cost savings within two years
- Deloitte methodology and collaborative approach enabled Dartmouth to achieve its project goals.

## Development Reform Strategic Plan: City of Los Angeles, Office of the Mayor

### The Client

The mayor of Los Angeles is the chief executive office of the city, elected to a four-year term and limited to serving no more than two terms. Los Angeles is the most populous city in the State of California and the second most populous city in the United States behind only New York.

### Related Key Capabilities

- Organizational Engagement
- Implementation Roadmap

### Challenge

Since 1995, three Mayors attempted to launch Development Reform in the City of Los Angeles through Blue Ribbon Panels, mandated audits by the City Controller, and forced organizational consolidation. Each attempt had failed because of the various interests groups, parochial approaches of the City departments, bureaucratic red tape and antiquated zoning codes, and lack of receptivity to collaborate in fear of loss of control.

### Scope of Engagement and Approach

In January of 2011, the City of Los Angeles Mayor's Office launched the Development Reform initiative and the City retained the services of KH Consulting Group to assist with this effort. To make development more seamless, predictable, and transparent across the City, Development Reform focused on implementation and change management. To achieve an action-oriented solution, the KH Team:

- Focused on work-to-date (100 studies already completed), flow-charted 43 processes, and identified strategies and tactics for making real-time and lasting change
- Worked with the City to produce a Strategic Plan with Action Plans that outline what should be done, why it should be done, who should do it, when it should happen, and what is the magnitude of investments needed to make the changes a reality
- Worked with more than 100 City employees on 10 Implementation Improvement Teams to review ideas submitted for improving development services and to develop the Action Plans
- Worked with the City's Development Reform Advisory Committee (DRAC), a group of outside industry stakeholders to garner and implement critical feedback on Development Reform efforts
- Solicited widespread input from both industry and community groups through 11 forums around the City and an online survey, which was available to the general public and City employees
- Wrote the draft Strategic Plan with 9 Strategic Priorities and complementary Action Plans

### Key Objectives Achieved

The Development Reform Strategic Plan was finalized and adopted by the Mayor in August 2011 and can be viewed at:

[http://www.losangelesworks.org/resources/uploads/Dev\\_Reform\\_Strategic\\_Plan\\_Vol\\_1.pdf](http://www.losangelesworks.org/resources/uploads/Dev_Reform_Strategic_Plan_Vol_1.pdf)

Outcomes achieved since the issuance of the Strategic Plan include:

- The City Council has approved \$15 million in funding for new technology to integrate development services across the 12 City departments
- The City Council approved \$8 million and the Department of City Planning has launched Zoning Code Reform – the first comprehensive update of the zoning code since 1946

## 11.C Deloitte Team Detailed Resumes

<b>Rick Ferraro</b> <b>Engagement Director</b> <b>Deloitte Consulting LLP</b> <i>Director</i>	Tel: +1 703 251 3685 Mobile: +1 202 210 6486 Email: <a href="mailto:rferraro@deloitte.com">rferraro@deloitte.com</a>
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Rick is a Director with deep experience and knowledge in organization-wide restructuring and cost reduction. He has led or participated in more than several dozen company restructurings or significant reorganizations in the private, public, and non-profit sectors, as well as numerous functional transformations, and merger integrations. He has over 30 years of consulting experience. He helps align leaders to strategic priorities, facilitates common direction and priorities, helps fashion a program to quickly and objectively identify improvement opportunities, and helps lead the implementation of programs to produce results.

Rick has led restructuring activities related to productivity improvement, business model and service delivery model redesign, service and process improvement and performance management, outsourcing, offshoring, discretionary spend reduction, sourcing, and supply chain optimization.

Rick has targeted experience serving higher education, public sector, and non-profit organizations as Brandeis University, Johns Hopkins University, Simmons College, Northeast R1 University, University of Cincinnati, Alabama State Docks, Fairfax County Public Schools, Government of Canada (70+ agencies), Canada Blood Services, Institute of Electrical and Electronics Engineers, Maryland Port Administration, Nashville and Davidson County, South Carolina State Ports Authority, United States Postal Service, Virginia State Corporation Commission, Western Australia Petroleum, and the World Bank.

### Relevant Project Work

#### **Government Deficit Reduction for the Government of Canada**

Rick led a large cost reduction engagement for the Government of Canada encompassing nearly 70 departments and agencies. Leading his team through the complex assessment, they produced \$5.2B in cost reductions and savings. The solution provided addressed the use of innovative business models and approaches, and included identifying savings within Shared Services Canada, one of the largest such organizations in the world.

#### **Cost Reduction, Shared Services and Performance Improvement at Northeast R1 University**

Rick provided subject matter expertise to all aspects of the university-wide cost reduction and performance improvement assessment for Northeast R1 University. In his role, Rick provided cost reduction assistance and guidance to functional teams across the engagement as they identified and built business cases for cost reduction opportunities.

#### **Spend Diagnostics and Procurement Function Model Review at Johns Hopkins University**

As engagement director, Rick was responsible for providing Johns Hopkins University with a spend diagnostic providing category-level insights into all targeted external spending to identify focused, quick hit savings opportunities. By working with the purchasing team, University Administration and the broader university buying community, Rick and his team was able to cleanse and classify \$3.6 B in spend within eight weeks.

#### **Administrative Cost Reduction Assessment at University of Cincinnati**

As project manager for the engagement, Rick was responsible for daily operations and client management for a team tasked with identifying cost reduction and performance improvement opportunities at the University of Cincinnati.

### Education:

**M.S. Management** – Massachusetts Institute of Technology

**M.S. Mechanical Engineering** – State University of New York, Buffalo

**B.S. Mechanical Engineering** – State University of New York, Buffalo

**Chris Rose**  
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Mr. Rose is a Strategy, Cost and Finance Transformation leader in Deloitte's Federal Practice. He has supported over 70 engagements across Army, Navy, Defense Agencies, and Department of Energy during the last 13 years as a consultant. Since joining Deloitte, Mr. Rose has managed relationships providing vision to senior clients enabling them to think about new ways to execute their operations and transformation their operations. Mr. Rose has led the successful Federalization and adaptation of commercial approaches to the Federal marketplace in Finance Transformation, Business Case development and G&A Cost Assessment translating them into eminence for the Federal Practice.

#### Relevant Project Work [at least three]

##### **Financial Management Transformation for the Navy Reserves Forces Command**

Mr. Rose acts as lead Principal of a team conducting a financial management transformation effort that is focused on financial process improvement, financial systems implementation and sustainment, and financial management workforce transformation. As part of this effort, Mr. Rose and his team conducted extensive analysis of the process, workforce and operations supporting the development of a new enterprise-wide financial management organization structure, a benchmarking assessment comparing the Navy Reserves to their Army and Air Force counterparts. He has overseen the development of process improvement and technology development efforts for Navy Reserve fuels and personnel funding. In addition, Mr. Rose is teamed with Deloitte Consulting Technology Service Area in the delivery of finance business intelligence tools to facilitate the analytics the organization performs.

##### **Overhead Cost Assessment for the United States Army's Army Material Command Program**

Mr. Rose led project efforts for DUSA and ASA(FM&C). For the DUSA, he led an overhead cost assessment across the overhead functions of the Army's largest activity – Army Material Command - to identify redundancies, overlaps and potential changes for improved operations. The assessment is reviewing a series of cost parameters to include financial, manpower and workload to identify potential opportunities for improvement. For the finance organization, Mr. Rose assessed manager span of control, geographic location dispersion via a fragmentation analysis and conducted comparative financial benchmarking to identify potential opportunities for improvement. For ASA(FM&C), Mr. Rose and his team performed contract reconciliations between legacy systems and GFEBS to determine appropriate obligation amounts to enter into GFEBS for out of year contracts.

##### **Strategic and Operating Review for the Department of National Defence of the Government of Canada**

As part of a strategic and operating review for the Government of Canada (GOC), Mr. Rose provided independent advice and knowledge regarding private and public sector best practices for improving productivity and achieving operational efficiencies. He was responsible for task management of several teams throughout the life cycle of the project. The project also looked for ways to improve services and service delivery to Canadians by examining government-wide solutions to standardize, consolidate and re-engineer GOC business processes, procedures, organizations and locations/sites. Through review, research and analysis, Mr. Rose led the composition and delivery of the independent advice and knowledge for the Department of National Defense covering all non-mission functions to include financial management.

##### **Financial Operations Assessment and Services Transformation for the Assistant Secretary of the Army**

Mr. Rose led an assessment the Department of the Army financial operations encompassing 106 locations and over 11,000 financial management personnel to determine options for a new service delivery model conceptual design for Army financial management in an ERP-enabled environment. The recommended "To Be" service delivery model consolidated most Army financial management processes into an Army-wide shared service center for increased process standardization and enhanced internal controls. Outlined required workforce skill sets to support an Army cost culture after implementation of the recommended service delivery model. Developed a supporting business case of the operating model change yielding an estimated \$82M in benefits with an ROI of 192%.

#### Education:

**Masters, Public Administration** – North Carolina State University  
**B.S. Business and History** – Wake Forest University

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Virginia is a seasoned senior manager with a well-rounded background in consulting. Over sixteen years of project management experience in a variety of high-profile settings. Seven years of experience working at Carnegie Mellon University as a Project Director prior to Deloitte. A wide variety of skills pertaining to strategy development and implementation in service delivery and customer service from the executive suite to line-staff levels. Shared Services and Cost Reduction strategy and implementation experience. Systems implementation and IT governance experience. Excellent communication and writing skills.

## Relevant Project Work

### **Higher Education Business and Technology Transformation**

Virginia led and managed a twelve person cross functional Deloitte team to support a major business and technology transformation of a 900+ person organization across 70+ libraries at a top-tier Ivy League university. She worked closely with senior executives (e.g., CIO, Senior Associate Provost, Executive Director) and managers to plan and implement major portions of a large transformation initiative for the University Library. This work included development of a shared services model and detailed business process redesigns across several functions (Access Services, Technical Services, and Preservation, Digitization, and Conservation; some Finance), detailed organizational design and financial analysis for shared services and IT, development of an 18-month transformation roadmap, creation of Memorandums of Understanding across multiple schools and departments, establishment and support of a program management office, and support for high-priority strategy development.

### **Shared Services Finance Center for a Leading Ivy League College**

Virginia led the design and implementation of Shared Services Finance Centers to process transactions such as Payroll, Business Expense Reimbursement, and Procurement. Worked closely with executives, managers, and staff to conduct Business Process Reengineering on key business processes, created training and procedures materials, planned the communications strategy, and led implementation working groups consisting of managers and staff from the client organization. Created and tracked the project plan, issues, and risks. Managed Deloitte and client resources. Conducted extensive facilitation of executive client meetings to drive project and resolve issues.

### **Statewide Preparation for Federal Stimulus Funding for a State Department of Management and Budget**

Virginia Managed Deloitte resources and served as liaison to client during the preparation of an extremely high-profile statewide report. This report outlined 8000+ projects the state proposed in anticipation of funding under President Obama's American Recovery and Reinvestment Act. This role focused on the Workforce aspects of statewide preparation for hiring and training of internal and external jobs.

## Education:

**M.S. Policy Management** – Carnegie Mellon University, Heinz College

**B.S. Human Development and Family Studies** – The Pennsylvania State University

**Jennifer (Jen) Ivey**  
**Organizational Engagement Manager**  
**Deloitte Consulting LLP**  
*Manager*

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Jennifer (Jen) Ivey is a Human Capital Manager and a member of the Organizational Transformation practice at Deloitte Consulting. She has served on the US Public Sector Management Advisory Council (MAC) to advise public sector consulting leadership on the state of the public sector practice and has built eminence on the topic of Innovation in State Government. Jen has over 15 years of experience in change management, learning and development, and strategic communications both in the private sector and consulting. Most recently, she has spent over 6 years working exclusively with public sector clients to support their organizational and technology transformation needs.

### Relevant Project Work

#### **Change Management and Organizational Transformation Subject Matter Expertise at Northeast R1 University**

Jen provided subject matter expertise on change management and organizational transformation to a project team serving Northeast R1 University. While the team was working to conduct an assessment of cost reduction, shared services, and performance improvement opportunities, Jen advised the communications specialists on the content and materials to be included in the university-wide communications plan. In addition, Jen acted as a key advisor all of the program teams when drafting business cases on the organizational impacts of the opportunities they identified. Finally, Jen provided input and direction for the creation of the implementation roadmap.

#### **Strategic Change Lead for Human Resources Modernization Project in the Commonwealth of Massachusetts**

Jen led the Strategic Change workstream of this large engagement focused on enhancing the efficiency and effectiveness of the HR Division in the Executive Branch of the Commonwealth of Massachusetts. Jen was responsible for, working directly with Secretaries and executives from the eight secretariats, union representatives, and the Governor's office. The overall engagement team conducted a comprehensive organizational assessment of the 45,000 executive department employees, which led to the creation of a 5-year program roadmap to support employee success in their careers with the Commonwealth. The team then created the programs necessary for the first year of the roadmap, which included communications and implementation plans, training on 10 different topics, targeted for delivery to multiple audience groups, and in multiple delivery formats including classroom, eLearning, and virtual learning. Additionally, Jen and her team designed a new HR Service Delivery Model and HR Balanced Scorecard to enable HR to better support employees and create more transparency across the executive departments. Additionally, Jen developed a Leadership model and development program for the enterprise (across all 8 secretariats) and delivered the inaugural session to a cohort of 34 of the Commonwealth's emerging leaders

#### **Training Manager & Implementation Support Lead for the New York State Department of Budget**

Jen led the Training Program design and development for New York State (NYS) Department of Budget's New York Enterprise Licensing (eLicensing) System (NYELS). NYS is implementing a state-wide, electronic licensing application to streamline many professional and recreational licensing activities, enhance enforcement actions and improve customer service. As lead, Jen worked directly with five Agencies, the Enterprise (central) team, NYS Information Technology Services, and Department of Budget to manage training and implementation activities. In addition, Jen advised on Call Center/Help Desk support model, managed implementation/site support resources, and advised project leadership on implementation communications and activities.

### Education:

**B.S. Communications and Theatre** – Eastern Michigan University

**David Noone**  
**Program Integration Manager**  
**Deloitte Consulting LLP**  
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Dave has over 11 years of consulting experience related to defining and improving service delivery models, improving processes, reducing costs and leading effective program management activities. Additionally, Dave has experience leading assessments of administrative services and processes within Universities in areas including: Finance, Human Resources, Communications, Administrative Support, Libraries, and Research Administration. Dave also has applied experience designing IT processes and holds a master's degree in Information Systems Technology from George Washington University.

#### Relevant Project Work

##### **Administrative Assessment and Cost Reduction Opportunity identification for Northeast R1 University**

Dave led the review of administrative processes at Northeast R1 University. He also provided over-arching project management for the entire effort and led the analysis relating to Finance, Human Resources, Communications, Administrative Support, Research, Libraries, and Web Services. The team developed a catalog of nearly 100 opportunities for improvement and ranked them based on impact and ease of implementation. From this list led the development of business cases and future state operating model design for 10 areas/opportunities from the catalog. This effort allowed the university to understand their primary administrative challenges and identified a future state solution and business case for the top 10.

##### **Shared Services Assessment and Design for Northeast R1 University**

Dave led the development of shared services design for Finance, Human Resources, and Information Technology. This included designing the future state processes, service levels, staffing levels, organizational design, detailed business cases, technology blueprint and implementation plan. Dave led a team of approximately 10 people to accomplish the work over 6 months. This allowed the university to understand the organizational structure needed to implement shared services at Northeast R1 University including the timing and cost.

##### **Information Technology Security Assessment for Ivy League University**

Dave Supported an IT Security Assessment at an Ivy League university. His main role was to serve as the higher education subject matter expert and to lead project management activities including defining and developing the project schedule and associated artifacts. The team is reviewing security policies, mapping key processes, determining gaps, and making recommendations. The output will allow the university to understand where they need to improve relating to information security.

#### Education:

**M.S., Information Technology** – George Washington University

**B.S., Management Science and Information Systems** – The Pennsylvania State University

**Gayla Kraetsch Hartsough, Ph.D.**  
**Academic Program Functional Lead**  
**H Consulting Group**  
*President*

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Dr. Gayla Kraetsch Hartsough has been President of KH Consulting Group (KH) since she founded it in 1986. She specializes in strategic planning, organizational design and restructuring, organizational change, human resources, business process reengineering, participatory governance and stakeholder buy-in, and cost reduction. During her 35+ year career, she has worked with more than 80 higher education institutions, including university systems and community colleges, often times incorporating new ways of thinking from other industries and government. She has consulted throughout the United States and in Asia, Europe, and Australia. She is also an Adjunct Faculty member at the University of Southern California, Sol Price School of Public Policy, International Public Policy and Management Program (IPPAM), where she teaches public policy formulation and implementation to graduate students and conducts executive training program for foreign delegations from Shenzhen, China, and Indonesia.

## Relevant Project Work

### Academic Reviews and Master Plans

Gayla conducted the first academic review for Gallaudet University since its founding in 1864. As project director, she integrated the team and maintained cultural sensitivity, given the uniqueness of Gallaudet and its student population. Gayla also designed the educational program offerings and enrollment forecasts for the opening of the University of the District of Columbia, the first urban land grant college in the United States and only land-grant college established in the 20th century. Since then, she has worked with multiple other colleges and universities in developing such plans. For Las Positas College, she linked the Educational Master Plan with the organizational structure and staffing configuration; she then integrated those plans with the \$500-million bond for the Facilities Master Plan to transform two colleges. For the University of Nevada Las Vegas, she led a team to identify innovative ways to finance the \$1.7-billion master plan through public-private partnerships and other financing mechanisms, proven successful in the University of California system.

### Strategic Cost Management Model applied to academic programs

For UCLA, Gayla led KH's development of case studies of Responsibility Center Management (RCM) at the University of Pennsylvania, University of Southern California, and Indiana University. On the basis of this work, she honed the RCM principles and developed KH's Strategic Cost Management Model, which she has applied in academic settings, typically to set educational priorities and close fiscal gaps. Among these clients are San Francisco City College (where she helped close a \$20 million gap); Chabot-Las Positas (CA) Community College District where she applied the model to academic, student services, and administrative services; University of the Pacific where she applied the model to the School of Education and School of Business; and Los Angeles Trade Technical College where she led two strategic planning efforts and is currently working on implementation of different aspects of the Strategic Plan, including Strategic Cost Management.

### Higher education cost reduction

She has led multiple studies to reduce costs at colleges and universities. For the California State University (CSU) system, she explored how campuses could reduce costs by sharing and re-engineering human resources services across five of the campuses. She also conducted a customer satisfaction survey of business services across the 22 CSU campuses to improve services and reduce costs of delivering accounts payable, procurement, facilities, student accounts receivable, financial aid, admissions, records, and human resources (general, benefits, hiring) services. She has analyzed how to reduce costs and increase revenue services at the University of Southern California (USC) in the areas of parking and maintenance operations (at the Norris Cancer Center at the USC Medical Center).

### Performance Reviews and Management Audits

Over the years, KH has conducted 17 performance reviews and management audits on behalf of the Los Angeles County Civil Grand Jury and multiple performance reviews for the City of Los Angeles City Controller. The nature of these audits range from airport operations, port operations, transportation, general services, foster children, domestic violence, gang injunctions, jail operations, public-private partnerships in health services, and pharmaceutical operations to name a few. As an example of the kinds of outcomes on these projects, the KH team identified savings of \$25 million through increased civilization of jobs within the County of Los Angeles jails.

### State Higher Education

Early in her career, she was a policy analyst on higher education initiatives, involving the Ohio Board of Regents (OBR), where she analyzed enrollment forecasts using a market segmentation approach of high school feeder schools by institutional type (community college, university, etc.); State of Florida legislature, where she analyzed the quality of education and financial needs for the higher education system (community colleges and four-year universities); State of Louisiana, where she analyzed the basic skills and development education requirements of entering students and determining what policies are required to accommodate shifting demographics with open enrollment; and State of West Virginia, where she analyzed the relevancy of the curriculum in the public and private colleges and universities in terms of in-state companies and hiring practices.

**Gayla Kraetsch Hartsough, Ph.D.**  
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**Education:**

**Ph.D., Emotional Disturbance and Educational Administration** – University of Virginia, Graduate School of Arts & Sciences

**M.Ed., Research Methodology and Statistics** – University of Virginia, Curry School of Education

**Ed.M., Elementary Education and Learning Disabilities** – Tufts, Graduate College of Arts, Sciences, & Engineering

**B.S., Communications Studies** – Northwestern University, School of Communications

**Certificate, Feature Screenwriting** – University of California at Los Angeles

**Post-doctorate Fellow, Higher Education Administration** – Woodrow Wilson National Fellowship

<p><b>Maxine Riccio</b>  <b>Advancement, Marketing &amp; Advertising, and Student Services Functional Lead</b>  <b>Deloitte Consulting LLP</b>  <i>Consultant</i></p>	<p>Tel: +1 412 402 2718  Email: <a href="mailto:mriccio@deloitte.com">mriccio@deloitte.com</a></p>
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Maxine is a Strategy and Operations Consultant for Public Sector and Health Care and Life Sciences. Maxine has training in organizational design and change, financial analysis, optimization theory and modeling, project management, and business process modeling. She has Deloitte project experience in business process analysis, project management, training development and implementation, and organizational visioning. Maxine has three years-experience prior in strategic planning, social impact measurement, and statistical and regression analysis.

**Relevant Project Work**

**Future State SIS Visioning, Business Requirement and Process Flows for R1 University**

Created and managed data capture tool for analyzing business process improvement and variation findings across 10 university-wide student service process workshops that engaged 115 key business process owners (student service process areas include: admissions, financial aid, student records/registration, degree audit, advising, and student accounts); Met with Deloitte SMEs to create future state process flows in IndustryPrint, and took ownership of revising flows based on workshops, adding value by highlighting areas for improvement and variation among schools/units; Interviewed 14 Steering Committee members for initial visioning expectations, and aggregated responses into one cohesive vision statement and set of guiding principles.

**Research and Analysis for Liberal Arts College Provost**

Maxine analyzed data and presented findings to support board-approved addition of 27 tenure-track faculty and a 10% salary increase for all faculty at Haverford College; benchmarked against peer group of colleges for academic program and personnel variances; prepared materials and meeting minutes for middle states accreditation.

**Ongoing Strategic Planning and Grant Evaluation for Corporate Foundation**

Maxine managed quantitative assessment of 1,000 grants over eight years; researched and recommended a new volunteerism program strategy for 50,000+ employees that was selected for pilot implementation, pending board approval; developed and led a marketing and communications project that coordinated with 10 regional markets to highlight qualitative program successes; facilitated a strategic planning discussion around social outcomes measurement which resulted in the creation of a working group to discuss future implementation and planning.

**Business Process Design for a State Government**

Maxine Conducted an “As-Is” and “To-Be” analysis of fraud, waste and abuse program office internal controls, policies, technology and organization structures as a first step to outlining recommendations for a department-wide program integrity blueprint.

**Education:**

- M.S., Public Policy & Management – Carnegie Mellon University**
- B.A., Economics – Haverford College**

<b>Pankaj Agarwal</b> <b>Facilities Operations, Maintenance, &amp; Construction Functional Co-Lead</b> <b>Deloitte Consulting LLP</b> <i>Senior Manager</i>	Tel: +1 415 783 4195 Mobile: +1 408 569 8711 Email: <a href="mailto:kcherry@deloitte.com">kcherry@deloitte.com</a>
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Pankaj Agarwal is a Senior Manager in the Real Estate & Location Strategy Practice and specializes in performance improvement and outsourcing in Facilities Management. His experience includes determining opportunities for improvement, building strong business cases for change, improving processes and developing performance measurement and management frameworks and scorecards. His clients include government organizations, not-for-profit institutions, global banks and technology companies.

**Relevant Project Work**

**Multiple-Workstream Business Model Transformation for Large Public Sector Association**

Pankaj served as Transition Manager for an engagement providing business model transformation support to one of the largest Associations in the United States with more than 10M members. While there, Pankaj managed the transformation process for 6 workstreams – Facilities Management, Mailroom, AP, Payroll, Print and Fulfillment.

**Cost Reduction Business Model Transformation for National Bank**

Pankaj managed a project to assist a National Bank with more than 1,000 branches with cost and headcount reduction, scalability and improved performance reporting for facilities management function. Pankaj and his team guided the bank through outsourcing facilities management function to a single service provider, yielding 16% annual savings.

**Financial and Business Process Benchmarking Study for Large Bank**

Pankaj managed work with a large bank that wanted to improve its "move, add, change" process (Real Estate & Facilities Management Department). Managing a team, Pankaj overhauled the bank's "move, add, change" process by performing financial and process benchmarking study identifying opportunities to improve performance while reducing costs.

**Education:**

**M.A., Business Administration, Finance, and Operations** – University of Michigan

**B.A., Business Administration** – University of Wisconsin

<p><b>Kajal Patel</b>  <b>Facilities Ops, Maint. &amp; Construction Functional</b>  <b>Co-Lead</b>  <b>Deloitte Consulting LLP</b>  <i>Senior Associate</i></p>	<p>Tel: +1 212 436 5120  Email: <a href="mailto:kajpatel@deloitte.com">kajpatel@deloitte.com</a></p>
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Kajal is a senior associate in the Engineering and Construction Consulting practice in the New York office of Deloitte FAS. She graduated from Rutgers, the State University of New Jersey with a degree in Civil Engineering and a focus in Construction Management. Her experience includes construction cost assessments, internal controls analysis and strategy development, forensic investigations, fraud awareness, real estate valuation, and construction benchmarking analysis. Kajal has an understanding of capital project programs and processes, with experience in project management oversight, insurance reconciliations, risk assessments, and closeout.

**Relevant Project Work**

**Quarterly Construction Audit for Higher Education Dormitory Construction Project**

Kajal assisted with the quarterly construction audit for a higher education dormitory construction project. The engagement included the review of contractor cost reports, including change orders and payment applications, to determine compliance with relevant contracts and uncover potential cost saving opportunities.

**State Public Assistance Grant Closeout Program Redevelopment**

Kajal assisted with the redevelopment of the closeout program for over \$12 billion of public assistance grants. As part of the team, she assessed a state agency’s Disaster Recovery program and internal controls in the Closeout process. Roles and responsibilities of the Closeout team were redefined to accelerate the Closeout process and eliminate duplication of efforts. An enhanced Closeout process was developed and piloted to integrate a new, more efficient strategy for performing disaster closeout. Effective tools and templates were created and trainings were conducted to facilitate the enhanced grants management closeout process. The redevelopment of the Closeout program focused on accurately capturing project costs and reimbursements by ensuring proper procurement methodologies were utilized, accurate cost estimates were made, and insurance funds received were reconciled.

**Cost to Complete Analysis for two large power plant construction projects**

Kajal performed a cost to complete analysis for two large power plant projects for an international power and utilities company. The analysis included a review of contracts in place, claims, variations, and payments made to contractors to determine the forecasted costs to complete.

**Education:**

**B.A., Civil Engineering** – Rutgers University

<p><b>Emily Todd</b>  <b>Finance and Administration, Human Resources, and Research Functional Co-Lead</b>  <b>Deloitte Consulting LLP</b>  <i>Senior Consultant</i></p>	<p>Tel: +1 877 580 5575  Mobile: +1 617 823 1382  Email: <a href="mailto:emtodd@deloitte.com">emtodd@deloitte.com</a></p>
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Emily Todd is Senior Consultant with Deloitte's Strategy and Operations Public Sector practice. Emily has a strong interest and experience in process improvement and business model transformation. Prior to joining Deloitte she spent four years at Huron Consulting Group, where she developed broad consulting experience in international strategy, business modeling and process redesign for healthcare and higher education institutions. Her background includes helping US-based academic medical centers and health governance organizations develop and implement international strategies, as well as assisting foreign healthcare institutions adopt US standards of excellence. Emily has also worked in higher education, focusing mostly on budget process redesign and operations improvement.

**Relevant Project Work**

**Cost Reduction and Process Improvement at Northeast R1 University**

As lead of the Finance Shared Services workstream, Emily led and managed a working group in process redesign of key 5 Finance areas. Emily and her team conducted analysis focused on people, processes, organizational structure and technology and made business process improvement recommendations and quantified potential savings from developing shared services for finance. Emily worked directly with the CFO and Executive Level client sponsors to develop assumptions and approach and then led the development of the Finance business case for cost reduction and service improvement, implementation plan, staffing plan, and organizational design.

**Comprehensive review of Human Resources, Finance and IT Functions for a University in the Midwest**

Emily managed and led the review and analysis of the Finance and IT functions. Analysis focused on people, processes, organizational structure and technology. She served as the primary client contact, conducted stakeholder interviews and process mapping sessions, and identified areas of concern that would need to be addressed as the institution moved towards a RCM model. Emily also assisted in finalizing an Excel-based RCM model for the institution and was responsible for developing and managing project work plan, client status updates and budget.

**Education:**

**B.S., General Management with Concentration in Finance – Boston College**

<p><b>Gary Sutton</b>  <b>Finance and Administration, Human Resources,  and Research Functional Co-Lead</b>  <b>Deloitte Consulting LLP</b>  <i>Specialist Leader</i></p>	<p>Tel: +1 571 858 0567  Mobile: +1 630 596 3922  Email: <a href="mailto:gasutton@deloitte.com">gasutton@deloitte.com</a></p>
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Gary is a Specialist Leader at Deloitte Consulting with over 15 years of experience transforming sourcing and procurement organizations into high-performing operations. He has led and supported over 20 projects across multiple industries, including the Public Sector. Gary has conducted transformations in the following areas: technical and leadership capabilities, strategic and transactional processes, and organizational design. He also has significant experience with e-procurement technologies (e.g., e-sourcing, contract management). In Higher Education, Gary has been a workstream lead at Northeast R1 University and Brandeis University where he has conducted organizational maturity model and spend analyses as well as category sourcing at both universities.

**Relevant Project Work**

**Spend Diagnostic and Category Sourcing Implementation for Northeast R1 University**

Led spend diagnostic and sourcing implementation effort to identify opportunities to drive cost savings and improve the operating performance of Northeast R1 University. Identified cost savings opportunities across: HR Benefits, Professional Services, Real Estate/Facilities, Travel, Lab Supplies, IT, Food Service, Utilities, Library Subscriptions, Print & Marketing, Maintenance Material, and Telecom and Transportation/Fleet.

**Spend Diagnostic and Procurement Function Review for Brandeis University**

Led a team through a comprehensive spend diagnostic and procurement function review. The spend diagnostic included an assessment of all expenditure categories across the entire university and the identification of category-specific savings opportunities that were prioritized into execution waves. The Procurement Function Review included an assessment of how the procurement function operated throughout the university. This included an assessment of the operating model (i.e. centralized versus decentralized), a review of the key sourcing and procurement processes (e.g. Spend Analysis, Strategic Sourcing and Contracting, Supplier Management, PO processing, Master Data Management, etc.), an assessment of key sourcing and procurement technologies, and an assessment of the organization structure. The current state of the procurement organization was then compared to higher education benchmarks to identify opportunities to improve the overall operating performance of the procurement organization.

**Spend Diagnostic and Procurement Function Review for NATO**

Led a team through a comprehensive spend diagnostic and procurement function review. The spend diagnostic included an assessment of all indirect material expense categories consumed by the NATO headquarters operation. This led to the identification of category-specific savings opportunities. The Procurement Function Review included the assessment of how the procurement function operated throughout the NATO headquarters. This included an assessment of the operating model (i.e. centralized versus decentralized), a review of the key sourcing and procurement processes (e.g. Spend Analysis, Strategic Sourcing and Contracting, Supplier Management, PO processing, Master Data Management, etc.), an assessment of key sourcing and procurement technologies, and an assessment of the organization structure. The current state of the procurement organization was then compared to public sector and commercial benchmarks to identify opportunities to improve the overall operating performance of the procurement organization.

**Comprehensive Transformation of Lockheed’s Supply Chain Organization** – Led a comprehensive transformation of Lockheed’s organization structure and key sourcing and procurement functions that span the sourcing and procurement lifecycle (e.g. sourcing, transactional procurement, supplier management, contract management, and master data management). Effort fundamentally changed a decades-old philosophical view about how to manage cost in the aerospace and defense industry.

**Supply Chain Transformation for New York City Housing Authority** – Led the assessment and redesign of the Authority’s key supply chain processes (e.g. sourcing, transactional procurement, materials management and warehousing). The transformation also included an assessment of the Authority’s material and services spend to identify opportunities for savings through strategic sourcing.

**Comprehensive Cost Reduction and Cost Center Assessment for the School District of Philadelphia** – led a comprehensive assessment of three key cost centers to identify opportunities to reduce cost and address a growing budget deficit. The cost centers included procurement, student transportation services (e.g. yellow-bus service), and facilities management services (e.g. custodial, maintenance and engineering). The assessment produced a business case showing significant economic opportunity if yellow-bus and facilities management services are privatized and if material and services managed within the procurement organization are strategically sourced. Selected to continue supporting the implementation of the cost reduction recommendations.

**Education:**

**M.B.A. (Finance Concentration)** – Duke University

**B.A. Economics** – Howard University

<b>Eugene Lukac</b> <b>Information Technology Functional Lead</b> <b>Deloitte Consulting LLP</b> <i>Specialist Leader</i>	Tel: +1 305 372 3299 Mobile: +1 305 978 6332 Email: <a href="mailto:elukac@deloitte.com">elukac@deloitte.com</a>
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Eugene Lukac is a Specialist Leader in Technology Strategy & Architecture. He helps large clients align business and IT strategies, improve the business effectiveness of IT processes, and develop business cases for technology investments. He is a recognized speaker and author on the financial management and contribution of IT organizations. His experience has spanned a broad cross-section of industries, with particular emphasis in energy, consumer and industrial products, and financial services.

Prior to his 15+ years in consulting, Dr. Lukac had 15+ years of experience managing information services organizations. He is a frequent guest speaker at premier industry gatherings. His articles have appeared in publications such as CIO, Bankers Monthly, and the Journal of Business Strategy. He is fluent in Spanish, English and French.

### Relevant Project Work

#### **IT Operating Model Assessment and Design for Large Research University**

Eugene led the overall effort to conduct an IT organizational assessment and design for one of the world's leading private research universities. Eugene led the analysis of IT processes, identification improvement opportunities, and design of a new organizational structure for the central IT organization. As a result, the university gained a mission-aligned IT organizational structure with built-in collaboration: units are now defined in terms of results they produce for their internal and external "customers."

#### **IT Cost Effectiveness Analysis for Large Healthcare Organization**

As part of a comprehensive effort to improve cost effectiveness across the enterprise of a large integrated health care organization, Eugene led the IT workstream tasked with assessing current IT spending and making recommendations for improvement. Eugene conducted an analysis of client spend data for IT and compared it against benchmarks for the insurance and health care industry segments. The analysis of the variance led to the identification of opportunities to reduce IT spending by approximately \$300 million across the demand management, work management and resource management domains.

#### **Shared Services Organizational Assessment for Large Hollywood Studio**

Eugene lead the comprehensive assessment of the shared services organization covering the business alignment, positioning, and operational excellence perspectives of one of the largest Hollywood studios. Eugene worked with the he business units to conduct the assessment and propose recommendations regarding the legacy shared services. The recommendations addressed shared services mission, structure, governance, and financial processes. In addition, Eugene conducted sensitive and confidential executive interviews to obtain input on two possible candidates for the CIO role.

### Education:

**M.L.S., Information Science** – University of British Columbia

**Ph.D., Physics** – University of British Columbia

**M.S., Physics** – University of Connecticut

**B.S., Physics** – University of Massachusetts

<p><b>Tom Shaver</b>  <b>Strategic Space Utilization and Scheduling Functional Lead</b>  <b>Ad Astra</b>  <i>Founder &amp; CEO</i></p>	<p>Tel: +1 913 652 4110  Mobile: +1 913 481 7144  Email: <a href="mailto:tshaver@aais.com">tshaver@aais.com</a></p>
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Tom Shaver is Founder and CEO of Ad Astra Information Systems, a software technology company based in Overland Park, Kansas. He launched Ad Astra Information Systems in 1996 to provide scheduling technology solutions for higher education institutions.

Under Shaver's leadership, the company has grown steadily to offer classroom scheduling and event management software products and consulting services to customers worldwide (primarily in the United States and Canada). More than 800 college and university campuses have licensed Ad Astra software products and services since 1996 to help them with their facilities scheduling, event management, resource management and more.

Shaver began his career in 1987 as the third generation working with his family's architectural and consulting company named The Shaver Partnership. He began working with his father, John Shaver, who specialized in building design for universities.

The experience was instrumental in helping him launch Ad Astra. The consulting work evolved to include software to support an innovative, capacity-based model for academic space management and a student-centric model for course offering management. Additionally, a popular consulting service based on both models has been developed called Strategic Scheduling Check-Up. Today, he is also actively involved as the lead consultant for the team that develops and presents these studies that establish a framework and business justification for better management of academic resources on college and university campuses.

In 2004, Shaver authored a United States business process patent application that was recently approved. The patent protects Ad Astra's inventions in the scheduling software market including: student-specific course demand analysis, historical analysis of course demand and student availability, and high-impact schedule refinement.

## Relevant Project Work

### **Mississippi Institutions of Higher Learning**

The Board of Trustees has placed the efficient use of campus facilities across all 9 of the universities under the Mississippi Institutions of Higher Learning as a primary focus of the board. The Board has a great interest in the ability to make data driven decisions regarding the request for new construction, renovation, and student accessibility to classes.

To meet this goal, an efficiency task force was established. Phase 1 was a mandate for each of the schools to conduct a facilities audit of every room on each campus. The audit included the type of room i.e. lecture, lab, classroom, the square footage, and the coding associated with it. Phase 1 has been completed allowing the board to see the facilities that each of the schools have to work with today.

Phase 2 was to establish a way to help the board make data driven decisions regarding construction and renovation and the overall more efficient use of space. To obtain this level of knowledge further analysis on the utilization and capacity of each school is required.

The Strategic Scheduling Check Up is a consulting service that can provide the board with this level of insight on the existing space and effective capacity of each campus. The study is comprised of a capacity study and a historical course offering analysis.

The Capacity Study provides findings that speak to current use of academic space and makes recommendations that suggest ways to optimize campus facilities. The study provides data that supports process change and makes recommendations to accommodate enrollment growth and efficient use of facilities.

The Historical Course Analysis provides data that will allow informed decisions to be made when building course schedules to meet student demand while balancing the need for efficiencies as it relates to campus facilities and other high demand resources.

Combined the study provides visibility into how each institution course offering matrix aligns with the existing capacity of its campus. The Strategic Scheduling Check Up will provide a baseline for each school and a comprehensive system wide analysis.

### **Indiana State University**

Unveiled on October 14, 2009, one of the main goals of the ISU Strategic Plan focuses on increasing enrollment and student success, and seeks increases in the university's first-year retention rate and four- and six-year graduation rates. Tom Shaver worked with ISU leadership to align strategic outcomes with scheduling and resource management benchmark indicators through the Strategic Scheduling Checkup. Platinum Analytics was also implemented to track student access to required courses after SECTION 30. IC 21-12-14 was added to IN code in 2013 stating that each student attending a public institution of higher education must have a degree map outlining field of study and course sequence. This code also stipulates that this institution is to ensure students can enroll in courses on their degree map without schedule or registration conflicts.

<p><b>Tom Shaver</b>  <b>Strategic Space Utilization and Scheduling</b>  <b>Functional Lead</b>  <b>Ad Astra</b>  <i>Founder &amp; CEO</i></p>	<p>Tel: +1 913 652 4110  Mobile: +1 913 481 7144  Email: <a href="mailto:tshaver@aais.com">tshaver@aais.com</a></p>
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The Strategic Scheduling Check-up provides findings that enable Indiana State University to achieve its goals of optimally using space and analyzing historical course offerings.

The Ad Astra Platinum Analytics tool will enable the University to advance the study strategically by determining course demand based on students' degree programs. More closely balancing course demand with schedule offerings could potentially improve student satisfaction with course availability and reduce the time required to graduate, while addressing issues of enrollment growth and efficient use of campus resources.

**University of North Texas**

UNT currently enrolls over 36,000 students at the Denton campus and is the 26th largest public university in the US. They operate 157 buildings, 227 Classrooms, 293 Class labs and about 5,000 academic meeting patterns each term. UNT commissioned Ad Astra and Tom Shaver to benchmark current scheduling practices and examine course offerings time and space efficiencies and inefficiencies. They were looking for the identification of cost savings and capacity/growth opportunity. They had been feeling of being "out of space" and needed data to justify additional renovation and new construction. "There is impending construction ALL over campus and over 1,200 classroom seats have been lost during renovations."

Tom Shaver and Ad Astra Consultants assisted their leadership with change management and educating the campus about effective scheduling, which was one of the biggest obstacles of the project. Historically the campus perceived space and scheduling as "ownership" and the same basic scheduling processes had been in place since the early 80's. The process was Faculty driven and "Free for all" scheduling with limited involvement at Dean's level or above. There was tension between departments and Registrar's Office. A phased approach to data driven, policy managed scheduling was developed, integrated and successfully implemented.

**University of Iowa**

In the Spring of 2009 The Office of the Provost sponsored a task force on Undergraduate Education and Success included the following relevant charges: (1) Expand access: A five-year plan for increased enrolments (2) Promote success: A five-year plan to improve retention and graduation that provides incentives to and makes colleges accountable for meeting the targets. The metrics for gauging progress towards these goals include: (1) An increase in retention from 83% to 88% by 2016 (2) An increase in the six-year graduation rate from 65% to 70% (3) A reduction in time to degree by 5% (4) Increase enrollment of first-year first time undergraduate students by 100 each year through 2015. This meant addressing scheduling. They university knew they had limited large classroom and auditorium space available during primetime and Departmental room ownership was constraining university use of space. The Assoc Provost is also concerned about having enough classes for incoming freshman classes. The university turned to Ad Astra to implement indicators and policy to more effectively management capacity and resources and implement resource optimization software to improve resource utilization. Part of this analysis was a class time study.

**Education:**

**B.A. Psychology – University of Kansas**

<p><b>Francisco Acoba</b>  <b>Facilities Subject Matter Advisor</b>  <b>Deloitte Consulting LLP</b>  <i>Director</i></p>	<p>Tel: +1 212 618 4432  Mobile: +1 202 368 9406  Email: <a href="mailto:facoba@deloitte.com">facoba@deloitte.com</a></p>
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Francisco is a director with Deloitte Consulting's Strategy & Operations practice based in New York, New York. He has over 16 of experience providing management consulting services to corporate real estate and facilities management organizations in Commercial and Public sectors. Francisco specializes in assessing operations and business processes, developing new service delivery models to optimize outsourcing/insourcing opportunities, and applying IT solutions to better support organizations' business strategies. In Higher Education, Francisco has led an assessment of Harvard University's capital program, concentrating on process improvement, cost reduction, policy and procedure development, and performance management.

**Relevant Project Work**

**Capital Program Assessment for Harvard University**

Led an evaluation of Harvard's execution capabilities and made recommendations to improve the institution's approach to construction program oversight and delivery. Identified potential improvement opportunities based on industry leading practices and how they might be applied within the Harvard operating environment. 15 key recommendations were developed and grouped into 5 key areas: Restructuring & Organization, Policy & Procedure Development, Process Improvement, Cost Reduction, and Performance Management. Found opportunities for over \$250MM in performance improvement over the next 5 years.

**Facilities Function Operational and Cost Optimization Assessment for Dartmouth University**

Led the facilities function operational and cost optimization assessment at Dartmouth University. Assessment included an evaluation of the University's organizational structure, service delivery model, business processes, and enabling technology.

**Facilities Function Operational and Cost Optimization Assessment for Northeast R1 University**

Led the facilities function operational and cost optimization assessment at Northeast R1 University as part of a larger assessment of operational efficiency and cost savings. The assessment was inclusive of organizational structure, service delivery model, business processes, and enabling technology.

**Real Estate Opportunity Investment and Validation for a Global Pharmaceutical Company**

Francisco co-led a study to identify and validate a series of real estate and facilities cost reduction opportunities identified during a recent enterprise-wide operational assessment of site support services. Based on discussions with key stakeholders and an in-depth analysis of the existing operations, nearly \$30MM in annual cost savings and cost avoidance opportunities were identified.

**Corporate Real Estate Operational Assessment for a Fortune 100 Diversified Manufacturer**

Francisco completed an in-depth review of the current operating models, organizational constructs, governance structures, business processes, information technologies, and performance management systems of the company's existing, but independent, facilities and real estate service functions in the US and Europe. Two specific components of the facilities and real estate services organization were identified for additional review: 1) strategic planning and performance management related to the real estate portfolio and 2) additional information technology that would be required by the facilities and real estate services organization given the pending enterprise-wide implementation of SAP. These in-depth analyses provided the client with additional specific actions and initiatives that could be explored as part of the larger corporate real estate transformation initiative that was being formalized.

**Education:**

- M.R.E. Strategy & Finance** – Harvard University
- B.Arch. Property & Asset Management** – Cornell University

<p><b>Mark Blumkin</b>  <b>Subject Matter Advisor</b>  <b>Deloitte Consulting LLP</b>  <i>Director</i></p>	<p>Tel: +1 212 436 2359  Mobile: +1 201 264 6234  Email: <a href="mailto:mblumkin@deloitte.com">mblumkin@deloitte.com</a></p>
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Mark Blumkin is a Director in the Capital Projects Consulting Services Practice in the New York office of Deloitte Financial Advisory Services LLP. He has over 30 years of experience in the engineering and construction industry focused on providing construction risk and cost assessments as well as advising owners on how to improve the management, control and execution of their capital projects. Mark's experience includes working with several higher education institutions, state & local governments as well as health care institutions, academic medical centers, transportation agencies and manufacturing companies. Mark was instrumental in developing Deloitte FAS' construction cost and risk assessment methodology.

**Relevant Project Work**

**Cost Reduction and Process Improvement at Northeast R1 University**

Led the Facilities/Operations workstream on an engagement at Northeast R1 University to design and implement a new operating model and to identify and implement opportunities for cost reduction, efficiency improvement and operations effectiveness university-wide.

**Columbia University Medical Center Capital Project Processes Benchmarking**

Led a construction cost benchmarking study of project costs and key processes. The study considered data gathered from ten academic medical centers across the US focusing on the following project types: wet and dry research laboratories, academic facilities, clinical space, administrative space and vivariums.

**Process Improvement and Benchmarking the Architecture, Engineering, and Construction Division of a Midwestern University**

Performed several construction cost assessments and a business process assessment for the prestigious Midwestern university in connection with its multi-year \$500 MM capital improvement program. Findings have included over billings in construction management fee and back charges to architects and engineers due to errors & omissions and inappropriate change order costs. The university implemented several process, system and organizational improvements as a result of the process works.

**Education:**

- M.B.A.** – City University of New York, Baruch College
- B.S. Civil Engineering** – Union College

**Kevin Chambers**  
**Subject Matter Advisor**  
**Deloitte Consulting LLP**  
*Principal*

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Kevin Chambers is a Principal and geographic account leader for Deloitte Consulting with over 22 years in DoD Logistics and professional consulting experience. Mr. Chambers is a leader in Supply Chain Management who develops trusted and sustainable relationships with clients, helping them solve their strategic challenges from concept through implementation. A certified Project Management Professional (PMP) from the Project Management Institute, Mr. Chambers provides strategic business advice and consulting services in the areas of Supply Chain Management, Strategy & Operations, Data Warehousing, Strategic Planning, Business Process Reengineering, Workforce Development, and Logistics Management.

#### Relevant Project Work

##### **Benefit-Cost Analysis, Savings Opportunity Analysis, and Business Case Development of the United States Air Force**

Led the Deloitte engagement team tasked with conducting a benefit-cost analysis (BCA) of the Item Unique Identification (IUID) program at the US Air Force. The Deloitte team worked with key government personnel to conduct an independent analysis to determine if there was a positive ROI for continued implementation and then make actionable recommendations to maximize the identified benefits.

##### **Strategic Sourcing and Procurement Optimization for the United States Air Force**

Led the deployment of a multi-phased approach to reduce purchasing costs and improve procurement efficiency through strategic sourcing for the Air Force's Installation Acquisition Transformation (IAT) initiative. The team leveraged its commercial sourcing and procurement practice to: develop and provide tailored training, identify optimal sourcing initiatives, and apply leading commercial strategic sourcing best practices including: deployment of standardized tools and techniques, implementation of a robust communication and change management methodology and development of a supplier relationship management program.

##### **Change Management for United States Transportation Command (USTRANSCOM)**

Engagement Principal over the Deloitte team tasked to lead USTRANSCOM's effort in implementing a new organizational strategy focused on preparing the workforce for a new operating environment after combat operations in Afghanistan conclude, significantly reduced funding, and a reduced workforce. The team implemented industry proven Change Management processes and procedures that included development and execution of a comprehensive Change Management Plan focusing on senior leadership engagement, communications management, organizational development and professional development.

#### Education:

**M.A. Management Science** – Webster University

**B.A English and Comparative Literature** – University of Cincinnati

<p><b>Keith Cherry, Ph.D.</b>  <b>Organizational Engagement Subject Matter Advisor</b>  <b>Deloitte Consulting LLP</b>  <i>Principal</i></p>	<p>Tel: +1 717 635 4153t  Email: <a href="mailto:kcherry@deloitte.com">kcherry@deloitte.com</a></p>
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Keith Cherry, Deloitte’s National Human Capital Industry Leader, Higher Education and Public Sector, has more than 20 years of experience as an advisor to complex transformational engagements. Dr. Cherry has assisted numerous government agencies and universities with major organizational change initiatives and human capital programs, including designing and implementing new structures, streamlining administrative operations, and reengineering HR business processes. He is currently conducting a leading edge benchmarking study of Talent Management practices of the Top 25 Universities in the country and he recently completed an assessment of Georgetown University’s performance management program. Dr. Cherry has previously held teaching and research appointments at the University of South Florida and the George Washington University.

**Relevant Project Work**

**Higher Education CIO Talent Benchmarking Study Conducted by Deloitte Consulting**

Project Director for internal initiative to benchmark IT talent management approaches of the Top 25 universities in the U.S. and other major research and teaching institutions such as Penn State, Large University System and Virginia Tech. In-depth interviews with CIOs and/or their designees explores all facets of talent management in the IT organization including recruiting and retention, performance management, leadership development, workforce planning, learning and organizational effectiveness. Study results will be shared with participating institutions and the broader higher education community.

**Performance Management Assessment for Georgetown University**

Project Director for assessment of performance management practices at Georgetown’s University Information Services. As part of an overall modernization effort undertaken by the CIO, Deloitte mapped Georgetown’s performance management maturity and provided recommendations on how the University could best stimulate a high performing workforce under intense budgetary pressures.

**VALU Training Assessment at the U.S. Department of Veterans Affairs (VA)**

Project Director for rigorous quantitative and qualitative evaluation of major VA investment program intended to improve health care and benefits for U.S. military veterans. Conducting complex statistical analyses and return on investment calculations to justify program expenditures and identify cost savings to Congress, the White House and other key stakeholders.

**Education:**

- Ph.D., Communication** – University of South Florida
- M.A., Communication** – University of South Florida
- B.S., Communication** – Florida State University

<p><b>David Lotz</b>  <b>Advancement &amp; Student Services Subject Matter Advisor</b>  <b>Deloitte Consulting LLP</b>  <i>Specialist Leader</i></p>	<p>Tel: +1 512 226 4433  Mobile: +1 512 970 0004  Email: <a href="mailto:dlotz@deloitte.com">dlotz@deloitte.com</a></p>
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David is a Specialist Leader with over 20 years of experience serving in senior leadership roles at national universities managing and advising strategic communications and Advancement efforts. Prior to Deloitte, David led the higher education practice for Convio, Inc., overseeing product direction, service, strategy, and sales for the company's college and university clients and partners. Prior to Convio, David served as assistant dean for resource development at the UT Austin McCombs School of Business where he was responsible for strategic communications with alumni, donors, and corporate partners as well as fundraising efforts. At Deloitte, David has served as an advisor on multiple college and university client engagements, and as lead industry advisor to the Deloitte Global Benchmarking Center's Higher Education Benchmarking Study. David also currently serves on the Council for Advancement and Support of Education (CASE) U.S. Industry Advisory Council.

**Relevant Project Work**

**Change Management and Communications during a Technology-enabled Transformation for Florida State University**

David served as the change management lead on a project to transform the student experience at a Florida State University (FSU). The project involved re-engineering existing processes and implementing a new system to standardize and improve critical University-wide administrative functions, including admissions, advisement, financial aid, student records, course registration, and scheduling, among others. This project had a phased implementation plan, with the initial, successful go-live completed in September of 2012.

**Advancement Operational Review and Change Management for Northeast R1 University**

David led the Advancement operational review and served as an advisor for change management and communications strategy during an administrative management effectiveness engagement at Northeast R1 University. The review identified ways to improve administrative effectiveness and efficiency across the university, and identified cost reduction and revenue generating opportunities.

**Lead Industry Advisor to Deloitte's Higher Education Benchmark Study**

For this efficiency-focused benchmark analysis, David has been responsible for developing the study taxonomy and managing college/university enrollment and reporting. Study participants to-date includes 13 public and private Higher Education institutions from the U.S. and Canada. The areas benchmarked in the study include: Admissions, Advancement, Facility Services, Financial Aid, Human Resources, Procurement, and Finance, and the study also considered cross-cutting areas such as technology, shared services and outsourcing. Data for the 13 participating schools was collected, validated and analyzed, with study results currently being communicated to participating schools. Knowledge gained through the study has helped participants identify strengths and weaknesses from an efficiency perspective, and also highlighted areas where targeted investment could potentially lead to improved performance.

**Education:**

**B.B.A. Marketing and Management – Baylor University**

**Roy Mathew**  
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Roy is a Principal in Deloitte's Technology Strategy practice in the San Francisco office of Deloitte Consulting LLP. He has extensive Higher Education experience as a program manager for large R1 University projects where he focuses on the design and implementation of operational efficiency and effectiveness. Roy has deep knowledge and experience in implementing large transformation projects. His experiences include establishing effective governance structures, developing pricing and chargeback models, managing organizational and workforce development changes, and establishing change management programs.

#### Relevant Project Work

##### **Shared Services Implementation for the University of California – Berkeley**

Led a team of 8-10 Deloitte resources to provide advisory support and subject matter experience to the University of California - Berkeley's Campus Shared Services (CSS) team to plan and rollout shared services across IT, HR, and B&FS (in progress). Developed a detailed program and Day 1 project plan with key activities, outcomes, dependencies, and risks to enable the CSS team to rollout shared services to the first wave of adopters in an effective manner. Developed strategic performance management frameworks, metrics, dashboards and supporting processes to measure, monitor, and improve the effectiveness of the new CSS organization over time. Assisted with the design of the future state CSS organizational mode and job descriptions. Developed detailed service menu guides, playbooks, and operational procedures to enable a successful Day 1 launch.

##### **New Operating Model for Northeast R1 University**

Led a team to assess the current state of operations related to IT and supporting HR/Finance functions at Northeast R1 University to identify gaps relative to industry leading practices. Developed recommendations for a future state operating model that included a strategic performance management framework, KPIs, and a federated model that balances university-wide priorities while providing flexibility for individual departments. Assisted with the implementation and rollout of the new operating model.

##### **Consolidation Strategy and Roadmap for the Commonwealth of Massachusetts IT Consolidation Program**

Led a team of more than 400 State resources and more than 10 Deloitte resources to develop a consolidation strategy and roadmap for the Commonwealth CIO and 8 Secretariat CIOs. The project scope included IT infrastructure, applications, governance, finance, HR, change management, and communications. Worked closely with agency CIO's, CFO's, HR Directors, and other key stakeholders to analyze the entire IT budget across the state, and identified opportunities to improve the efficiency, effectiveness, and information security of IT services. Set up a Program Management Office to implement the roadmap over a two-to-three year period. Key sources of savings included data center consolidation, server virtualization, helpdesk consolidation, application rationalization, and staff realignment. Developed and presented a report to the Governor and his Cabinet.

#### Education:

**M.S. Engineering** – Stanford University

**B.S. Engineering** – Georgia Institute of Technology

**Art Stephens**  
**Subject Matter Advisor**  
**Deloitte Consulting LLP**  
*Director*

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Art is a Director in the Deloitte Consulting Technology Strategy and Architecture practice focusing on the public sector and higher education. He leads the CIO Services practice for our public sector clients. Through this role he provides leadership to the public sector and higher education mobile initiative bringing strategy, architecture, application and security services to our clients. Art provided insight and expertise into the 2012 Deloitte-NASCIO Cyber Security Survey and provided support for the 2013 Tech Trends Publication.

During his 25 year professional career, Art has served as a principal and director for Deloitte, Chief Information Officer for a state government, Deputy Chief of Staff to the Governor and Vice Chancellor for Strategic Initiatives for a public higher education system.

As Vice Chancellor, Art established the information technology strategic direction and implemented strategic initiatives for a fourteen university public higher education system. The technology direction defined how college students could leverage technology to enhance learning, improve efficiency and align Pennsylvania graduates with key opportunities across the Commonwealth. Art also led the creation of and served as interim executive director for a non-profit corporation, the Keystone Initiative for Network Based Education and Research (KINBER). KINBER was created by members of the Commonwealth's higher education and health care communities. The non-profit corporation's mission is to provide services to the Commonwealth by implementing a comprehensive broadband research network linking education, health care, government and economic development organizations across the Commonwealth.

#### Relevant Project Work

##### **Vice Chancellor for Strategic Initiatives for the Pennsylvania State System of Higher Education (PASSHE)**

As Vice Chancellor, Art established the information technology strategic direction and implemented strategic initiatives for a fourteen university public higher education system. The technology direction defined how PASSHE could better serve Pennsylvania's college students by leveraging technology to enhance learning, improve efficiency and align Pennsylvania graduates with key opportunities across the Commonwealth. Key initiatives included: implementing student information systems, creating a comprehensive data management program, developing a collaborative and federated security and authentication strategy, implementing disaster recovery and shared services strategies and creating more customer friendly web sites and applications.

Art also led the creation of and served as interim executive director for a non-profit corporation, the Keystone Initiative for Network Based Education and Research (KINBER). KINBER was created by members of the Commonwealth's higher education and health care communities. The non-profit corporation's mission is to provide services to the Commonwealth by implementing a comprehensive broadband research network linking education, health care, government and economic development organizations across the Commonwealth. The non-profit organization successfully applied for and was awarded nearly \$100 million in Federal economic stimulus funding for the creation of Pennsylvania's first higher education and research network. The construction of the network has begun and is expected to be completed by February, 2013.

As an additional responsibility, Art led the creation of PASSHE's emergency preparedness and continuity of operations planning for the Office of the Chancellor. This included working with System, university and PEMA resources to develop a comprehensive Hazard Mitigation Plan, Emergency Operations Plan and Continuity of Operations Plan.

##### **Deputy Chief of Staff for the Office of the Governor in the Commonwealth of Pennsylvania**

As Deputy Chief of Staff to Governor Rendell, Art was a member of the Governor's senior staff. Art served as the chief liaison for the Governor to cabinet agencies on a variety of issues including information technology and public safety.

Agencies that Art worked with include the State Police, the Department of Corrections, the Pennsylvania Emergency Management Agency, the Office of Homeland Security, the Pennsylvania National Guard, the Commission on Crime and Delinquency, the Board of Probation and Parole, PennDOT, the Office of Administration, the Department of General Services, the Office of the Budget, the Liquor Control Board, the Department of Labor & Industry, the Department of Environmental Protection, the Department of Conservation and Natural Resources and the Department of Health.

Art also served as the liaison to the Office of Information Technology. During Art's period as Deputy Chief of Staff, the Commonwealth continued its consolidation efforts and created additional shared services and continued to integrate IT offices into the Office of Information Technology. Art reviewed numerous pieces of technology legislation for telecommunications, security, identity theft and other and developed technology policy. Art also oversaw a national search to identify a Chief Information Officer for the Commonwealth.

This position required a unique blend of proactive planning, crisis management and relationship building. During his time in the Governor's Office Art, created the Public Safety Strategic Plan, the Homeland Security and Emergency Preparedness framework, the Public Safety Cabinet and the Homeland Security Executive Cabinet. In addition, Art re-established continuity of government planning for all agencies under the Governor's

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jurisdiction. Art participated in numerous emergency response activities including the 7/7/2005 London subway bombings, Hurricanes Katrina, Rita and Wilma, energy shortage concerns, the 2006 Pennsylvania floods, the Nickel Mines shootings, inhalation anthrax and growing concerns for a potential pandemic resulting from avian influenza.

**Education:**

**B.S. Finance** – The Pennsylvania State University

## 11.D Functional Summaries for Methodology

To provide additional depth and insight to each functional area under review, we have include a summary of each area below that outlines the Deloitte Team's thoughts on the trends, challenges, and opportunities higher education institutions face. This summary also includes how our team typically approaches these areas and the unique methods and tools that differentiate us from our competitors. The summaries provide a further level of detail to supplement the information found in the shorter functional descriptions contained within the methodology section.

### Finance

The Finance Organization plays a critical role in maintaining the fiscal health of a university and monitoring financial compliance and risk. Finance in higher education is often complex, with many additional critical intersection points with research administration, student financial services, and endowment management. Iowa has already made critical steps in improving its account receivables, payables, and treasury functions through initiating programs such as remote deposit, adoption of ACH, and electronic billing.

The Deloitte Team will leverage its deep functional expertise in finance to help Iowa build on the improvements that have already underway in the finance function. The Deloitte Team has the ability to address the wide spectrum of Finance needs, including finance strategy, finance operations, integrated performance management and risk management.

#### Unique Activities and Approach Differentiators

The Deloitte Team will perform an end to end review of the finance function, looking at back office operations, as well as the performance management process and approach.

In addition to the approach outlined in Section 6, we will perform additional analysis specific to Finance. Activities will include:

- Integrated Performance Management (IPM) review of the planning, budgeting & forecasting process. IPM focuses on helping institutions improve a finance organization's decision-making and business consultative skills, including enhancing budgeting, planning and forecasting, analytic capability, management reporting and finance information strategy processes. We will review current processes at Iowa to determine whether an improvement opportunity exists in this area.
- Review of Budgeting funding model for all three Universities to determine whether current model meets performance management standards. Benchmark Iowa model against leading budgeting funding model trends in Higher Education
- Detailed review and benchmark of Accounts Payable metrics and spend data to determine additional savings opportunities

#### Deloitte Differentiators

Deloitte Consulting has a comprehensive Finance Transformation Practice that has developed multiple tools to accelerate the review and improvement of Finance Functions. A sampling of Deloitte Finance tools includes:

- FAST Methodology: Proprietary approach and set of tools for rapid Finance assessment and improvement
- Finance Lab: A one-day, Finance focused session, enabling client teams to accelerate alignment, prioritization and solution development
- CFO Value Map™: A tool that logically structures the vast, ambiguous world of stakeholder value creation by introducing the 4 value domains of Financing, Investment, Operations, and Valuation using Deloitte's proprietary Enterprise Value Map (EVM) structure

- Assessment of Risk Management Function to determine if coverage is adequate and whether cost savings exists on current insurance policies

### Key Challenges & Opportunities in Finance

The competitive climate of higher education has put additional pressure on finance organizations to be efficient and effective in managing their limited financial resources. Decreasing federal and state funding, along with volatile endowment returns, has forced institutions to not only rethink how they manage their back office functions, but how they manage their overall financial portfolio and risk tolerance. Universities often struggle with enacting change within their finance organizations due to the decentralized nature in which many institutions operate in.

The Deloitte Team’s broad finance and higher education experience allows us to quickly identify the leading challenges and opportunities that our clients face. A sampling of common challenges and opportunities we’ve faced at various clients is provided in the table below.

Key Challenges	Key Opportunities
<ul style="list-style-type: none"> <li>• Decentralized finance structure leads to redundancy and inefficient processes</li> <li>• Multiple approvals for expenditures required at the department level, creating delays and inefficiencies</li> <li>• Significant time spent auditing transactions at the department level</li> <li>• Current budget and forecasting processes require significant time, with a relatively small portion dedicated to value-add analysis</li> <li>• Level of financial sophistication within the departments is not always sufficient to provide significant business value</li> <li>• Heavy reliance on Excel spreadsheets to serve as the platform for analytics</li> <li>• Intercompany transactions are not streamlined or standardized</li> </ul>	<ul style="list-style-type: none"> <li>• Consolidate operations across units to streamline processes and ensure efficiency</li> <li>• Automate expense approval process with predefined, allowable parameters in place</li> <li>• Develop robust post-audit function so departments are not required to audit transactions. Adopt statistical sampling methods</li> <li>• Implement enterprise planning tool to minimize transcription</li> <li>• Set performance targets to promote achievement of strategic objectives</li> <li>• Consolidate management of the finance and planning processes to minimize involvement of staff that are not financially trained</li> <li>• Performance management framework to include assessing departments ability to manage budgets appropriately</li> <li>• Establish a multidimensional tool for analytical and all reporting</li> <li>• Book intercompany transactions concurrently to multiple ledgers by using intercompany functionality which ensures transactions balance and reduce efforts spent on reconciliations and tax analysis</li> </ul>

**Table 23. Key Challenges and Opportunities in Finance**

### Key Success Factors

Our experience in finance and higher education has led us to develop some key success factors and lessons learned from past projects that will be instrumental in ensuring success at Iowa. Key success factors related to finance include:

- Policy changes that are led from the front: VP level stakeholders must adopt key policy and process changes for it to be successful at the department level
- Financial transparency when it comes to preferred suppliers: If we expect staff to use preferred vendors, the savings garnered from preferred vendors must be transparent.

## Sourcing and Procurement

The sourcing and procurement function is responsible for activities related to the management of expenditures with external suppliers of goods and services. These activities fall into four primary categories:

- Supplier Identification (Sourcing)
- Order Execution (Purchase Order Processing/Procurement)
- Invoice Payment
- Supplier Performance Management

Performing these key activities well is important because for most Universities more than 40% of the total operating budget is spent on external suppliers. For that reason, many of the institutional and state-system efficiency audits making headlines in higher education concur that reducing external spend is the largest opportunity for administrative savings<sup>8</sup>. It is also the functional area where significant “politically uncontroversial<sup>1”</sup> savings can be achieved without reducing headcount.

The Deloitte Team has current experience helping universities realize significant savings and sustain them by transforming sourcing and procurement operating models, making them more effective (i.e. better results) and more efficient (i.e. results at a lower cost). We have also helped deliver savings for hundreds of commercial and public sector clients and this experience has given the Deloitte Team the insight needed to effectively apply to our higher education clients the applicable best practices from other industries.

### Key Challenges & Opportunities in Sourcing and Procurement

Within public sector procurement, there are three primary sourcing and procurement challenges:

- Increasing effectiveness (Better results—e.g. more savings, better cycle times, etc.)
- Increasing efficiency (Productivity—e.g. more POs processed per Procurement FTE, etc.)
- Maintaining regulatory process compliance and preventing fraud waste and abuse in the sourcing and procurement process

To address these challenges and assess the extent to which there is opportunity for improvement in both efficiency and effectiveness, and opportunities to further guard against fraud

#### Deloitte Differentiators

Because of Deloitte's breadth of capabilities, we can take one data set (the procurement data) and apply three different lenses to identify more high-quality opportunities

- **Deloitte Consulting:** Identify opportunities for sourcing and procurement savings and procurement function improvement opportunities
- **Deloitte Tax:** Identify opportunities for recovery of over tax payments
- **Deloitte Audit:** Identify opportunities to reduce fraud waste and abuse

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<sup>8</sup> University Business Executive Roundtable. Disciplining University Spend. Strategies and Best Practices for Achieving Savings from On-Contract Purchasing, page x. 2009 The Advisory Board Company

waste and abuse, the Deloitte Team will conduct two primary analyses.

- Spend Diagnostic
- Procurement Functional Review

### **Spend Diagnostic**

The spend diagnostic is an independent, comprehensive, analytical, fact-based review of the total expenditure base for all expenditures with third parties across each of the universities. The goal is to profile all categories of spend, benchmark current category-specific savings levels and identify opportunities for incremental savings.

A key process step in the Spend Diagnostic is the collection of the total expenditure data across the three universities. In addition to being used to identify opportunities for savings from sourcing, the data is also evaluated by Deloitte practitioners from our Tax and Audit practices. Our Tax practitioners (with custom Deloitte tools) can take the same data collected for the Spend Diagnostic and with quickly identify opportunities for tax recovery given the tax exempt status of the universities.

The same data can also be quickly evaluated by our Audit practitioners to assess the extent to which the sourcing and procurement processes are compliant with public sector regulatory requirements.

### **Procurement Function Review**

The goal of the Procurement Function Review is to assess the extent which the university Procurement functions are delivering their intended outcomes and the extent to which they are positioned to realize and sustain incremental identified savings opportunities. These broad outcomes include:

- Savings
- Processed supplier bids (Requests for Proposals—RFPs)
- Processed Purchase Orders (POs)

The Deloitte Team will benchmark key performance metrics that tell us the extent to which the outcomes are being achieved (effectiveness metrics) and the cost to achieve these outcomes (efficiency metrics). The benchmarks will come from higher education, other public sector organizations and commercial enterprises and cover the people, the processes, the policies, the organization structures and the technology used to deliver the outcomes.

A gap analysis showing where the universities have gaps to best-in-class performance benchmarks for personnel capabilities, processes, policies, organization structures and technology usage will be developed and recommendations for how to close these gaps will be provided.

The Deloitte Team has extensive experience helping universities, public sector organizations and commercial enterprises realize significant incremental savings and sustain them by transforming sourcing and procurement operating models, making them more effective and more efficient. This cross-industry experience gives us the ability to apply the best-in-class practices from higher education, the public sector and selectively target applicable improvement opportunities from the commercial sector.

The key challenges and opportunities addressed by the Spend Diagnostic and the Functional Review are summarized in the table below.

Area	Key Challenges Addressed	Key Opportunities
<b>Spend Diagnostic</b>	<ul style="list-style-type: none"> <li>Obtaining detailed visibility of expenditures at the category level within and across universities</li> <li>Ongoing prioritization of category-specific savings opportunities</li> <li>Monitoring over tax payments to suppliers</li> <li>Identification of metrics to identify and track fraud waste and abuse</li> </ul>	<ul style="list-style-type: none"> <li>Create detailed visibility of expenditure categories at the university level and system wide</li> <li>Identify incremental university-specific and system-wide savings opportunities</li> <li>Prioritize university-specific and system-wide category savings opportunities for implementation and benefit realization</li> <li>Identify university-specific opportunities to recover over tax payments to suppliers</li> <li>Develop metrics for the ongoing monitoring of fraud waste and abuse</li> </ul>
<b>Procurement Function Review</b>	<p>Assessing key components of the procurement function to determine whether they are operating effectively to produce the key organizational outcomes at costs consistent with leading relevant benchmarks. These key components of the procurement function include:</p> <ul style="list-style-type: none"> <li>The operating model (e.g. centralized versus decentralized)</li> <li>Key sourcing and procurement processes (e.g. spend analysis, strategic sourcing, supplier management, master data management, etc.)</li> <li>Technology applications (e.g. spend categorization, e-sourcing, bid optimization, e-procurement, etc.)</li> <li>Key sourcing and procurement policies (e.g. spend thresholds requiring procurement involvement for sourcing, spend thresholds for requiring procurement involvement for PO processing, policies regarding usage of enterprise contracts, etc.)</li> </ul>	<p>Benchmark the key components of the sourcing and procurement organizations to Identify gaps to best-in-class organizations from Higher Education. These benchmarks will cover measures of efficiency (the cost of producing the organizational outcomes) and effectiveness (the degree to which the organizational outcomes are being produced). Samples of these metrics include:</p> <ul style="list-style-type: none"> <li>Efficiency: <ul style="list-style-type: none"> <li>Spend Managed per Procurement FTE</li> <li>Number of POs Processed per Procurement FTE</li> <li>Total Procurement department operating budget as a percentage of total spend managed</li> <li>Total cost to process a purchase order</li> </ul> </li> <li>Effectiveness <ul style="list-style-type: none"> <li>Savings as a percentage of total expenditures</li> <li>Process cycle time for processing RFPs</li> <li>Process cycle time for processing POs</li> </ul> </li> </ul>

**Table 24. Key Challenges and Opportunities in Sourcing and Procurement**

**Key Success Factors**

There are three keys to success in conducting both the Spend Diagnostic and the Procurement Function Review. These included:

- Make sure that the assessments are fact-based where insights are driven by a careful analysis of data
- Align with key stakeholders from Procurement and targeted members of the end user community who use the goods and services. This alignment includes, but is not limited to:

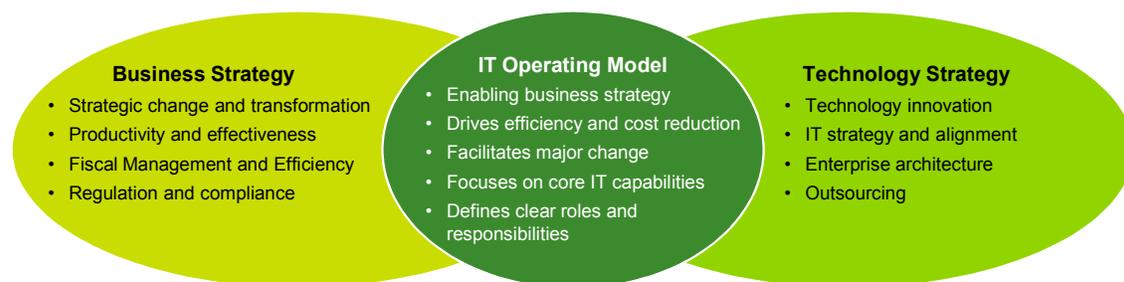
- The overall assessment approach and timeline
- The fact-base (e.g. total expenditures, sub-categories of expenditures, etc.)
- The size and scope of identified opportunities

Make sure timely access to end users of the goods and services being purchased to validate observations and provided feedback on recommendations

## Technology

Deloitte's IT transformation methodology for Higher Education is based on the understanding that while certain parts of an institution's IT operation may be studied or assessed separately, they still have dependencies on other facets of the IT operation within the university and across the university system. And it follows that resulting transformation in one area may significantly affect other areas. In addition to being interrelated to themselves, these different IT areas must also align to the business and IT strategies, so that none of them are considered in a vacuum.

Through extensive IT assessment and transformation experience across 200+ higher education institutions, we have found that using an IT Transformation framework that clearly defines technology strategy, business strategy, and the requisite IT operating model that results as the foundation for the work helps to understand, and capitalize on, these interrelationships. The following figure depicts these high level relationships.

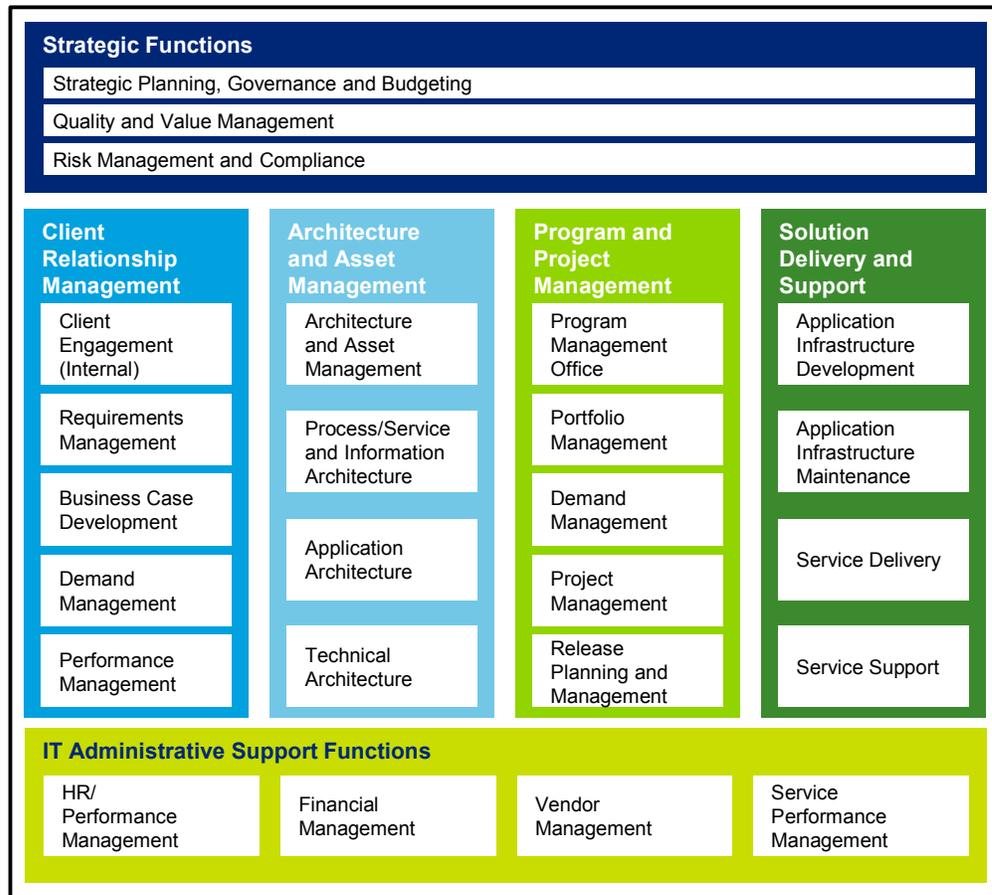


**Figure 33: IT Operating Model Interdependencies.**

Deloitte's IT Transformation Framework, shown below, is built on the understanding of the strong interrelationship between business and technology. This framework covers all aspects of IT while encapsulating and bridging industry accepted frameworks and practices (from Deloitte, the PMBOK, ITIL, COBIT, TOGAF, etc.). This figure provides a depiction of the component pieces of the six key areas of IT, all of which should be considered as a part of any comprehensive IT transformation:

- **Strategic Functions:** These processes and procedures define how the IT function will be managed. Key decisions involve IT strategies, plans, structures, investments, risk and change management.
- **Client Relationship Management:** This is the customer facing side of IT. Key decisions involve the processes and procedures to allow for business and IT alignment, including the balancing of supply and demand.
- **Architecture and Asset Management:** This is the business and technical architecture of IT. Key decisions involve the structures and standards needed for inter-operability and for the safety and protection of the organization's information assets.

- **Program and Project Management:** This is the program and project delivery component of IT. Key decisions involve the processes and procedures for managing the project portfolio and for project execution.
- **Solution Delivery and Support:** This includes the design, development, and day-to-day support of IT services. Key decisions focus on the service catalog, performance standards, and continuous improvement.
- **IT Administrative Support Functions:** These are the processes and procedures that must be performed to run IT like a business. Key decisions involve staffing, vendor sourcing and procurement, facilities management, and records management.



**Figure 34: IT Transformation Framework.**

Deloitte's IT Transformation Framework covers all aspects of IT – encapsulating and bridging industry accepted frameworks and practices across the six key areas of IT.

**Sample Hypotheses:**

Each of the universities have had great success in implementing new technologies resulting in both cost reductions and improved services to faculty and students. In addition, the universities have collaborated on several initiatives including the Regents Legislative Requests Database and sharing data centers to support disaster recovery requirements.

Deloitte's hypothesis is to gain additional understanding of these initiatives and leverage them as the starting point to explore future opportunities for sharing success and joint implementation initiatives.

All of these initiatives have resulted in cost savings and increased efficiencies that could be realized across the university system through increased collaboration. Each campus could leverage the solutions and expertise of the others while still maintaining a level of independence to implement their unique requirements.

The framework below positions possible efficiency and transformation opportunities on a relative scale to highlight areas that the Board can think about during its transformation.

**Deloitte Differentiators**

- Ranked #1 by Kennedy Research and Gartner in IT Strategy and Planning Services
- Deep IT strategy, planning and implementation experience across 200+ Higher Education institutions
- Successful IT transformation experiences at the University of California Berkeley, Northeast R1 University, and numerous public and private institutions
- Our tried and tested tools and accelerators that will allow us to hit the ground running on Day 1

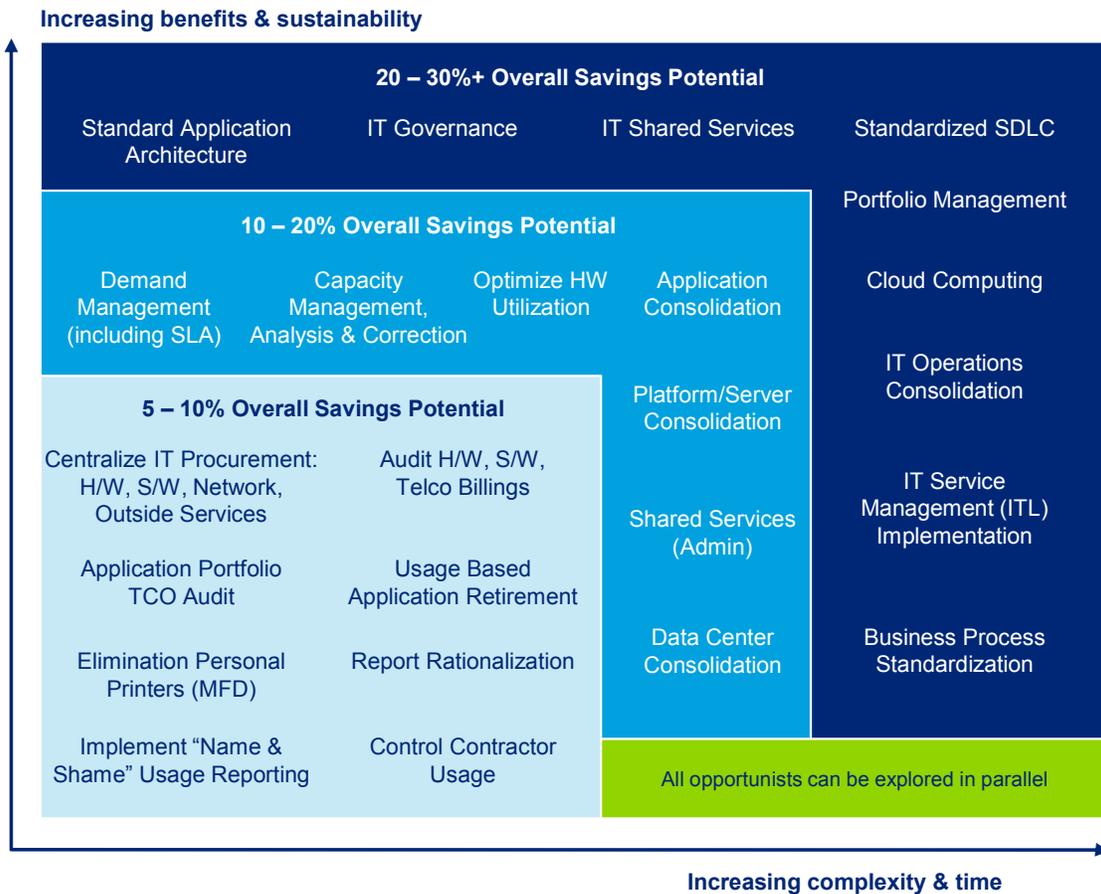


Figure 35: IT Transformation Framework II

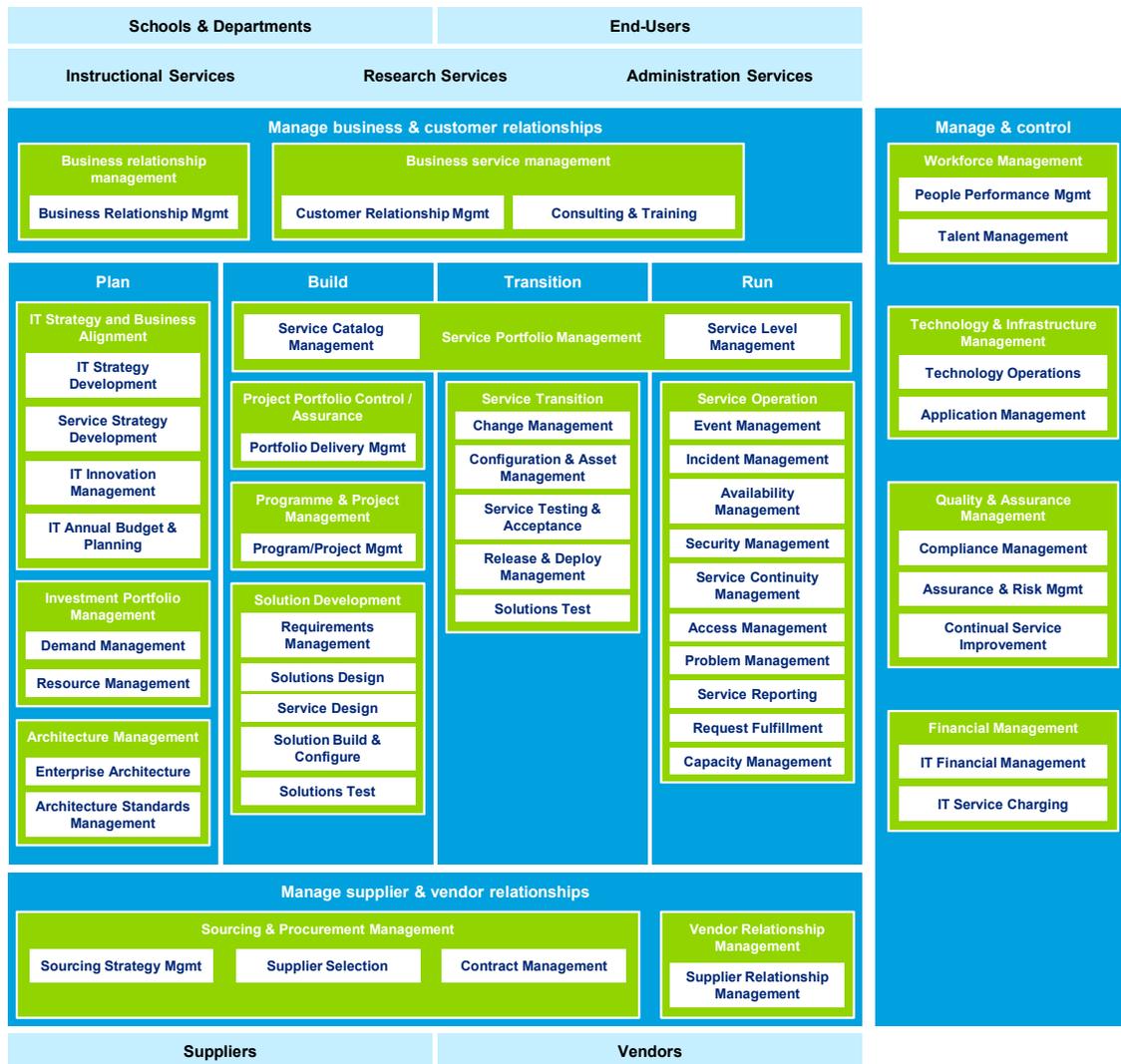
**IT-Specific Data Collection**

- IT Infrastructure – including data centers, physical and virtual servers, storage, networks, help desks, end user devices, etc.

- IT Applications – including enterprise applications (e.g., SIS), custom application specific to each university, etc.
- IT Governance - including current working groups, roles and responsibilities, membership by university, effectiveness and involvement in planning and implementing decisions, etc.
- IT Finance – including key budgetary and funding models, capital and operating expenses, IT service catalog and associated pricing methodologies, and key funding sources outside of full control of universities like federal funds, grants, trusts, retained revenue, etc.
- IT Change Management and Communications – including existing communication and change management channels and approaches that are most effective in managing change during the IT Transformation program.
- IT Workforce Development – including IT staff by university, titles, and roles that may impact IT Transformation decisions, etc.

### **Potential Areas of Analysis**

To minimize impact to end users on each campus, Deloitte typically uses an IT Process Model framework to assess opportunities completed to date (e.g., server virtualization, network convergence, Voice-over-IP, etc.) as well as additional opportunities to further improve efficiencies (e.g., cloud computing).



**Figure 36: Potential Areas for Analysis**

### Sample Benchmarks

As one of the top professional services organizations in the world, Deloitte develops, works collaboratively with, and procures a tremendous volume of benchmarking data and research. We have developed large and current dataset of metrics from our experiences at other institutions as well as through our partners such as iTHC, Gartner, Forrester, and Educause. The Deloitte Team will leverage this scale as well as our experience in benchmarking leading practices to perform an assessment of the IT services along the following high level categories:

- IT Services Relative to Other Institutions
- IT Operating Model Relative to Other Institutions
- IT Service Levels Relative to Other Institutions
- Costs Relative to Other Institutions

## Benchmarking Approach

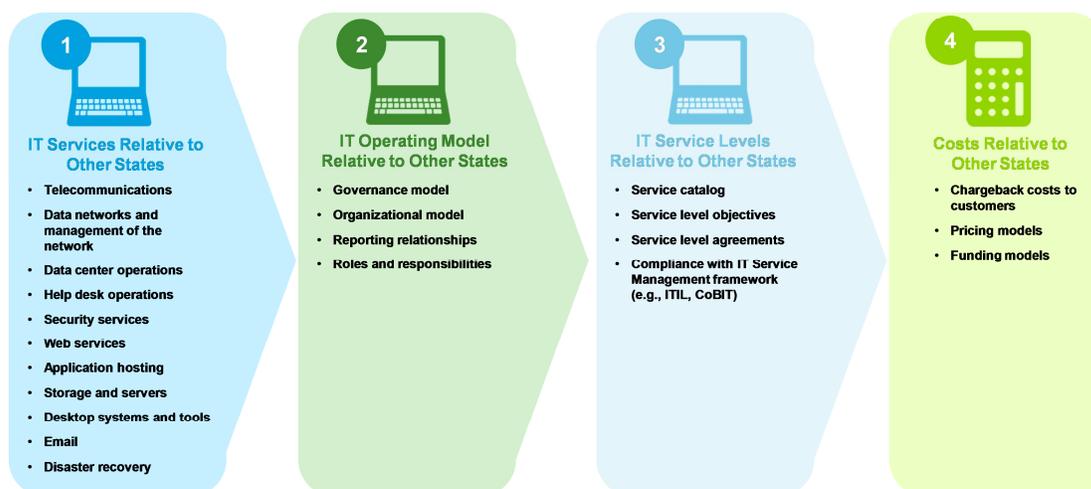


Figure 37: Benchmarking Approach

The following table lists sample KPI's that we have successfully used on other Higher Education IT Transformation projects for benchmarking purposes, which we anticipate leveraging for this effort to select the top 8-10 KPIs for this project.

IT Service	Description	Sample Benchmark KPI's
<b>Distributed Computing</b>	Direct support of the end user in the desktop environment	<ul style="list-style-type: none"> <li>• Cost per user</li> <li>• Average cost per client</li> <li>• Average cost per management staff</li> <li>• Users per support staff</li> <li>• Desktop support cost per user</li> </ul>
<b>Help Desk</b>	Internal IT help desk or call center	<ul style="list-style-type: none"> <li>• Cost per contact</li> <li>• Monthly calls per agent</li> <li>• Total cost per FTE</li> <li>• First contact resolution rate</li> <li>• Call abandoned percent</li> </ul>
<b>Open Systems Computing</b>	The organization's non-mainframe servers (i.e., UNIX or x86 server farms in data centers, cloud computing services, etc.)	<ul style="list-style-type: none"> <li>• Cost per server</li> <li>• Administration cost per server</li> <li>• Servers per FTE</li> <li>• Disaster recovery percent of cost</li> </ul>
<b>Mainframe Computing</b>	The "traditional" mainframe operations and software application mix running on the mainframe systems	<ul style="list-style-type: none"> <li>• Cost per MIPS</li> <li>• Average GB space per Data Center</li> <li>• Average cost for batch processing</li> <li>• Consultants cost per site</li> </ul>
<b>Wide Area Data Networking</b>	The leased lines, fiber/cable, network equipment, traffic and staffing resources dedicated to managing and maintaining a wide area network	<ul style="list-style-type: none"> <li>• Cost per connected device</li> <li>• Average traffic per month</li> <li>• Average cost per FTE</li> <li>• Internet traffic per device</li> </ul>
<b>PBX/VoIP Telecom</b>	The organization's internal phone system. This includes the PBX(s), VoIP PBX(s), desk phones, extensions, voicemail and the resources to support the equipment and	<ul style="list-style-type: none"> <li>• Cost per extension</li> <li>• Transmission cost per extension</li> <li>• Extensions per support staff</li> </ul>

IT Service	Description	Sample Benchmark KPI's
	service	<ul style="list-style-type: none"> <li>• Management staff costs per extension</li> </ul>
<b>Wireline Telecom</b>	The local and long distance charges, the minutes used and the internal support dedicated to providing this service to the enterprise	<ul style="list-style-type: none"> <li>• Cost per minute</li> <li>• Average cost per support staff</li> <li>• International minutes per user</li> <li>• 800 inbound cost per minute</li> </ul>
<b>Wireless Telecom</b>	Cell phones, pagers, PDAs, options, rates and plans as well as the staffing resources in support of these devices and services	<ul style="list-style-type: none"> <li>• Cost per device</li> <li>• Average cellular cost per minute</li> <li>• Cellular off peak minutes</li> <li>• Cost per device</li> <li>• Minutes per user</li> </ul>
<b>Software Applications Development</b>	The efforts of an enterprise to develop new applications, interfaces, and database or web applications	<ul style="list-style-type: none"> <li>• Costs per function point (FP)</li> <li>• Personnel cost per FP</li> <li>• Equipment costs</li> <li>• Database developer cost per FP</li> </ul>
<b>Software Applications Support</b>	The resources required to run, maintain and fix custom applications	<ul style="list-style-type: none"> <li>• Cost per FP supported</li> <li>• Total in-house cost per FTE</li> <li>• Total contractor cost per FTE</li> <li>• Programmer cost per FP</li> </ul>
<b>End User Survey</b>	The End User Survey provides insights into the quality of services provided by an IS/IT organization	<ul style="list-style-type: none"> <li>• Quality of help desk, support, and communications</li> <li>• First and quality sources of help</li> <li>• Hours of training per year</li> </ul>
<b>Business Unit Survey</b>	The business unit's level of satisfaction with the services provided by IT	<ul style="list-style-type: none"> <li>• Confidence and satisfaction with IT</li> <li>• Alignment with business unit</li> </ul>

**Table 25. Sample IT KPI's**

### Key Challenges & Opportunities in Technology

Although higher education institutions understand these requirements, aging technology systems make it exceptionally difficult to deliver on stakeholder needs. Back-office systems used to manage student information, finances and human resources are outdated hampering institutions ability to streamline the student enrollment process, realize cost efficiencies or hire new or visiting staff. Many departments maintain home-grown IT systems that are almost impossible to upgrade or centralize or maintain parallel systems that cause redundancy and inefficiency.

Higher education institutions are rethinking how they deploy and manage infrastructure. Asset optimization is becoming increasingly critical. To reduce infrastructure costs, some institutions are now partnering with the private sector to build and/or operate shared facilities. Others are disposing of surplus assets and taking steps to streamline their infrastructure portfolios.

Area	Key Challenges	Key Opportunities
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>• Reducing the overall cost of deploying and supporting infrastructure assets</li> </ul>	<ul style="list-style-type: none"> <li>• Partnering with the private sector to build and/or operate shared services facilities and infrastructure</li> <li>• Rationalize applications resulting in the ability to dispose of surplus infrastructure assets</li> </ul>
<b>Applications</b>	<ul style="list-style-type: none"> <li>• Aging and expensive application systems</li> <li>• Redundant applications</li> </ul>	<ul style="list-style-type: none"> <li>• Leverage social media and other online forms of ongoing communication to establish and maintain relationships with students, parents and alumni</li> </ul>

Area	Key Challenges	Key Opportunities
	<ul style="list-style-type: none"> <li>Online security and data privacy</li> </ul>	<ul style="list-style-type: none"> <li>Implement and/or leverage technologies designed to streamline core business processes, such as student services, research, finance, administration, human resources and procurement</li> <li>Rationalize IT application portfolios</li> </ul>
<b>Service Delivery</b>	<ul style="list-style-type: none"> <li>High student expectations of the technology experience</li> <li>Evolving student and faculty technology demands</li> </ul>	<ul style="list-style-type: none"> <li>Improve information management and data analytics to identify areas of competitive differentiation</li> <li>Leverage technological innovation to better engage students and improve services</li> </ul>

**Table 26. Key Challenges and Opportunities in Technology**

### Key Success Factors

Our experience in IT and higher education has led us to develop some key success factors and lessons learned from past projects that will be instrumental in ensuring success at Iowa. Key success factors related to technology include:

- Developing a strategy and technology roadmap that lays out the journey to achieving a transformed IT organization that provides cost reduction opportunities
- Streamline core business processes through improvement automation freeing up funding to meet the increasing demands for new technology solutions such as social media and online courses

### Research Administration

Research administration not only plays an integral part in fulfilling the academic mission of higher education institutions, it also provides important funding to support universities' core services. The research administration process is often complex, with many regulatory and financial management requirements. Iowa State has already undertaken recent initiatives in research, including simplifying the way research is managed through the implementation of a web-based reporting system and the consolidation of research centers. Deloitte's higher education and public sector experience in research will allow us to build on the work currently underway at Iowa. The Deloitte Team will perform an end-to-end review of the research administration function, from pre-award proposal development through post-award financial management and close out to maximize revenue, savings, and efficiency opportunities in research.

#### Unique Activities and Approach Differentiators

The Deloitte Team's broad research administration experience, in both higher education and clinical research institutes, allows us to quickly identify the organizational, process, and technology related challenges and

#### Deloitte Differentiators

Deloitte understand the importance of research administration and is committed to supporting research in Higher Education. The Deloitte Foundation, a non-profit organization funded by Deloitte LLP and the retired partners of the Deloitte U.S. Firms, has been a strong supporter of higher education for more than 80 years. The Foundation encourages and supports excellence in teaching, research, and curriculum innovation.

- The Deloitte Foundation supports education through a variety of initiatives that promote excellence in teaching, research and curriculum innovation, and help develop the talent of the future.
- The Deloitte Foundation has allowed Deloitte to develop hands on experience working with Higher Education institutions to support the research function
- Experience has allowed Deloitte to understand the reporting and regulatory requirements that are needed to support the research function

opportunities that our clients face in research administration. Our experience includes a deep understanding of all aspects of the research function, including pre-award, post-award, and compliance, and commercialization. We are uniquely positioned to help the Board deal with the complexities of today’s research environment, from risk mitigation to trainings to business development. In addition to our client experience, we have experience supporting the academic research function directly.

**Key Challenges & Opportunities in Research Administration**

Competition for research funding has become increasingly difficult over the past five years. Universities often struggle with developing streamlined processes that support Principal Investigators’ needs, while simultaneously minimizing the overhead incurred at the institution level. The desire to support faculty at the local level often supersedes the need for efficient processes that are in compliance with state and federal regulations.

The Deloitte Team’s broad research administration experience, in both higher education and the public sector, allows us to quickly identify the organizational, process, and technology related challenges and opportunities that our clients face in research administration. A sampling of common challenges and opportunities we’ve faced at various clients is provided in the table below.

Key Challenges	Key Opportunities
<ul style="list-style-type: none"> <li>• Inconsistent level of trained research administration support for faculty at the local level</li> <li>• Unclear roles &amp; responsibilities creates confusion and redundancy between Pre-Award and Post-Award functions</li> <li>• Conflicting priorities and perspectives due to silo-ed organization structures</li> <li>• Lack of shared systems, tools, and databases to track and manage proposals and awards</li> <li>• Lack of shared metrics (e.g., success rates) to measure performance</li> <li>• High degree of manual and paper processing for grants management (e.g., invoicing, effort reporting)</li> <li>• Excessive layers of handoffs and administrative burden</li> <li>• Varying perspectives on risk tolerance and university priorities</li> </ul>	<ul style="list-style-type: none"> <li>• Increase skillsets and understanding of research administration policy and processes for department/school-level staff through training, outreach (e.g., onboarding, roll-out of new systems and tools), additional online resources, and/or recruitment</li> <li>• Clarify roles and responsibilities of staff to reduce overlaps in accountability and improve coordination between units</li> <li>• Increase collaboration between Sponsored Programs Accounting and Pre-Award unit for pre- and post-award activities.</li> <li>• Collect performance metrics (e.g., level of effort, success rates) across groups, leveraging new or existing technologies as needed, to improve transparency and communication</li> <li>• Increase sharing of data and metrics between units, particularly between Central units (e.g., ORA, SPA) to departments and PIs, including making metrics publicly available when appropriate</li> <li>• Invest in end-to-end research administration and grants management systems for use by PIs, staff, sponsored accounting and pre-award to increase transparency and efficiency with a particular focus on modules to functionality to improve manual processes (e.g., effort reporting)</li> <li>• Enforce single signing authority by one group for all agreements involving sponsored funds to prevent non-compliant agreements from being submitted, maintain consistency, and improve support</li> </ul>

**Table 27. Key Challenges and Opportunities in Research Administration**

**Key Success Factors**

Changes to research administration function tend to be politically sensitive and require a commitment to change management since it affects faculty directly. Our experience with Research Administration in higher education led us to develop some key success factors and lessons learned from past projects that will be instrumental in ensuring success at Iowa. Key success factors include:

- Engage faculty in the process overall – make sure the imperative for change is clearly defined and illustrate how changes will have a positive impact on PIs daily work
- Due to the often decentralized nature of research administration, a strong governance structure is required. Governance structure should have representation from pre-award, post-award, faculty, and local research administration support

## Human Resources

HR plays is responsible for managing the human capital of an organization – a critical component of higher education institutions. Human Resource organizations in higher education have the complex role of providing services to faculty, staff, student workers, and unions. Regent institutions have already undertaken numerous HR initiatives to help improve efficiencies and reduce costs. UI Self-Service, Jobs@Ulowa, Jobs@UNI, and electronic personnel action forms are all important initiatives that have helped Regent institutions leverage technology to become more efficient in HR. Deloitte will leverage its deep functional expertise in its Human Capital practice to help Regent institutions build on the improvements that have already underway in HR. The Deloitte Team will build on this work by not only doing an end to end review of HR processes and technology, but will look across the institutions to determine if any additional synergies can be made across campuses.

### Unique Activities and Approach Differentiators

Deloitte Consulting’s Human Capital practice is a leading global advisor and implementation partner working with companies, governments, and organizations around the world. With over 2,900 dedicated Human Capital practitioners in North America, we work to improve our clients’ organizational results and impact by focusing on challenges at the intersection of business and people. We offer a focused combination of breadth and expertise across HR transformation, organization, change, talent, rewards, and actuarial and analytics capabilities.

The Deloitte Team will conduct a comprehensive review of the HR function to determine where transformation is needed. Our HR transformation methodology typically focuses on nine key areas, as outlined in the diagram below.

### Deloitte Differentiators

Deloitte Human Capital Practice has many project acceleration tools that will help the Board quickly and efficiently prioritize opportunities in HR. Sample tools include:

- The **Enterprise Value Map™ for Human Capital** demonstrates ways that shareholder value can be increased through Talent Strategies, Learning & Development, Change Management / Transformation, Organization Strategies, Employee Rewards & Benefits, Governance, Risk & Compliance, and HR Strategy & Services.
- The **HR Service Delivery Model** provides a framework for considering all of the elements required to provide HR services from an end-to-end perspective.
- **InfoHRm**: A database of HR benchmarks, which include data on demographics, workforce profiles (such as staffing rates and tenure), mobility, workforce development, and many others



**Figure 38: Deloitte's HR Transformation Approach**

In addition to the methodology outlined above, Deloitte has many proprietary tools that will help accelerate the assessment of the HR function. A sample of HR-related tools is provided below:

Dimension & HR Element	1	2	3	4	Comments
HR Strategy & Value Value Creation HR Service Alignment Value Realization					
HR Organization & Governance HR Sourcing HR Process & Policy HR Technology & Infrastructure Location, Regulation & Tax					Project plan priority
People Dimensions of HR Transformation HR Business Practices Culture of Leadership Talent Development Employee Engagement Diversity & Inclusion					Project - not a focus
Project Management HR Project & Deal Execution Resource & Knowledge Project & Compliance Communication: Stake & Status					Project plan priority

**HR Maturity Diagnostic**

This tool can be used to assess the current state of the various elements of the HR service delivery model, and to begin visioning about the future state



**Value Tracking**

The information from this tool can be used to track expected versus actual project benefits following the timeline established in the measurement schedule

Category	Current State	Target State	Assessment
HR Technology			
HR Process			
HR Organization			
HR Strategy			

**HR Technology Review Assessment**

This assessment tool can be used to clearly evaluate various HR technology information systems and to determine which technology is best suited for the Client

Category	Current State	Target State	Assessment
People			
Process			
Technology			

**Change Impact Assessment**

This tool can be used to identify key change impact areas and what this means for the business and stakeholders

**Figure 39: Sample HR Related Tools**

Our robust HR transformation experience will allow us to quickly identify top challenges and opportunities across the Board of Regent’s institutions, allowing Iowa to drive quickly towards implementation.

**Key Challenges & Opportunities in HR**

Human Resource organizations in higher education are being forced to rethink how they provide services to their key stakeholders. Traditionally, HR organizations in Higher Education are often decentralized, with many local administrators providing departmental HR support. Faculty HR issues are often handled outside of the central HR organization, creating discrepancies and workarounds.

The Deloitte Team’s broad HR and higher education experience allows us to quickly identify the leading challenges and opportunities that our clients face. A sampling of common challenges and opportunities we’ve faced at various clients is provided in the table below.

Key Challenges	Key Opportunities
<ul style="list-style-type: none"> <li>• Insufficient resource capacity in HR to meet full demand for services by faculty and staff, particularly in areas such as organizational design, change management, etc.</li> <li>• Significant time spent on managing transactions rather than strategic services</li> <li>• Underinvestment in HR technology and tools to support needed functionality and process efficiencies</li> <li>• Limited HR support services provided to faculty (e.g., employee relations, benefits and non-academic leaves, and coaching)</li> <li>• Inefficient, duplicative, and/or manual processes such as, Personnel Action Forms, Time Entry, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider outsourcing some transactional HR processes such as payroll, benefits administration, etc.</li> <li>• Invest in HR technology and systems to support process improvements and efficiencies, increase compliance, and improve service delivery</li> <li>• Redesign HR processes to reduce cycle times, handoffs, and pain points as well as to support increasing needs of faculty</li> </ul>

**Table 28. Key Challenges and Opportunities in HR**

**Key Success Factors**

Our experience in HR and higher education has led us to develop some key success factors and lessons learned from past projects that will be instrumental in ensuring success at Iowa. Key success factors related to HR include:

- Alignment of HR Strategy: We’ve found that stakeholders often have differing opinions on what services HR should provide. Alignment HR strategy and expectations with key leadership upfront will be instrumental to project success
- Obtaining Departmental Buy-in: Since HR services are often viewed as personal, obtaining departmental buy-in will be critical in ensuring process, people, and technology changes support stakeholder needs.

**Facilities Operations, Maintenance and Construction**

Facility Operations and Maintenance aims to plan for, develop, and maintain a portfolio of land and facilities in a condition that supports executing the vision of the university system. While construction activities can vary greatly depending upon a multitude of factors, including population growth rates and the availability of funds, annual facility operations and maintenance budgets remain relatively stagnant and predictable for larger, mature campuses with a portfolio of properties of varying ages.

Overall facility stewardship is especially important since 60 to 85 percent of the total lifecycle cost of a building is the operating cost, while only 15-40% is attributed to the design, construction, acquisition and disposition cost<sup>9</sup>.

### Unique Activities and Approach Differentiators

The Deloitte Team maintains many methodologies, toolkits, accelerators and data sources in the areas of facilities maintenance and capital project management. For example, our team recently completed a higher education Facilities and Capital Projects survey that identified key metrics and benchmarks related to staffing levels, technology and processes for these functions from more than 15 higher education institutions nationwide.

A partial list of some of our tools and accelerators is provided below:

- Operating Model Analysis
- Maturity Model Analysis
- Operational Baseline Assessment Tool
- Benchmarking Data & Targets
- Service Provider Scorecard
- Service Level Agreement (SLA) Rationalization
- Real Estate & Facilities IndustryPrint™ – Process Maps

#### Deloitte Differentiators

- Established industry thought leaders and subject matter specialists
- Suite of workplace strategies that increase utilization of assets and improve stakeholder productivity and satisfaction
- Team member accreditations include: AIA, CCE/A, CCIM, LEED AP, MCR, PE, PMP and SLCR
- Access to the Enterprise Value Map™ - Tool to determine what investments are accretive and the relative value of competing investments across the portfolio so that they can be prioritized

### Key Challenges & Opportunities

The goal of the Deloitte Team will be to build upon the existing initiatives undertaken by the universities and identify additional process, organizational, technology and cost savings opportunities that can improve operations and reduce cost.

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<sup>9</sup> "Defining High Performance Buildings for Operations and Maintenance" – Angela Lewis, David Riley, Abbas Elmualim, International Journal of Facility Management, Vol 1, No 2 (2010) <http://ijfm.net/index.php/ijfm/article/viewArticle/26/39>

Area	Key Challenges	Key Opportunities
<b>Facility Operations</b>	<ul style="list-style-type: none"> <li>Decentralized facilities operations structure leads to redundancy and inefficient processes</li> <li>Significant time spent by facilities department managing service providers. We find that 80% of facility and maintenance vendors are small, consume significant management time and attention, but comprise only 20% of total vendor spend</li> </ul>	<ul style="list-style-type: none"> <li>Centralize facilities operations across units to streamline processes and create efficiency</li> <li>Services are often provided through multiple vendors and there is an opportunity to rationalize vendors and obtain lower pricing and better performance by leveraging total spend across Universities</li> </ul>
<b>Maintenance /Stewardship</b>	<ul style="list-style-type: none"> <li>Fragmented use of technology hinders appropriate planning and tracking of maintenance activities, reducing the useful life of equipment and assets</li> <li>Disconnected inventory of assets and warranty details results in redundant maintenance spends on aspects already covered by the manufacturer under warranty</li> </ul>	<ul style="list-style-type: none"> <li>Increase the life of expensive facilities equipment and building assets by improving maintenance procedures</li> <li>Upgrade process and technology for scheduling and managing equipment maintenance (preventative and predictive) to lower costs</li> </ul>
<b>Space Development and Utilization</b>	<ul style="list-style-type: none"> <li>In older buildings, inefficient space design and utilization result in excess space and higher operating cost</li> <li>Unplanned growth leads to inefficient stacking patterns and space standards</li> </ul>	<ul style="list-style-type: none"> <li>Improvements in space utilization, through technology and redesign, can avoid the cost of building new facilities and moving people, and can even free up facilities for alternative uses</li> </ul>
<b>Construction</b>	<ul style="list-style-type: none"> <li>Dynamic programming requirements that must accommodate a variety of users and uses</li> <li>Limited in-house project management capabilities</li> <li>Limited history of infrastructure improvements</li> </ul>	<ul style="list-style-type: none"> <li>Improve return on capital investment by conducting project costs and control analyses throughout and following construction activity</li> <li>Develop cost and schedule control systems to reduce project and organizational costs and mitigate risks</li> </ul>

**Table 29. Key Challenges and Opportunities in Facilities Operations, Maintenance, and Construction**

### Key Success Factors

1. **Service Delivery Model** - To be most effective, service provision should be considered within the context of stakeholder requirements, budget and operating model
2. **Business Process Improvement** - Identify best-in-class processes internally and externally, and standardize them portfolio-wide. Align organization structure to optimize performance
3. **Technology** - Effective integrated work management system (IWMS)/computerized maintenance management system (CMMS) optimizes work order input and tracking, order routing, maintenance management, asset life-cycle management and reporting

### Student Services & Academic Support Programs

Student Services and Academic Support Programs encompass a series of functions including, but not limited to, financial aid, student career counseling & placement, student billing, and registrar/transcript processing. Such functions are typically provided by a variety of offices including the Office of the Bursar, the Student Financial Aid Office, and Career Services.

As the cost of higher education continues to skyrocket, public universities face increasing pressure to deliver an affordable, but still high quality education. Financial aid offices are tasked with providing

students, families and members of the community with expert financial aid information, and high quality personal assistance in obtaining the financial resources needed to pursue and attain their educational goals. Many universities are turning to the latest technological developments to provide cost-effective guidance for students and their parents. For example, some offices provide web-based videos and other means of documentation on aid packages and financial literacy topics to better educate students and parents on available opportunities. Furthermore, online based services and increased automation helps minimize administrative costs associated with processing financial aid requests.

Typically a registrar supports the academic, student, and administrative activities of a university enterprise through the creation, maintenance, certification, and protection of University records (e.g. courses, degrees, transcripts, etc.). While core functions may vary across university systems, the Office of the Registrar is broadly responsible for course catalog production, course inventory administration, course scheduling, degree audit, diploma services, document management, enrollment certification, final exam administration, student academic records, transcript services, and university-wide academic calendars. There has been a significant shift away from a reliance on paper and traditional mailing services to enable university registrars to respond to student requests (e.g. transcript requests) in a cost-efficient and timely manner. Furthermore, the implementation of document imaging cannot only be beneficial for archival purposes, but also as a way to better manage and move current documents given limited financial, space, and human resources.

Efficiently managed student billing operations allow students, parents, and other stakeholders to conduct their financial affairs with the University in an easy to use and time effective manner. For some universities, these responsibilities fall under the auspices of a centralized billing office – often referred to as the “Office of the Bursar.” These operations include, among other things, administering the University’s cashing operations, distributing revenue to appropriate accounts, and receiving and processing student account payments. Many offices are increasingly turning to electronic collection methods, sometimes through self-service portals, to better manage administrative costs, reduce paper-based services, and provide easy and customizable access for students and their families.

Institutions are also expected to provide requisite career counseling and placement opportunities to help students beyond their college years. Some universities help students with a variety of activities ranging from resume guidance and mock interviews to helping students pursue full-time employment, internships, or other experience-based learning opportunities. At some universities, a career services office can also act as a liaison between students and prospective employers through career fairs, company specific information sessions, on-campus interviews, and alumni relations events.

### **Key Challenges & Opportunities in Student Services and Academic Support Programs**

As a recognized global leader in Business Operations Consulting services, the Deloitte Team brings the requisite functional expertise and proven capabilities to help universities streamline inefficient processes while still meeting the diverse needs of students, parents, faculty, and staff. The Deloitte Team’s experiences collaborating with other institutions of higher education, as well as our public and private sector clients, enables us to quickly identify the leading challenges, trends, and opportunities with regard to Academic Support Programs. A sampling of common challenges and opportunities facing higher education institutions is documented below:

Area	Key Challenges	Key Opportunities
<b>Financial Aid</b>	<ul style="list-style-type: none"> <li>Improving access to financial resources</li> <li>Educating students and families about aid options</li> <li>Costs associated with paper-based services</li> <li>Decentralized points of contact for various aid options</li> </ul>	<ul style="list-style-type: none"> <li>Increase community support through enhanced development of external financial resources for students</li> <li>Leverage existing technology to develop and encourage “paperless” financial aid processes</li> <li>Create a comprehensive and accessible financial resources guide</li> <li>Develop a “One-Stop” student financial services portal</li> </ul>
<b>Student Career Counseling &amp; Placement</b>	<ul style="list-style-type: none"> <li>Costs associated with paper-based services</li> <li>Mitigating student anxiety (or unrealistic expectations) about the job market</li> <li>Persuading students to take advantage of career services</li> <li>Locating enough recruiters or job opportunities</li> <li>Managing employer, campus, and student relationships</li> </ul>	<ul style="list-style-type: none"> <li>Develop “buddy” systems to partner upperclassman, alumni, or vocation experts with underclassman</li> <li>Internal marketing and messaging through web-based services, career fairs, master calendars, and alternative formats/methods</li> </ul>
<b>Student Billing</b>	<ul style="list-style-type: none"> <li>Costs associated with paper-based services</li> <li>Simplifying/streamlining “routine” transactions</li> <li>Increasing preference for student control and flexibility to access their own information</li> <li>Preference for high-quality personal assistance when necessary</li> </ul>	<ul style="list-style-type: none"> <li>Increase automation of “routine” transactions</li> <li>Develop web-enabled self-service systems with student access and flexibility</li> </ul>
<b>Registrar &amp; Transcript Processing</b>	<ul style="list-style-type: none"> <li>Space, fiscal, and human resource constraints managing past and current paper-based documents</li> <li>Varying information for degree programs or confusing messaging</li> <li>Inflexible procedures to alter degree programs to better meet student demand</li> </ul>	<ul style="list-style-type: none"> <li>Increase automation of previously-identified paper forms and processes into online services</li> <li>Streamline degree plan information in collaboration with the academic community</li> <li>Standardize the content and presentation of information in University catalogs</li> <li>Implement solutions that allow the course inventory change process and catalog production cycle to be more flexible, responsive and agile to meet campus needs</li> </ul>

**Table 30. Key Challenges and Opportunities in Student Services & Academic Support Programs**

**Potential Areas of Analysis:**

- Instituting the “Common Application” to streamline admissions processes and utilize existing online based resources to reduce administrative costs
- Developing incentive based programs to supplement campaign efforts encourage student participation in electronic bill payment services
- Identify solutions to alter the course inventory change process and catalog production cycle to be more flexible, responsive and agile to meet campus needs
- Creating an active marketing campaign to champion Career Guidance services through social media (e.g. Facebook, Twitter, etc.) and other web-based offerings
- Identifying additional areas to automate routine-tasks across all academic support programs (i.e. financial aid, student billing, etc.)

## Marketing and Advertising

Now, more than ever, institutions of higher learning are placing a renewed emphasis on their marketing departments to reach a broader and more diverse audience. The Deloitte Team has the functional expertise and has collaborated with a variety of higher education, commercial, and public sector clients on marketing and advertising initiatives.

### Key Challenges & Opportunities in Marketing and Advertising

From budget cuts to branding issues, to defining and reaching target audiences, the competitive climate of higher education has not only pressured University Systems to improve their messaging, but to do so in a cost-effective manner. Although universities must consistently adapt to fully take advantage of new outreach approaches and technological formats, many are not well-positioned to do so.

The Deloitte Team’s broad marketing and higher education experience allows us to quickly identify the leading challenges and opportunities that our clients face. A sampling of common challenges and opportunities facing higher education institutions is documented below:

Area	Key Challenges	Key Opportunities
<b>Limited Resources</b>	<ul style="list-style-type: none"> <li>Economic downturn, in general, is forcing Universities to become more fiscally responsible and constrain budgets across the board</li> <li>Marketing departments within the University system are often experiencing budget cuts or insufficient funding</li> </ul>	<ul style="list-style-type: none"> <li>Increased opportunities to share costs and make strategic use of available resources</li> <li>Investigation of new sources of funding</li> <li>Developing strong evaluation metrics and adjusting expenditures as necessary from inefficient initiatives to cost-effective campaigns.</li> </ul>
<b>Branding and Messaging</b>	<ul style="list-style-type: none"> <li>The target audience for Universities (i.e. students, parents, etc.) are experiencing “information overload” as a result of media saturation</li> <li>Inconsistent messaging across the University system between schools, departments, and programs leads to brand confusion</li> </ul>	<ul style="list-style-type: none"> <li>Improved coordination and revision of branding efforts to enforce standardization across an Institutions</li> <li>Market segmentation research to enable systems to develop “audience-specific marketing”</li> </ul>
<b>New Approaches and Formats</b>	<ul style="list-style-type: none"> <li>Today’s fast moving technical environments forces universities to continuously adapt to new technology and forms of communication</li> </ul>	<ul style="list-style-type: none"> <li>Increased emphasis on “social networking” as a means of reaching target audiences</li> <li>Developing new, or updated websites to improve branding</li> <li>Assessing, and reassessing, the effectiveness of new format and communication types</li> <li>Training existing staff and hiring new staff to meet growing technological needs</li> </ul>
<b>Appealing to a wider range of consumers</b>	<ul style="list-style-type: none"> <li>An increasingly competitive (and global) pool of candidates pressures universities to better differentiate themselves from their peer institutions</li> <li>Parents and students demand increased customization to tailor their education to their own learning goals and styles</li> </ul>	<ul style="list-style-type: none"> <li>Expanding messaging beyond traditional geographic borders</li> <li>“Audience-specific marketing” to better tailor messages to niche groups</li> </ul>

Table 31. Key Challenges and Opportunities in Marketing and Advertising

## Potential Areas of Analysis:

The myriad of challenges facing higher education with regard to marketing opens the door for multiple areas of analysis, including:

- Developing Key Performance Indicators (KPIs) and evaluation techniques to better determine the effectiveness of marketing initiatives enabling universities to allocate, and re-allocate expenditures to make sure each dollar is well spent
- Performing rigorous market segmentation research to enable Universities to develop “audience-specific marketing” efforts to better target messages and materials, both for niche programs and for the institution as a whole
- Sharing costs and making strategic use of available resources both within the marketing department and across other organizations can mitigate resource issues
- Increasing emphasis on technology as a means to expand messaging beyond traditional boundaries (e.g. geographic, cultural, etc.)

## Auxiliaries

A higher education institution’s auxiliaries are important focus areas as they augment the educational experience and influence the campus environment.

The Deloitte Team has worked with many higher education institutions on effectively planning and managing these auxiliary areas. The goal of the Deloitte Team is to build upon current successes and identify additional process, organizational, technology and cost savings opportunities that can improve services and service levels and reduce costs. The Deloitte Team will perform an end-to-end review of these functions, focusing on the relevant processes, organization, technology, and performance management.

### Deloitte Differentiators

- Unique portfolio of competencies and ability to integrate services to provide a breadth of perspectives and insights to create greater value and return on investment
- Experience in managing multiple stakeholder groups with unique and conflicting priorities
- Comprehensive transformation tools and accelerators to quickly and efficiently assess services, identify improvement opportunities and effectively implement changes

## Unique Activities and Approach Differentiators

The Deloitte Team maintains many methodologies, toolkits, accelerators and data sources in these auxiliary areas.

Deloitte-developed tools, such as the Enterprise Value Map™, are used to determine what investments are accretive and the relative value of competing investments across the portfolio so that they can be prioritized. Our staff is knowledgeable about the operations of the auxiliaries, so we have the ability to consider, practically, how each of these functions can operate most effectively.

## Key Challenges & Opportunities

Each of the Regent institutions have undertaken several impressive initiatives related to building and renovating efficient buildings in accordance with LEED silver, gold and platinum guidelines, energy management and waste management. Each initiative achieved cost savings, cost avoidance, and more space and resource usage efficiency. The goal of the Deloitte Team will be to build upon these successes and identify additional process, organizational, technology and cost savings opportunities that can improve operations and reduce cost.

Area	Key Challenges	Key Opportunities
<b>Residence Services</b>	<ul style="list-style-type: none"> <li>• Providing services that foster an environment of comfort and learning</li> <li>• Obtaining permission from students to access their rooms is sometimes a challenge, making work scheduling difficult</li> <li>• Maintaining and auditing the quality of food services is often a challenge, and impacts student satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>• Improvements in space planning of existing accommodation can reduce the need to provide additional space</li> <li>• Standardization of service quality across facilities can improve student experience</li> </ul>
<b>Athletics</b>	<ul style="list-style-type: none"> <li>• Athletics programs are important to most stakeholders, a point of prestige and a recruiting tool for most universities, however, increasing costs and reduced budgets are forcing universities to reduce investments</li> </ul>	<ul style="list-style-type: none"> <li>• A review of the athletics program's service delivery model can help focus cuts in administrative costs and allow greater percentages of the athletics budget to be devoted to programs stakeholders value</li> </ul>
<b>Parking and Transportation Enterprises</b>	<ul style="list-style-type: none"> <li>• Responding to the parking and transportation needs of the university's students, faculty, staff, and visitors represents a space and cost challenge at most campuses</li> </ul>	<ul style="list-style-type: none"> <li>• Make sure that all parking structures are automated with access control to the extent possible</li> <li>• Review the market prices for parking and make sure that university parking prices are reasonable yet competitive</li> </ul>
<b>Utility Systems</b>	<ul style="list-style-type: none"> <li>• Increasing utility costs and use of traditional sources of energy for heating result in higher costs, which may not be correctly passed on to end-users</li> <li>• Waste disposal is becoming increasingly expensive</li> </ul>	<ul style="list-style-type: none"> <li>• Demand Management – initiatives to reduce the usage of energy</li> <li>• Supply Management – make sure price of utilities leverages the University System's total consumption</li> <li>• Billing Management – make sure the correct tariffs are being applied and contracted discounts are provided</li> </ul>

**Table 32. Key Challenges and Opportunities in Auxiliaries**

### Key Success Factors

1. Change Management - Recognize that transformation of service provision can have significant impact on stakeholder experience and therefore carries a need for clear communication and change management
2. Governance - Perform active and ongoing management of service providers and staff, including regular review of relevant metrics. Adjust incentives over time to keep service levels and cost performance on track.

### Academic Programs

Our team brings deep experience in various aspects of academic programs including resource stewardship, scheduling, and mission realignment. These services can enable the Board to effectively allocate academic resources, improve labor market outcomes and economic opportunity, and contribute to critical higher education initiatives across all three universities. For example, our team can provide insight around academic schedule and resource costs to optimize course schedules and reduce facilities costs. Through deeper analysis, we can also work with the Board to improve student outcomes, and reduce inefficiencies due to curriculum duplication, overlap, and wastage.

Below is a brief overview of the areas we typically look at within academic programs and how we can support improvements to curricula, schedules, and programs to gain efficiencies, improve services, generate revenues, and achieve the universities' mission.

## Unique Activities and Approach Differentiators

**Academic Program Review** – Academic programs are core to the mission of every university. As such, any review of academic programs must develop a strategic approach for managing the programs, linked to university missions. Our experience will help the Board identify both inefficiencies and revenue-generating opportunities across all three universities. Using a Strategic Cost Management model we help colleges and universities to focus on their core mission and delivery of academic programs that result in student success.

- **Strategic Cost Management Model** - The most effective framework for looking at academic programs is to begin with a given university's mission. Over the years, we have developed a Strategic Cost Management model to help colleges and universities to focus on their core mission and delivery of academic programs that result in student success. Our Strategic Cost Management model involves both revenue-generating and cost reduction tactics. The model works best if more people – administrators, faculty, and classified staff – are involved in adapting it to their universities and, thus, take on ownership of the proposed changes, innovations, and increased entrepreneurship. Therefore, we will most likely apply the model to the universities in Iowa during Phase Two. The model also shifts thinking from expense centers to revenue centers.
- **University Mission and Culture** - When exploring change, particularly in academic areas, any proposed initiatives must be sensitive to the mission and cultures of each university campus. Therefore, the Deloitte Team begins by working within a university to revisit its mission and confirm or revise it. Based on the mission, our team can work with the academic community to define what academic programs are
  - **Core mission – Essential.** We typically rely on the State's definition of what is essential – the core mission of a given university. The definitions tend to involve programs that lead to completion of degrees or possibly certificates. Some States include economic development as part of the core mission (as noted in the Board's Strategic Plan).
  - **Secondary – Supports Essential.** There are other services that a university requires to deliver its core mission, such as the library, academic computing, registration, etc.
  - **Tertiary – Value Added.** And yet other academic programs may not be part of the core mission but are important parts of the academic community, such as continuing education, community service, foundations, athletic teams, auxiliary services, etc. In other words, a university would still be a viable institution whether or not it had these value-added programs and services. If the value-added programs and services are truly valued and either are financially self-sustaining or generate additional revenues to help cover essential programs and support services, then they are a good investment for the university.
- **Documentation of Program and Service Revenues and Costs** - We collect data pertaining to the revenues and costs for delivering programs. Revenue consists of student tuition, grants, donations, auxiliary services, and other revenue generating endeavors. Expenses involve salaries, overhead costs, special equipment, and related costs. In the absence of available data, Our team relies on average faculty costs and average class sizes, realizing that a university consists of varying configurations for classes – ranging from large lecture halls to small seminars.

### Deloitte Differentiators

Deloitte's team member, KH, has two proprietary tools that are relevant to this program:

- **Strategic Cost Management Model:** a tool to help universities focus on their core mission and program delivery, looking at both revenue and cost-reduction tactics
- **Q2 Focus Groups:** an in-depth, disciplined interview strategy to obtain both quantitative and qualitative perspectives

- **Stratification of Academic Programs and Services** – Based on the understanding of the mission and the costs and revenues of academic programs, we then array each program, based on mission, as “Essential”, “Supports Essential”, and “Value-Added”. This array stimulates considerable discussion among faculty and academic administrators because it is a new way of looking at programs. We then manage these discussions carefully to make sure they are constructive and that the emphasis is in the achievement of a given university’s mission. To help guide these discussions, we encourage the academic community to:
  - View the situation as an opportunity to improve
  - Focus on mission
  - Understand importance of revenues
  - Analyze net costs
  - Support strategic subsidization where necessary
  - Focus on results that matter in terms of student outcomes, academic research, and related benefits
  - Improve results with monies available
  
- **Preservation of Essential Programs** - The aim is to preserve essential programs and services and provide the support that is necessary to deliver essential programs and services. Other programs and services may be value-added and sustained as long as they help subsidize essential and needed support services. When reviewing academic programs, considerations include:
  - Redundancy
  - Demand for programs
  - Job attainment
  - Uniqueness and consolidation potential
  - Alternative sources of funding
  - Timing
  - Reaction of the faculty community, Academic Senates, and unions
  
- **Building on Success and Prior Initiatives** – The Deloitte Team will build on the success to date at each of the universities. On the basis of the summary provided with the “Questions and Answers” to the RFP, the universities have undertaken many institutional efficiency efforts, encompassing (to name a few):
  - Organizational restructuring and consolidation
  - Staff reduction
  - Faculty workloads changes or faculty
  - Service consolidation
  - Program discontinuation
  - Shared services
  - Termination of sites
  - Technology (

- Cancelling of non-core activities
- Fee generation

**Academic Resource Stewardship & Scheduling** – We believed that scheduling plays a strategically important role in higher education. Effective allocation of academic resources by the academic departments can greatly contribute to critical higher education initiatives. Specifically, course offering schedules must be created that maximize faculty, space and the instructional week for the benefit of the students.

By capturing current data on department-level scheduling effectiveness, we can then compare this to benchmark data to determine opportunities to optimize course offerings and schedules relative to student demand. In addition, we can also benchmark facility allocation against peer performance using our team’s proprietary indicators. This will allow us to identify current and future bottlenecks that impede growth and recommend strategies to improve capacity. This will benefit each university by optimizing the use of academic facilities to reduce costs and improve student experience.

**Key Challenges and Opportunities**

We recognize that all three universities have taken several significant steps to reduce costs and improve efficiencies across their academic programs. These efforts include service consolidation (e.g., the combining of Pharmaceutical Services with the Center of Advanced Drug Discovery to create UI Pharmaceuticals at the University of Iowa), discontinuation of some programs (e.g., Masters of Agriculture at Iowa State University), and the closure of facilities (e.g., shuttering of University of Northern Iowa’s Price Laboratory School). Understanding that many of the “low-hanging fruit” opportunities to reduce costs may have already been undertaken by the universities, the value we bring to the Board is the depth and knowledge we have to pursue more aggressive opportunities. Based on our experience with similar clients and situations, we have identified several key challenges and opportunities that proving a strong starting point for the Board to further improve the efficiency and effectiveness of academic programs in each university.

Key Challenges	Key Opportunities
<ul style="list-style-type: none"> <li>• Inefficiencies in scheduling and resource stewardship leading to higher facilities costs</li> <li>• Academic programs not aligned to university mission and strategic objectives</li> <li>• Over-emphasis on redundant or non-critical programs and services</li> <li>• Insufficient use of revenue-generating programs and services</li> <li>• Lack of fiscal disciplinary and cost containment initiatives in academic programs</li> </ul>	<ul style="list-style-type: none"> <li>• Optimization of academic scheduling and class configuration to reduce facilities costs</li> <li>• Prioritize and align programs against university mission to determine which programs are essential</li> <li>• Eliminate or consolidate redundant or non-critical programs and services</li> <li>• Greater focus on revenue-generating services</li> <li>• Refine the Strategic Cost Management model to more effectively address costs in academic programs</li> </ul>

**Table 33. Key Challenges and Opportunities in Academic Programs**

**Key Success Factors**

Academic programs are the heart and soul of a university. Any proposed changes – even if only minor modifications – can result in lengthy academic debates about the merits of the changes.

For faculty, the words “efficiency” or “faculty productivity” are often viewed with resentment and hostility because they appear to potentially infringe on the essence of academic freedom. That said,

the reality frequently precludes faculty from embarking on some academic endeavors that are not fiscally feasible... or do not attract or retain students... or achieve institutional goals or missions.

Thus, any success or changes in academic programs requires:

- A clear vision and leadership from the top
- Transparency regarding our program approach and objectives
- Faculty and academic leadership engagement
- Frequent and clear communication
- Active collaboration and exchange of ideas
- Review of findings, options, recommendations, and eventual action plans, following the universities' academic review and government structures
- Objectivity and empirically based findings and decision-making
- Linkage of recommendations to university mission and strategy
- Recognition of the importance of academic integrity and ongoing commitment to student learning
- Acknowledgement of the unique attributes of each university that may result in different academic or operating model requirements

The approach stresses a collaborative partnership between the Deloitte Team, the Board, and all three universities through active involvement in all phases of the program.

## 11.E General Business Terms

**1. Services.** The services provided (the "Services") by Deloitte Consulting LLP ("Deloitte Consulting") under this proposal to which these terms are attached (the "Proposal") may include advice and recommendations, but Deloitte Consulting will not make any decisions on behalf of Client in connection with the implementation of such advice and recommendations. For purposes of these terms and the Proposal, "Client" shall mean the entity to which the Proposal is addressed.

**2. Payment of Invoices.** Client will compensate Deloitte Consulting under the terms of the Proposal for the Services performed and expenses incurred, through the term or effective date of termination of this engagement. Deloitte Consulting's invoices are due upon receipt. If payment is not received within thirty (30) days of receipt of an invoice (i) such invoice shall accrue a late charge equal to the lesser of (A) 1½% per month or (B) the highest rate allowable by law, in each case compounded monthly to the extent allowable by law, and (ii) Deloitte Consulting may also suspend or terminate the Services. Client shall be responsible for any taxes imposed on the Services or on this engagement, other than taxes imposed by employment withholding for Deloitte Consulting's personnel or on Deloitte Consulting's income or property.

**3. Term.** Unless terminated sooner as set forth below, this engagement shall terminate upon the completion of the Services. Either party may terminate this engagement, with or without cause, by giving thirty (30) days prior written notice to the other party. In the event of a termination for cause, the breaching party shall have the right to cure the breach within the notice period. Deloitte Consulting may terminate this engagement or performance of any part of the Services upon written notice to

Client if Deloitte Consulting determines that the performance of any part of the Services would be in conflict with law, or independence or professional rules.

#### **4. Deliverables.**

a) For purposes of these terms (i) "Technology" means works of authorship, materials, information and other intellectual property; (ii) "Deloitte Consulting Technology" means all Technology created prior to or independently of the performance of the Services, or created by Deloitte Consulting or its subcontractors as a tool for their use in performing the Services, plus any modifications or enhancements thereto and derivative works based thereon; and (iii) "Deliverables" means all Technology that Deloitte Consulting or its subcontractors create for delivery to Client as a result of the Services.

b) Upon full payment to Deloitte Consulting hereunder, and subject to the terms and conditions contained herein, Deloitte Consulting hereby (i) assigns to Client all rights in and to the Deliverables, except to the extent they include any Deloitte Consulting Technology; and (ii) grants to Client the right to use, for Client's internal business purposes, any Deloitte Consulting Technology included in the Deliverables in connection with its use of the Deliverables. Except for the foregoing license grant, Deloitte Consulting or its licensors retain all rights in and to all Deloitte Consulting Technology.

c) To the extent any Deloitte Consulting Technology provided to Client hereunder constitutes inventory within the meaning of section 471 of the Internal Revenue Code, such Deloitte Consulting Technology is licensed to Client by Deloitte Consulting as agent for Deloitte Consulting Product Services LLC on the terms and conditions contained herein. The rights granted in Section 4(b) do not apply to any Technology (including any modifications or enhancements thereto or derivative works based thereon) that is subject to a separate license agreement between Client and any third party (including, Deloitte Consulting's affiliates).

**5. Limitation on Warranties. THIS IS A SERVICES ENGAGEMENT. DELOITTE CONSULTING WARRANTS THAT IT SHALL PERFORM THE SERVICES IN GOOD FAITH AND IN A PROFESSIONAL MANNER. DELOITTE CONSULTING DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

#### **6. Limitation on Damages and Indemnification.**

a) Each party, its subsidiaries, subcontractors, and their respective personnel shall not be liable for any claims, liabilities, or expenses relating to this engagement ("Claims") for an aggregate amount in excess of (i) in the case of Deloitte Consulting, the fees paid by Client to Deloitte Consulting pursuant to this engagement, or (ii) in the case of Client, the fees paid and payable by Client to Deloitte Consulting pursuant to this engagement, except to the extent resulting from the recklessness, bad faith or intentional misconduct of the other party, its subcontractors or their respective personnel. In no event shall either party, its subsidiaries, subcontractors, or their respective personnel be liable for any loss of use, data, goodwill, revenues or profits (whether or not deemed to constitute a direct Claim), or any consequential, special, indirect, incidental, punitive or exemplary loss, damage, or expense relating to this engagement. The provisions of this Section 6(a) shall not apply to any Claim for which one party has an express obligation to indemnify the other or to any Claim for breach of

Section 4. In circumstances where any limitation on damages or indemnification provision hereunder is unavailable, the aggregate liability of each party, its subsidiaries, subcontractors, and their respective personnel for any Claim shall not exceed an amount that is proportional to the relative fault that their conduct bears to all other conduct giving rise to such Claim.

b) Deloitte Consulting shall indemnify, defend and hold harmless Client and its personnel from all Claims attributable to claims of third parties solely for bodily injury, death or damage to real or tangible personal property, to the extent directly and proximately caused by the negligence or intentional misconduct of Deloitte Consulting while engaged in the performance of the Services; provided, however, that if there also is fault on the part of any entity or individual indemnified hereunder or any entity or individual acting on Client's behalf, the foregoing indemnification shall be on a comparative fault basis.

c) Client shall indemnify, defend and hold harmless Deloitte Consulting, its subsidiaries, subcontractors and their respective personnel from all Claims attributable to claims of third parties solely for bodily injury, death or damage to real or tangible personal property to the extent directly and proximately caused by the negligence or intentional misconduct of Client while Deloitte Consulting is engaged in the performance of the Services; provided, however, that if there also is fault on the part of any entity or individual indemnified hereunder or any entity or individual acting on Deloitte Consulting's or any subcontractor's behalf, the foregoing indemnification shall be on a comparative fault basis.

d) As a condition to the indemnity obligations contained herein, the indemnified party shall provide the indemnifying party with prompt notice of any Claim for which indemnification shall be sought hereunder and shall cooperate in all reasonable respects with the indemnifying party in connection with any such Claim. The indemnifying party shall be entitled to control the handling of any such Claim and to defend or settle any such Claim, in its sole discretion, with counsel of its own choosing.

**7. Client Responsibilities.** Client shall cooperate with Deloitte Consulting hereunder, including, providing Deloitte Consulting with reasonable facilities and timely access to data, information and personnel of Client. Client shall be solely responsible for, among other things (a) the performance of its personnel and agents; (b) the accuracy and completeness of all data and information provided to Deloitte Consulting for purposes of the performance of the Services; (c) making all management decisions, performing all management functions and assuming all management responsibilities; (d) designating a competent management member to oversee the Services; (e) evaluating the adequacy and results of the Services; and (f) establishing and maintaining internal controls, including monitoring ongoing activities. Deloitte Consulting's performance is dependent upon the timely and effective satisfaction of Client's responsibilities hereunder and timely decisions and approvals of Client in connection with the Services. Deloitte Consulting shall be entitled to rely on all decisions and approvals of Client.

**8. Force Majeure.** Neither party shall be liable for any delays or non-performance directly or indirectly resulting from circumstances or causes beyond its reasonable control, including, fire, epidemic or other casualty, act of God, strike or labor dispute, war or other violence, or any law, order or requirement of any governmental agency or authority.

**9. Limitation on Actions.** No action, regardless of form, relating to this engagement, may be brought by either party more than one year after the cause of action has accrued, except that an action for non-payment may be brought not later than one year following the due date of the last payment owing to the party bringing such action.

**10. Independent Contractor.** Each party is an independent contractor and neither party is, nor shall be considered to be, nor shall purport to act as, the other's agent, partner, fiduciary, joint venturer, or representative.

**11. Confidentiality and Internal Use.**

a) To the extent that, in connection with this engagement, either party (each, the "receiving party") comes into possession of any confidential information of the other (the "disclosing party"), it will not disclose such information to any third party without the disclosing party's consent, using at least the same degree of care as it employs in maintaining in confidence its own confidential information of a similar nature, but in no event less than a reasonable degree of care. The disclosing party hereby consents to the receiving party disclosing such information (i) as expressly set forth in the Engagement Letter, (ii) to subcontractors, whether located within or outside of the United States, that are providing services in connection with this engagement and that have agreed to be bound by confidentiality obligations similar to those in this Section 11(a), (iii) as may be required by law, regulation, judicial or administrative process, or in accordance with applicable professional standards or rules, or in connection with litigation pertaining hereto, or (iv) to the extent such information (A) is or becomes publicly available other than as the result of a disclosure in breach hereof, (B) becomes available to the receiving party on a non-confidential basis from a source that the receiving party believes is not prohibited from disclosing such information to the receiving party, (C) is already known by the receiving party without any obligation of confidentiality with respect thereto, or (D) is developed by the receiving party independently of any disclosures made to the receiving party hereunder. Nothing in this Section 11(a) shall alter Client's obligations under Section 11(b). Deloitte Consulting may, however, use and disclose any knowledge and ideas acquired in connection with the Services to the extent they are retained in the unaided memory of its personnel.

b) All Services and Deliverables shall be solely for Client's benefit and are not intended to be relied upon by any person or entity other than Client. Client shall not disclose the Services or Deliverables or refer to the Services or Deliverable in any communication, to any person or entity other than Client except (i) as specifically set forth in the Engagement Letter, or (ii) to Client's contractors solely for the purpose of their providing services to Client, provided that such contractors comply with the restrictions on disclosure set forth in this sentence. Client shall indemnify and hold harmless Deloitte Consulting, its subsidiaries, subcontractors and their respective personnel from all Claims attributable to claims of third parties relating to Client's use or disclosure of the Services or Deliverables.

**12. Survival and Interpretation.** All provisions which are intended by their nature to survive performance of the Services shall survive such performance, or the expiration or termination of this engagement. In the event of any conflict or ambiguity between these terms and the Engagement Letter, these terms shall control. **Each of the provisions of these terms shall apply to the fullest extent of the law, whether in contract, statute, tort (such as *negligence*), or otherwise, notwithstanding the failure of the essential purpose of any remedy.** Any references herein to the term "including" shall be deemed to be followed by "without limitation."

**13. Assignment and Subcontracting.** Except as provided below, neither party may assign any of its rights or obligations hereunder (including, interests or Claims) without the prior written consent of the other party. Client hereby consents to Deloitte Consulting assigning or subcontracting any portion of the Services to any affiliate or related entity, whether located within or outside the United States. Services performed hereunder by Deloitte Consulting's subcontractors shall be invoiced as professional fees on the same basis as Services performed by Deloitte Consulting's personnel, unless otherwise agreed.

**14. Non-exclusivity.** Deloitte Consulting may (i) provide any services to any person or entity, and (ii) develop for itself, or for others, any materials or processes including those that may be similar to those produced as a result of the Services, provided that, Deloitte Consulting complies with its obligations of confidentiality set forth hereunder.

**15. Non-solicitation.** During the term of this engagement and for a period of one (1) year thereafter, each party agrees that its personnel (in their capacity as such) who had substantive contact with personnel of the other party in the course of this engagement shall not, without the other party's consent, directly or indirectly employ, solicit, engage or retain the services of such personnel of the other party. In the event a party breaches this provision, the breaching party shall be liable to the aggrieved party for an amount equal to thirty percent (30%) of the annual base compensation of the relevant personnel in his/her new position. Although such payment shall be the aggrieved party's exclusive means of monetary recovery from the breaching party for breach of this provision, the aggrieved party shall be entitled to seek injunctive or other equitable relief. This provision shall not restrict the right of either party to solicit or recruit generally in the media.

16. Waiver of Jury Trial. THE PARTIES HEREBY IRREVOCABLY WAIVE, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL RIGHTS TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM RELATING TO THIS ENGAGEMENT.

**17. Entire Agreement, Amendment, and Notices.** These terms, and the Engagement Letter, including attachments, constitute the entire agreement between the parties with respect to this engagement, supersede all other oral and written representations, understandings or agreements relating to this engagement, and may not be amended except by written agreement signed by the parties. All notices hereunder shall be (i) in writing, (ii) delivered to the representatives of the parties at the addresses set forth in the Engagement Letter, unless changed by either party by notice to the other party, and (iii) effective upon receipt.

**18. Governing Law, Jurisdiction and Venue, and Severability.** These terms, the Engagement Letter, including attachments, and all matters relating to this engagement, shall be governed by, and construed in accordance with, the laws of the State of New York (without giving effect to the choice of law principles thereof). Any action based on or arising out of this engagement or the Services shall be brought and maintained exclusively in any state or federal court, in each case located in New York County, the State of New York. Each of the parties hereby expressly and irrevocably submits to the jurisdiction of such courts for the purposes of any such action and expressly and irrevocably waives, to the fullest extent permitted by law, any objection which it may have or hereafter may have to the laying of venue of any such action brought in any such court and any claim that any such action has been brought in an inconvenient forum. If any provision of these terms or the Proposal is unenforceable, such provision shall not affect the other provisions, but such unenforceable provision

shall be deemed modified to the extent necessary to render it enforceable, preserving to the fullest extent permissible the intent of the parties set forth herein.

**19. Approval of Deliverables.** Client shall approve each Deliverable that conforms in all material respects to the requirements therefor set forth in the Engagement Letter. Approval of a Deliverable shall be deemed given if Client has not provided Deloitte Consulting with written notice of such approval or with written notice that a Deliverable does not conform with the foregoing within ten (10) days of delivery.