# New Project Management Framework for Institutional Research:

#### **Case Studies in the US and Potential Applications in the UK**

9<sup>th</sup> HERI Network Conference Liverpool John Moores University September 8<sup>th</sup>, 2016

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### **Goal of the Presentation**

### Context

While IR professionals are eager to promote the use of IR data and reports in decision-making, these conversations seem often *sporadic*.

### Goal

Propose a more *systematic* discussion on the use of IR data and reports in decision-making by:

- 1. Introducing a common framework to review IR projects
- 2. Demonstrating the uses of the new project management tool for IR

### **Presentation Overview**

## Terminology

### Part I:

Basics of the Four-quadrant Framework

### Part II:

Applications of the Four-quadrant Analysis

### Terminology - 1

UK	US
IR as function	IR as office
Planning Office	IR Office (institutional data & surveys)
Center for Teaching and Learning	<ol> <li>Center for Teaching and Learning (support pedagogical development)</li> <li>Assessment Office (measure learning outcomes)</li> </ol>
Quality Assurance (handled by Registrar's Office)	Accreditation (under IR or Assessment Office)

### Terminology - 2

UK	US
Enhancement	Improvement
Assurance	Accountability
Feedback Loop	Closing-the-Loop
Faculty as academic department	Faculty as a group of academic staff
Module	Course
Course	Program
Chancellor	President
Vice Chancellor	Provost

# Part I



# of the Four Quadrant Framework

### **Conventional Context of IR Offices in the US**

### People are hungry for data



### **Conventional Project Management Log**

### **Example: IR Project Log**

Project Title	Client	Due Date
Internal Report A	Provost	ASAP
Accreditation Report	Provost	Tomorrow
Strategic Indicator	President	Last Week
Benchmark	President	Next Month
Program Review	Department Y	Next Year
Gen Ed Assessment	Department X	Last Year

### **Conventional Focus of IR Offices**

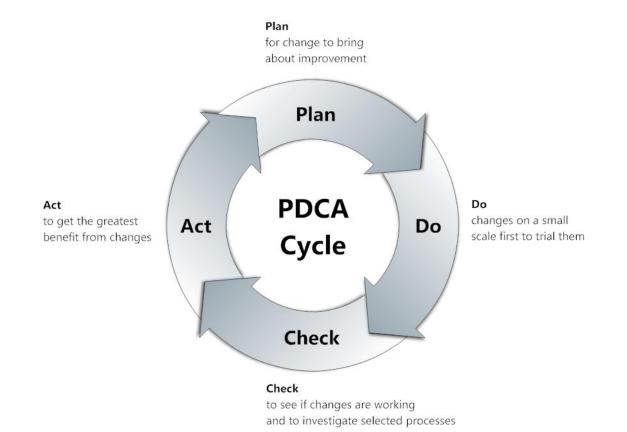
# **Efficiency:**

# an ability of producing data within a given timeframe and available resources

### **New Context for IR Offices**

## **Emphasis on Institutional Effectiveness:**

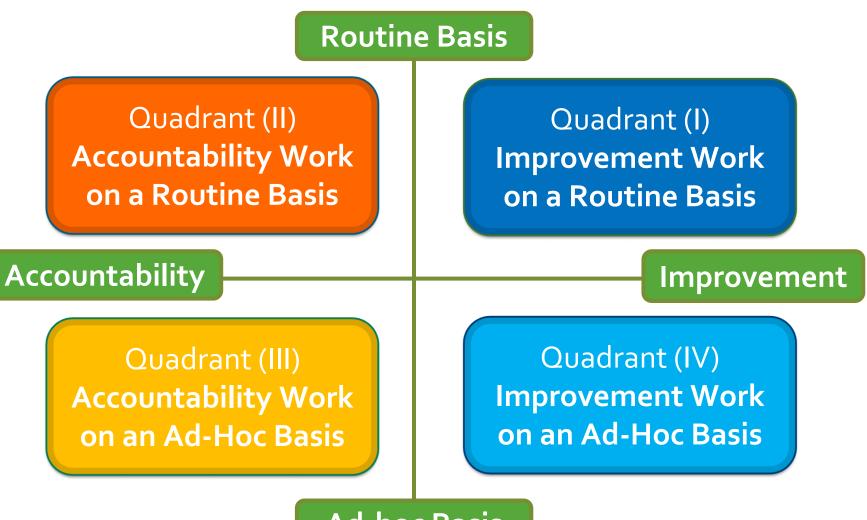
### Use of IR data and reports for continuous improvement



### **New Focus of IR Offices**

# Effectiveness: an ability of promoting data utilization in decision-making

### Four-quadrant Framework - Design



Ad-hoc Basis

## Develop your Four-quadrant Analysis - 1

**Step I:** List all the projects your office manages and categorize them into the four quadrants

**<u>Step II</u>:** Identify a proportion of total work hours that your office spend in each quadrant (See Orange in the diagram).

	Routine Basis		
<ul> <li>HESA Reporting</li> <li>HEFCE Reporting</li> <li>Research Council</li> <li>NHS reporting</li> </ul>			<ul> <li>Student Retention Analysis</li> <li>Student Completion Analysis</li> <li>Peer Comparisons</li> <li>Key Performance Indicators</li> </ul>
Accountability	50%	20%	Improvement
	20%	10%	
<ul> <li>Grant Reporting</li> <li>Financial Aid Reportin</li> <li>League tables</li> </ul>	ng		<ul> <li>Strategic Planning</li> <li>Analysis of impact of development</li> <li>Departmental self-study</li> <li>NSS</li> </ul>
	Ad-ho		

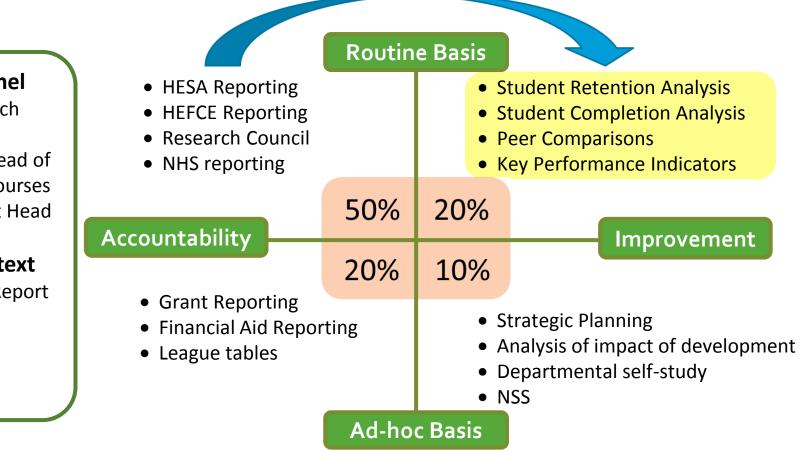
## **Develop your Four-quadrant Analysis - 2**

**<u>Step III</u>**: Identify the types of data utilization for continuous improvement

(a) Identifying problems,	Routin	e Basis		
<ul><li>(b) Developing solutions, and/</li><li>(c) Evaluating results</li></ul>	or	<ul> <li>Student Retention Analysis (a)</li> <li>Student Graduation Analysis (c)</li> <li>Peer Comparisons (b)</li> </ul>		
See <b>Blue</b> tags in the diagram The results imply a degree of effectiveness.		• Strateg	rformance Indicators (a) & (c) Improvement gic Planning (b)	
Bottom-line Question What changes have been made?	Ad-ho	• Depart • NSS (a	is of impact of development (a) tmental self-study(a) & (c) ) & (b)	

### **Four-quadrant Framework - Example**

### **Example: University X**



**Personnel** PVC (Research /L&T etc) Associate Head of Human Resourses Department Head

**Org Context** 

Institution Report Report to Governors New Vice Chancellor

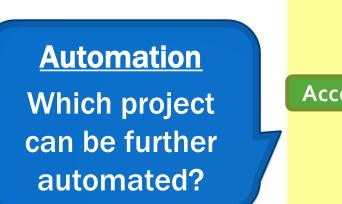
### **Project Management**

# **Communication tool** to examine *efficiency* and *effectiveness* of IR activities with:

1. Office Staff

2. Campus Stakeholders

### **Efficiency Related Discussion Questions**



	<b>Routine Basis</b>				
<ul> <li>HESA Reporting</li> <li>HEFCE Reporting</li> <li>Research Council</li> <li>NHS reporting</li> </ul>		<ul> <li>Student Retention Analysis</li> <li>Student Completion Analysis</li> <li>Peer Comparisons</li> <li>Key Performance Indicators</li> </ul>			
Accountability	50%	20%		Improvement	
Accountability	20%	10%		improvement	
<ul> <li>Grant Reportin</li> <li>Financial Aid Re</li> <li>League tables</li> </ul>	<ul> <li>Strategic Planning</li> <li>Analysis of impact of development</li> <li>Departmental self-study</li> <li>NSS</li> </ul>				
Ad-hoc Basis					

#### IT/data infrastructure

To what extent is IT support and investment necessary to further increase efficiency?

### **Effectiveness Related Discussion Questions**

#### **Data Utilization**

How can external accountability data be analyzed and shared with campus stakeholders?

### Project Management How can effective project management be established?

#### **Routine Basis** • Student Retention Analysis HESA Reporting Student Completion Analysis • HEFCE Reporting Research Council Peer Comparisons Key Performance Indicators • NHS reporting 50% 20% Accountability Improvement 20% 10% Strategic Planning • Grant Reporting Analysis of impact of development • Financial Aid Reporting Departmental self-study League tables NSS **Ad-hoc Basis**

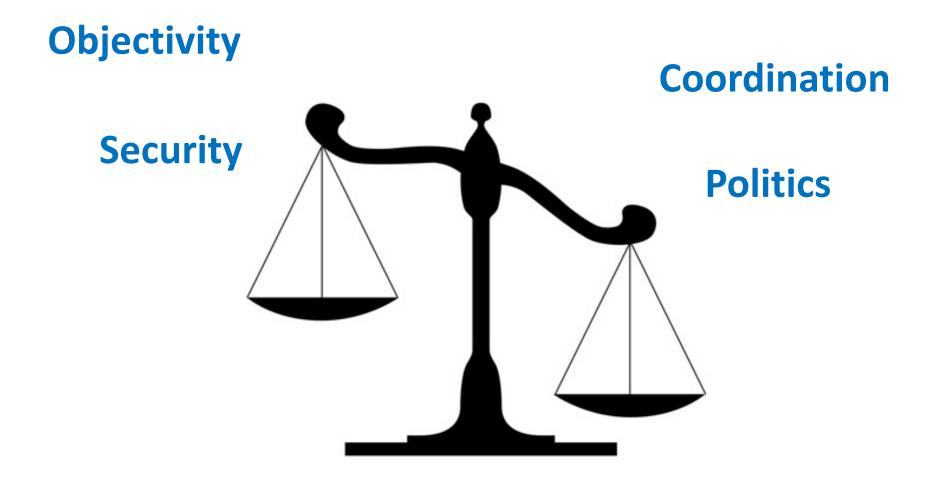
Networking How can a good relationship with campus stakeholders be built and maintained?

### **Overall Discussion Questions**

	Routin	e Basis				
<ul> <li>HESA Reporti</li> <li>HEFCE Report</li> <li>Research Cout</li> <li>NHS reporting</li> </ul>	ing ncil	<ul><li>Stude</li><li>Peer</li></ul>	ent Comj Compari	ntion Analysis pletion Analysis isons ince Indicators	S	Priority
Accountability	50%	20%		Improvem	ent	Which project needs
	20%	10%				to be re-prioritized?
<ul> <li>Grant Reporti</li> <li>Financial Aid</li> <li>League tables</li> </ul>	Reporting	<ul><li>Analy</li><li>Depa</li><li>NSS</li></ul>		ning pact of develo I self-study	pment	

<u>Organizational Structure</u> What kind of organizational structure is beneficial? **Staffing** What is an adequate level of staffing? **Insight and Consideration** 

### **Balancing between** Accountability and Improvement



### **Summary of Part I**

### Not mutually exclusive, but all inclusive

	Convention	New
Context	Numerous data requests	Use of data for improvement
Focus	Efficiency	Effectiveness
Project Management	Project Log	Four-quadrant Framework

# Part II

# **Applications** of the Four Quadrant Framework

**Case Studies in the US** 

# **Communication tool** with office staff and campus stakeholders

- 1. Reality Check
- 2. Stakeholder Feedback
- 3. Time Series
- 4. Flexible Analysis

### **Reality Check - Perception**

### **University of Delaware**

Personnel			Routin	e Basis		
Associate Provost IRE Director of IR Assistant Director of IR IR Analyst Director of BI Senior BI Analyst	<ul> <li>Accreditation</li> <li>Guidebooks/I</li> <li>HEA</li> <li>IPEDS</li> <li>State Perperti</li> </ul>	Rankii	ngs	• Be • Er	enchmark nrollment	Program Review king Projections ccess Outcomes
BI Analyst HEC Consortia (3 FTE) IT Advance (1 FTE)	State Reporti	ng	50%	25%		
Admin Assistant Graduate Assistants (2) Work Study Student (1)	Accountability		10%	15%		Improvement
Org Context Public Research (R1) Institution Report to Deputy	• Grant Reporting			<ul> <li>Capacity Studies</li> <li>Research Studies</li> <li>Strategic Planning KPIs</li> <li>Survey Research</li> </ul>		Studies Planning KPIs
Provost			Ad-ho	c Basis		

# Incorporating the four-quadrant categories in a project management log

### **Example: IR Project Log**

<b>Project Title</b>	Quadrant	Time
Internal Report A	Ad-hoc Accountability	5 Hours
Accreditation Report	Routine Accountability	20 Hours
Strategic Indicator	Routine Improvement	40 Hours
Benchmark	Routine Improvement	15 Hours
Program Review	Ad-hoc Improvement	20 Hours
Gen Ed Assessment	Ad-hoc Improvement	80 Hours

## **Reality Check - Empirical**

### **University of Delaware**

Personnel	245.25 hours (36%)	Routin	e Basis	93.5 hours (14%)
Associate Provost IRE Director of IR Assistant Director of IR IR Analyst Director of BI Senior BI Analyst	<ul> <li>Accreditation</li> <li>Guidebooks/Rankings</li> <li>HEA</li> <li>IPEDS</li> </ul>	34 Routin	e projects	<ul> <li>Benchmarking</li> <li>Academic Program Review</li> <li>Enrollment Projections</li> <li>Student Success Outcomes</li> </ul>
, HEC Consortia (3 FTE) IT Advance (1 FTE)	<ul> <li>State Reporting</li> <li>Accountability</li> <li>Specialized Accreditation</li> <li>Budget/Finance/AAUP</li> <li>Guidebooks/Rankings</li> </ul>	30%	6%	
Admin Assistant Graduate Assistants (2) Work Study Student (1)		47%	17%	Improvement <ul> <li>Capacity Studies</li> </ul>
Org Context		99 Ad ho	c projects	<ul> <li>Research Studies</li> <li>Strategic Planning KPIs</li> </ul>
Public Research (R1) Institution Report to Deputy	<ul> <li>NSC Requests</li> <li>Grant Reporting</li> <li>Survey Samples</li> </ul>			• Survey Research
Provost	268.50 hours (40%)	Ad-hoo	c Basis	66.0 hours (10%)

### **Stakeholder Feedback – Self-reflection**

## Santa Fe Community College Associate Vice President for IE

Personnel			Routin	e Basis	
<ul> <li>Assistant Vice President, PIE</li> <li>Director of Assessment and Accreditation</li> <li>Planning and Quality Officer</li> <li>Director of IR</li> </ul>	<ul> <li>Federal Reporting (c)</li> <li>State Reporting (c)</li> <li>Grants Reporting (a,</li> <li>Accreditation Reporti</li> <li>Strategic Planning KPI</li> </ul>	c) ng (a,		c Planning Implementation (b) ic Program Review (a, b, c) g Assessment (a, b, c) ation Work (a, b, c) ment of Dashboards (a, c) egrity Work (b)	
<ul> <li>IR Analyst</li> <li>IR Tech</li> <li>Director of Grants</li> </ul>	Accountability		35%	35%	Improvement
Org Context			5%	25%	Improvement
Reports to President Key <b>a</b> =Identifying problems <b>b</b> =Developing solutions <b>c</b> =Evaluating results	• Board Requested Info (a, b, c)	rmatio	on Items	• Ad-hoc I • Campus • Stakeho	Survey work (a, b, c) Reporting (a, b, c) Engagement (b) Ider Buy-in Committees (b) (b)
			Ad-ho	Basis	

### **Stakeholder Feedback – Supervisee**

## Santa Fe Community College **IR Director**

Demonster			e Basis	• Student S	plan data (KPIs) uccess (PGR)
<ul> <li>Personnel</li> <li>Assistant Vice President, PIE</li> <li>Director of Assessment and Accreditation</li> <li>Planning and Quality Officer</li> <li>Director of IR</li> </ul>	<ul> <li>Federal accountability reporting</li> <li>State accountability reporting</li> <li>Grant accountability reporting</li> <li>Scheduled division and departmental level reports</li> <li>Institutional information for public sites</li> </ul>		15%	<ul> <li>Program Review</li> <li>Retention rate</li> <li>Graduation rate</li> <li>Student Type clean up</li> <li>Annual surveys (Graduation, Employee Satisfaction, etc.)</li> <li>Banner End-User Support Team</li> <li>Achieving the Dream initiative</li> </ul>	
<ul><li>IR Analyst</li><li>IR Tech</li><li>Director of Grants</li></ul>	• Ad-hoc data reports	25%	20%		Improvement grity work with various
Org Context Reports to AVP	<ul> <li>Student directory informati</li> <li>CIP Code requests</li> <li>Data for grant applications</li> <li>New compliance report</li> <li>Analytical and statistical wo</li> </ul>	ode requests for grant applications compliance report	c Basis	<ul> <li>departments</li> <li>Work with stakeholders to improve data processes</li> <li>Design reports and dashboards using Business Intelligence Tool</li> <li>Internal process documentation</li> <li>Update data on OPIE web site</li> </ul>	h stakeholders to data processes ports and dashboards iness Intelligence Tools process documentation

### **Stakeholder Feedback – Supervisee**

### Santa Fe Community College Vice President for Academic & Student Affairs

Devenuel	Routine Basis					
Personnel <ul> <li>Six Schools</li> <li>Student Service</li> <li>Student Support</li> <li>Academic Support</li> <li>Instruction</li> </ul>	<ul> <li>Federal accountability reporting</li> <li>State accountability reporting</li> <li>Grant accountability reporting</li> </ul>		<ul> <li>Strategic plan data (KPIs)</li> <li>Student Success (PGR)</li> <li>Program Review</li> <li>Achieving the Dream initiatives</li> </ul>			
<b>Org Context</b> Reports to President	Accountability	3	30%	30%		Improvement
Data Needs		-	10%	30%		improvement
59% of data requests are from Academic and Student Affairs	<ul><li>Retention rate</li><li>Graduation rate</li></ul>				•	ting for departments I Structure
			Ad-ho	c Basis		

### **Time Series - Past**

### Ball State University: 2011-2012

Retention/graduation/time-to-

<b>Personnel</b> Executive Director for IE Associate Director Assistant Director Assessment Analyst IR Analyst	<ul> <li>IPEDS</li> <li>State reporting (CHEDSS)</li> <li>Accreditation reporting (HLC – PEAQ)</li> <li>Faculty workload</li> <li>College guidebook</li> </ul>		e Basis	<ul> <li>Retention/graduation/time-to- degree</li> <li>Use of NSC (Clearinghouse) and Consortium for Student Retention Data Exchange</li> <li>Delaware Study</li> <li>Faculty salary surveys</li> <li>New, ongoing senior and alumni surveys</li> <li>MAP-Works (Making Achievement Possible 2006 cold to EBL/Shufaster)</li> </ul>
Info. Mgt. Spec.	surveys			sold to EBI / Skyfactor) • Warious AAIR surveys, NSSE
Assessment Spec./Editor	Sorveys	35%	35%	<ul> <li>Major Field Test administration</li> <li>Summer assessment grants</li> </ul>
<b>Org Context</b> Report to Associate Provost	Accountability <ul> <li>Ad-hoc data, analysis</li> </ul>	20%	10%	improvement
Staff turnover Rebrand AAIR New ERP and data mgt. HLC self-study	<ul> <li>requests from numerous people, offices, etc.</li> <li>Ad-hoc federal, state, accreditation reporting</li> <li>Response to media, donor, public records</li> </ul>			hoc data, analysis requests from nerous people, offices, etc.
	requests	Ad-ho	c Basis	

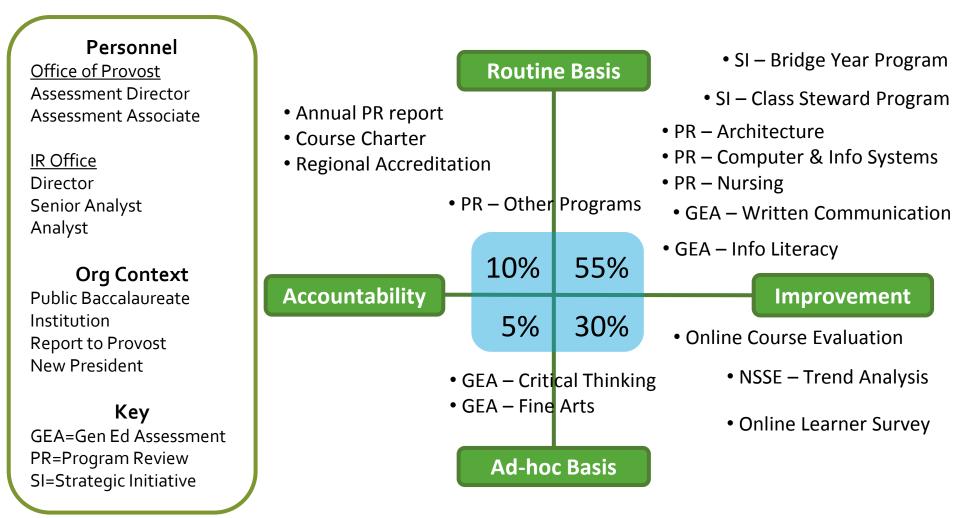
### **Time Series - Present**

### Ball State University: 2015-2016

Personnel Assistant Provost for IE Associate Director 3 Assistant Directors IR Info. Mgt. Spec. IE Analyst Communications Spec. Administrative Coordinator	<ul> <li>IPEDS</li> <li>State reporting (CHEDSS)</li> <li>Accreditation reporting (HLC – Open Pathway)</li> <li>Faculty workload</li> <li>College guidebook</li> </ul>	Routin	<ul> <li>Retention/g me-to-degr</li> <li>Use of NSC</li> <li>Delaware Sr</li> <li>Faculty sala</li> <li>New, ongoi and alumni</li> <li>Mapworks/S</li> <li>Various OIE NSSE</li> <li>Major Field administrat</li> <li>Summer ass grants</li> </ul>	ee analyses and CSRDE tudy ry surveys ng senior surveys Skyfactor surveys, Test ion	• Academic unit review
Org Context Report to Provost	surveys	25%	50%		(University-wide)
Staff accomplishments HLC Open Pathways	<ul><li>Accountability</li><li>Ad-hoc data, analysis</li></ul>	15%	10%		Improvement
Model Bb Outcomes Bb Analytics/Table Student interns from the IR IR Certificate program	<ul> <li>requests from numerou people, offices, etc.</li> <li>Ad-hoc federal, state, accreditation reporting</li> <li>Response to media, donor, public records requests</li> </ul>		num • New	erous pe <mark>/ staff m</mark>	, analysis requests from eople, offices, etc. ember to support e/intl. enrollment initiative

### **Flexible Analysis**

### **University of Maine at Augusta: <u>Assessment</u>**



### **Potential Applications in the UK**

## **1. Reflect on Individual Work**

## **2. Review Office Projects**

3. Review Projects by Crossfunctional Offices

(e.g., finance, planning, quality assurance, teaching & learning, etc.)

# Addendum

# **Comparative Study** through the Four Quadrant Framework

### **Comparative Study**

# **Comparison of IR offices**

- 1. In different types of HEIs
- Within a country or Across countries

### Case Study - 1

### **Public Research University**

	Routin	e Basis
<ul> <li>Personnel</li> <li>Assistant VP for IE</li> <li>Director of Academic Assessment</li> <li>Associate Director of Academic Assessment</li> <li>Assistant Director of IR</li> <li>Senior Research</li> </ul>	<ul> <li>IPEDS report</li> <li>State report</li> <li>Accreditation report</li> <li>HEOA report</li> <li>NSSE</li> </ul>	<ul> <li>Retention rate</li> <li>Graduation rate</li> <li>Benchmarking</li> <li>Support for internal surveys</li> <li>Development of internal data system</li> <li>Teaching load analysis</li> <li>Classroom utility analysis</li> </ul>
Analyst <ul> <li>Research Analyst</li> </ul>	Accountability	Improvement
<ul> <li>Research Analyst</li> <li>Org Context</li> <li>New president</li> </ul>	<ul> <li>US News ranking</li> </ul>	<ul> <li>Support Strategic planning</li> <li>Collect Faculty activities</li> <li>Support learning outcomes assessment</li> <li>Provide data for departmental self-study</li> <li>Analyze capstone course</li> <li>Financial analysis</li> </ul>
	Ad-ho	c Basis

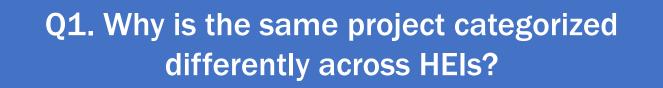
### Case Study - 2

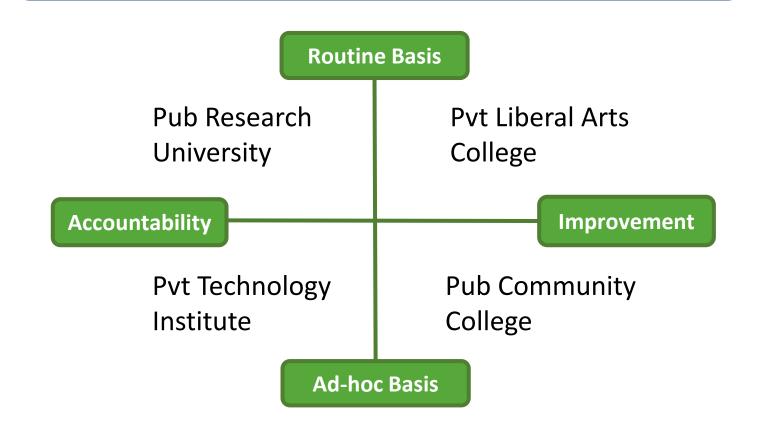
### **Private Liberal Arts College**

	Routi	ne Basis
Personnel • Assistant VP for IE • Director of IR • Director of Accountability • Research Analyst	<ul> <li>IPEDS report</li> <li>State report</li> <li>Accreditation report</li> </ul> Accountability	<ul> <li>Retention rate</li> <li>Graduation rate</li> <li>Fact Book</li> <li>Institutional performance indicators</li> <li>Support learning outcomes assessment</li> <li>NSSE</li> </ul>
Org Context Recent reorganization from and IR to IE office	• Financial aid report	<ul> <li>Support Strategic planning</li> <li>Benchmarking</li> <li>Support survey and data analysis by other offices on campus</li> <li>Examine the validity of such internal studies</li> </ul>
	Ad-ho	oc Basis

### Summary Finding & Discussion - 1

### **Analysis of National Survey of Student Engagement (NSSE)**





### Summary Finding & Discussion - 2

**Analysis of National Survey of Student Engagement (NSSE)** 

Q2. What are some factors promoting or hindering the use of survey data for continuous improvement?

Higher Education Institution	Student Enrollment	IR Office Staff Size	N of Survey Administration
Public Community College	< 15,000	3.5	1
Public Research University	< 20,000	7	1
Private Liberal Arts College	< 5,000	4	3
Private Institute of Technology	< 10,000	3	1



### Methodological Considerations - 1

1. One project might appear in multiple categories.

### Suggestions

- a) List the project in multiple quadrants, indicating the primary and secondary purposes.
- b) Consider the primary purpose of a project to be improvement, if reporting is not required.

### Methodological Considerations - 2

2. Heavy reliance on individual perceptions might skew project categorizations.

### Suggestions

- a) For <u>project management</u>, different perceptions among staff and campus stakeholders might serve as a validity check of the project categorizations
- b) For a <u>comparative study</u>,
  - i. Solicit any evidence to support a perception
  - ii. Interview personnel equivalent in their positions, job responsibilities, and offices.

### **Related Reference**

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### Acknowledgement

### My special appreciation to:

**Dr. Ian Scott** at Oxford Brookes University and Dr. Steve Woodfield at Kingston University **Ms. Clare Foyle** at De Montfort University for providing me with the context of IR in the UK higher education **Dr. William E. Knight** at Ball State University Dr. Heather A. Kelly at University of Delaware Mr. Yash Morimoto at Santa Fe Community College for sharing their case studies

### **Questions and Comments**

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