



"Defining institutional research: Strategies for bringing data to the decision-making process"

Anaheim, CA  
November 10, 2012

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Executive Director  
Association for Institutional Research

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Thank you AIR Members



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Passionate  
about  
Higher Education

Education changed my life.

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### Part 1: Current State of IR

Survey designed by Shuguang Wei  
AIR visiting scholar from China  
Pilot tested with selected AIR members  
Surveyed a random sample of AIR members  
~1,000 members with 57% response rate  
Results will inform a doctoral dissertation

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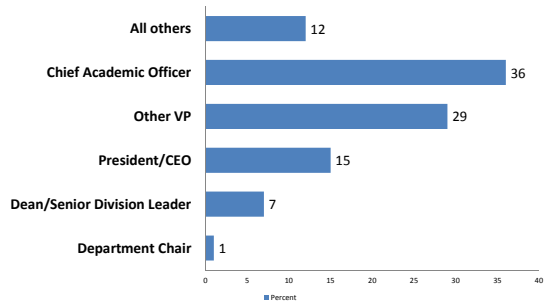
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### Audience Participation Who do you report to?



Source: Data collection by Shuguang Wei, summer 2012

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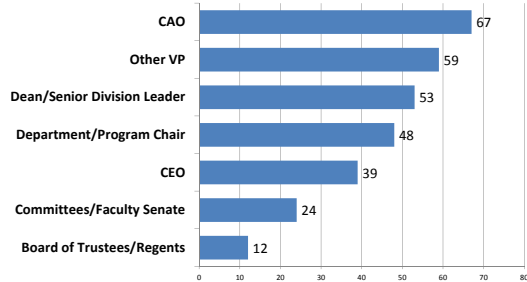
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### Where do data requests come from?



Source: Data collection by Shuguang Wei, summer 2012

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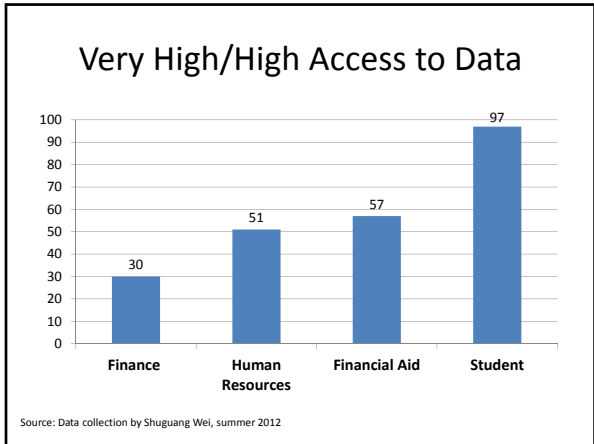
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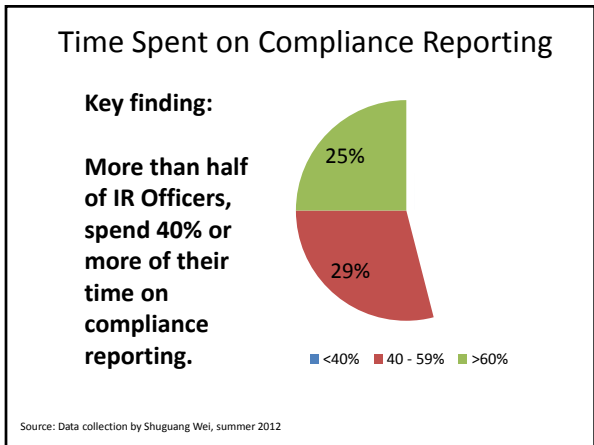
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### Part 2: IR and Decision-Making

To what extent do IR Officers directly participate in the decision-making process?

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IR Credibility &  
Participation in decision-making

**82%**

*Participation in decision making (beyond just reporting the data) has a strong positive (38%) or positive (44%) impact on IR Credibility*

Source: Data collection by Shuguang Wei, summer 2012

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Three Decision-Making Roles

- Identify and clarify problems
- Direct involvement in implementation
- Evaluate implemented solutions

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How often do you identify and clarify problems?

Very Frequently or Frequently

- ~100% through data requests
- ~100% through data analysis
- ~95% through discussion with decision-makers

Source: Data collection by Shuguang Wei, summer 2012

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**How often are you directly involved in implementation processes?**

	Very Frequently
Express an opinion about an implementation decision	56%
Assist with choices between alternative solutions	48%
Assist with design of implementation strategies	42%
Promote a chosen solution to stakeholders	34%
Chair a task force/committee charged with implementation	25%

Source: Data collection by Shuguang Wei, summer 2012

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**How frequently are you involved in implemented decisions?**

Analyze Outcomes Data	73%
Provide Benchmarks	72%
Formative Evaluations	70%
Summative Evaluation	67%

Source: Data collection by Shuguang Wei, summer 2012

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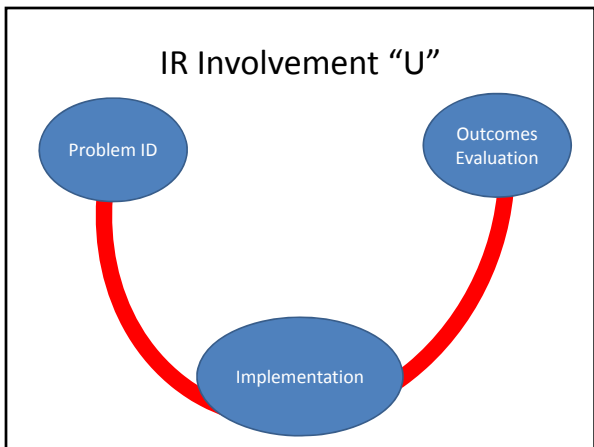
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### Part 3: What's the Future of IR?

#### Change Managers - Choice Architects

- Inform
- Frame Issues
- Provide Context
- Establish frameworks for assessment
- Direct engagement in implementation

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#### Disruptive Innovation (DI) Is not just "Change"

- **Disruptive innovators target their service or product at the needs of a new group of customers.**
  - Simpler, more affordable product than currently available
  - New customers have a different need/purpose
  - Serve a market that was "not worth it" to traditional providers
- **Uses enabling technologies**
  - Simplifies and routinizes delivery
- **Leads to a new business model (over time)**
  - New model of organizing
  - Lower costs and price to consumers
  - "Beat" incumbents who must serve traditional consumers in old business models.

Mark E. Raynor and Clayton M. Christensen, The Innovator's Solution, Harvard Business School Press, 2003.

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#### Disruptive Innovation (DI)

- Early computers were very expensive and used by experts for complicated business/scientific calculations
- Disruptions lead to minicomputers, desktops, laptops, palm-sized devices
- Cheaper
- New users
- New uses
- Simpler

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Mainframe computers still exist.

They remain complex, expensive, and serve niche markets.



Mainframe market is larger now than Mainframe market is a tiny portion of the overall computing market.

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What are potential Disruptive Innovations in the field of IR?

New Customers

- State K-20-WData Systems
- Federal Student Unit Record System
- Every Employee and Data Analyst
- Part-time students
- Transfer students

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The New York Times Magazine



How your shopping habits reveal even the most personal information. By Charles Doherty

**HEY!  
YOU'RE  
HAVING  
A BABY!**

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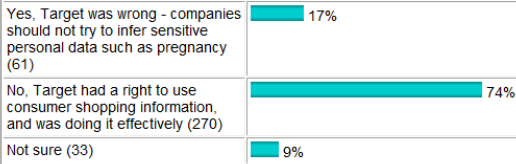
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## Disruptive Innovations

Was Target wrong in using analytics to identify pregnant women from changes in their buying behavior ? [364 votes total]



<http://www.kdnuggets.com/polls/2012/was-target-wrong-using-analytics-identify-pregnancy.html>

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## What are potential Disruptive Innovations to the field of IR?

Enabling Technologies

Dashboards

Automated Analytics

Mobile Data Applications

Sensor-based Data Collection

Outsourced Solutions

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## What are potential Disruptive Innovations to the field of IR?

New Business Models

Lead Campus Model

Student Unit Records

Interpreters Rather than Analyzers

New Models of Teaching and Learning

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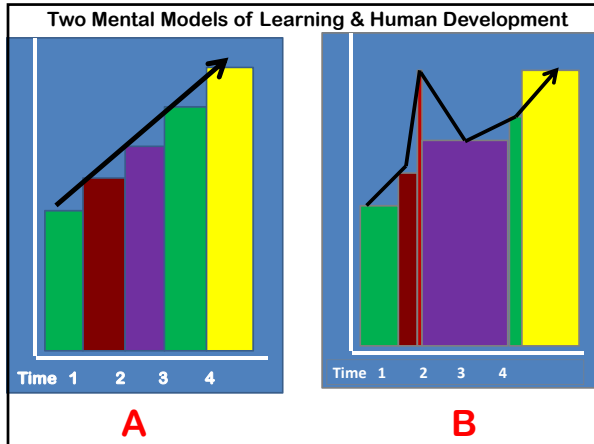
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**Student-Based View of Higher Education**

- Sample surveys – High School and Beyond
- Track Transfer Students (not first-time)
- Track Part-Time Students
- Increase tracking of the For-Profit Sector

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My Mother  
Doesn't Understand  
What I Do for a Living!

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**Post-Traditional  
Institutional Research**

Challenge assumptions of

- "uniqueness"
- "local culture"
- "neutral stance"
- reporting lines
- data ownership
- IT and IR relationship
- resource allocations to IR
- Institution-based view of Higher Education

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**Post-Traditional IR**

- Service to "non-consumers"
  - Grow the market of data consumers
  - Support "jobs to be done" more than job-holders
- Technology assisted data-to-information
  - Decrease manual labor increase technology routines
  - Reduce expertise needed
- Provide new services
  - Matching students with services
  - Targeting services to individual students
- New Business Model for IR
  - Decentralized
  - New partnerships with IT
  - New state- and national- level models

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See you in Long Beach!



Contact Information:  
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Association for Institutional Research

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