

# Dynamic Academic Profiles

---

## Using Established Databases in Pursuit of Strategic Planning

Mike Ellison

University of Nevada, Las Vegas

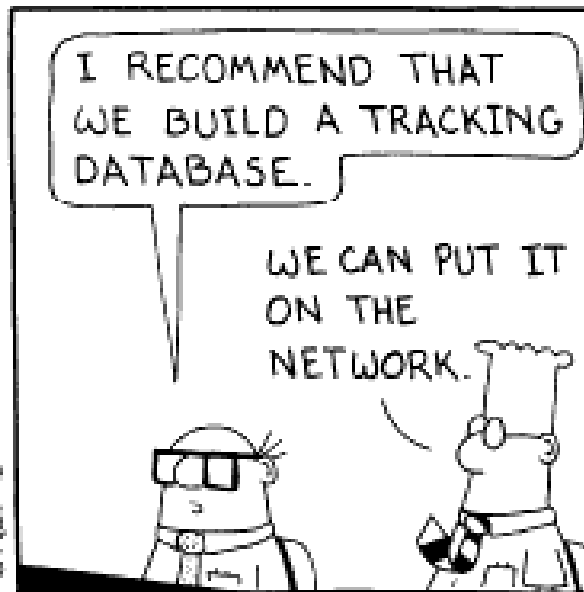
Office of Institutional Analysis & Planning

October 19, 2006

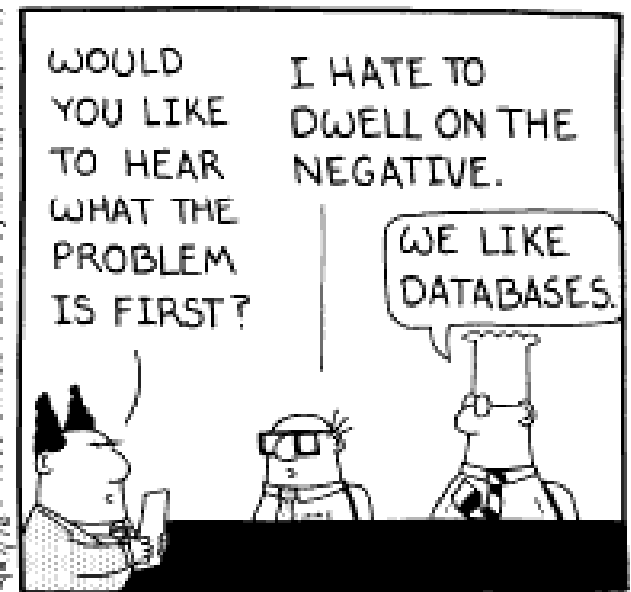
# We like databases...



S. Adams E-mail: SCOTTADAMS@AOL.COM



© 1996 United Feature Syndicate, Inc. (NYC)



# ...in Pursuit of Strategic Planning

---

- Established Databases
    - Faculty Workload
    - Student Information System
  - Online Academic Profiles Application
-

# Thought for the day

---

- “Making data more accessible also serves to improve data quality over time. As people use the data, errors can be corrected as they are found.”

- Scott Thorne, MIT



# Fall 2002 – Faculty Workload

---

- Online application for departmental data entry of course assignments and reassignments
  - Online reporting tools for Provost, Deans, Department Chairs to provide oversight
-

Instructional Assignments for TST 101 001  
Introduction to Bug Finding

Enrollment	Credits
30	3

Currently Assigned Instructors:

	Instructor	Dept	Method	Enrollment	Credits
<input type="button" value="Remove"/>	Corea, Chick	TST	LLB	30	1.5
<input type="button" value="Remove"/>	Ellington, Duke	TST	LLB	30	1.5

Assign an Instructor:

Filter:   by Last Name

Instructor:

Method:

Enrollment:  Credits:

### Department Summary for Computer Testing

#### PERM

Instructor Name	Rank	Lect/Lab Creds	Lect/Lab Enrl	Total Creds	Total Enrl	Reassign Creds	Total + Reassign Creds	UG SCH	Grad SCH	Total SCH
Ellington, Duke		3	30	3	30	0	3	90	0	90
Evans, Bill		0	0	3	14	0	3	42	0	42
Fitzgerald, Ella		0	0	6	1	0	6	6	0	6
<b>Totals:</b>	<b>3</b>	<b>3.0</b>	<b>30.0</b>	<b>12.0</b>	<b>45.0</b>	<b>0.0</b>	<b>12.0</b>	<b>138.0</b>	<b>0.0</b>	<b>138.0</b>
<b>Averages:</b>		<b>1.0</b>	<b>10.0</b>	<b>4.0</b>	<b>15.0</b>	<b>0.0</b>	<b>4.0</b>	<b>46.0</b>	<b>0.0</b>	<b>46.0</b>

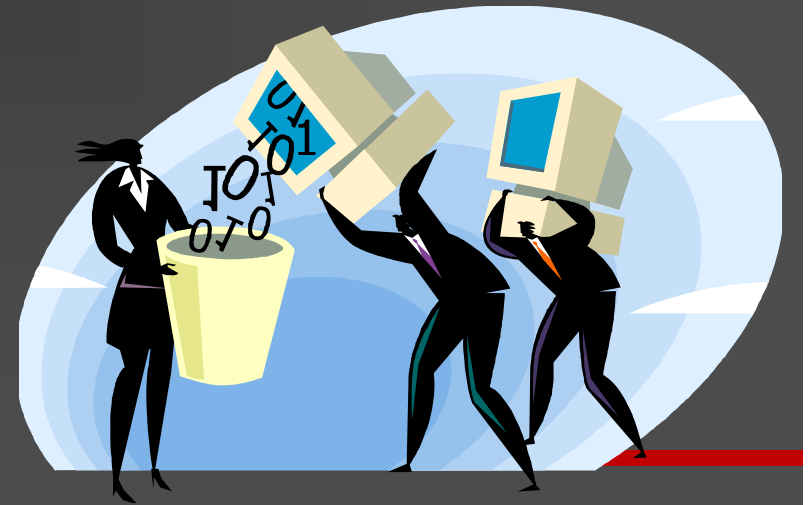
#### TEMP

Instructor Name	Rank	Lect/Lab Creds	Lect/Lab Enrl	Total Creds	Total Enrl	Reassign Creds	Total + Reassign Creds	UG SCH	Grad SCH	Total SCH
Tyner, McCoy		0	0	3	29	0	3	87	0	87
<b>Totals:</b>	<b>1</b>	<b>0.0</b>	<b>0.0</b>	<b>3.0</b>	<b>29.0</b>	<b>0.0</b>	<b>3.0</b>	<b>87.0</b>	<b>0.0</b>	<b>87.0</b>
<b>Averages:</b>		<b>0.0</b>	<b>0.0</b>	<b>3.0</b>	<b>29.0</b>	<b>0.0</b>	<b>3.0</b>	<b>87.0</b>	<b>0.0</b>	<b>87.0</b>

# Faculty Workload - Data

---

- Operational database for departmental data entry
- Data collection occurs annually in the Fall term





# Fall 2003 – DataNet

---

- Online application for reporting student and enrollment information
    - Headcount / FTE Trends
    - Course Enrollment Trends
    - Degrees Conferred
  - Flexible, with depth
-

## Headcount Trends

Terms:

Cohort:

Measure:

Group By:

Department  
Gender

< Add

<<

Remove >

>>

- +

Ethnicity  
Level  
Standing  
Residence  
Enrollment Status  
Major

Include Totals

### Additional Criteria (optional)

	Field	Value
x	College	Engineering
	<input type="text" value="College"/>	<input type="text" value="Engineering"/>

Add

Display Report

### Trends - Student Headcount

		Fall 2003	Fall 2002	Fall 2001	Fall 2000	Fall 1999
Civil & Environmental Engineering	F	79	81	80	59	61
	M	288	267	223	212	243
College of Engineering	F	18	18	8	2	5
	M	106	71	28	18	22
Computer Science, School of	F	82	113	105	93	81
	M	330	368	365	315	267
Electrical & Computer Engineering	F	52	45	52	52	43
	M	319	279	282	263	247
Engineering/Computer Science	F	3	3	2	10	14
	M	22	24	8	32	34
Mechanical Engineering	F	32	34	25	25	22
	M	212	172	157	141	139

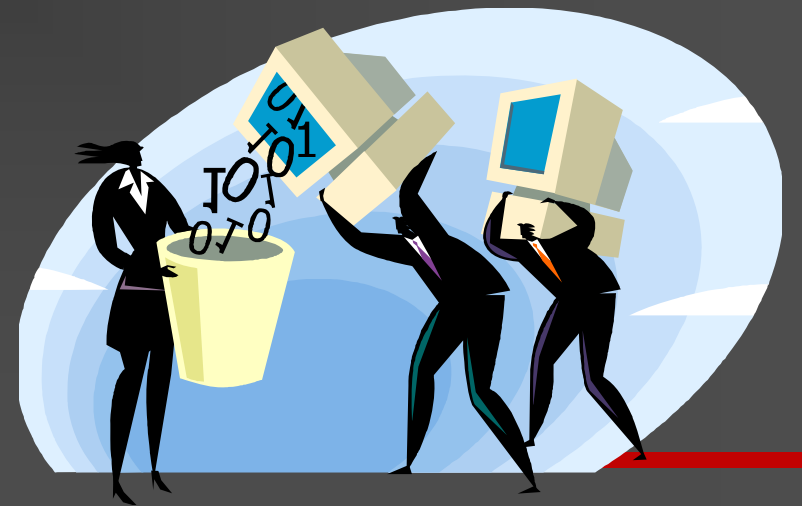
### Parameters

AdditionalCriteria: College=Engineering

# DataNet - Data

---

- Warehoused data from our Student Information System
- Data extracts taken at official points in time for start and end of terms



# Over time...

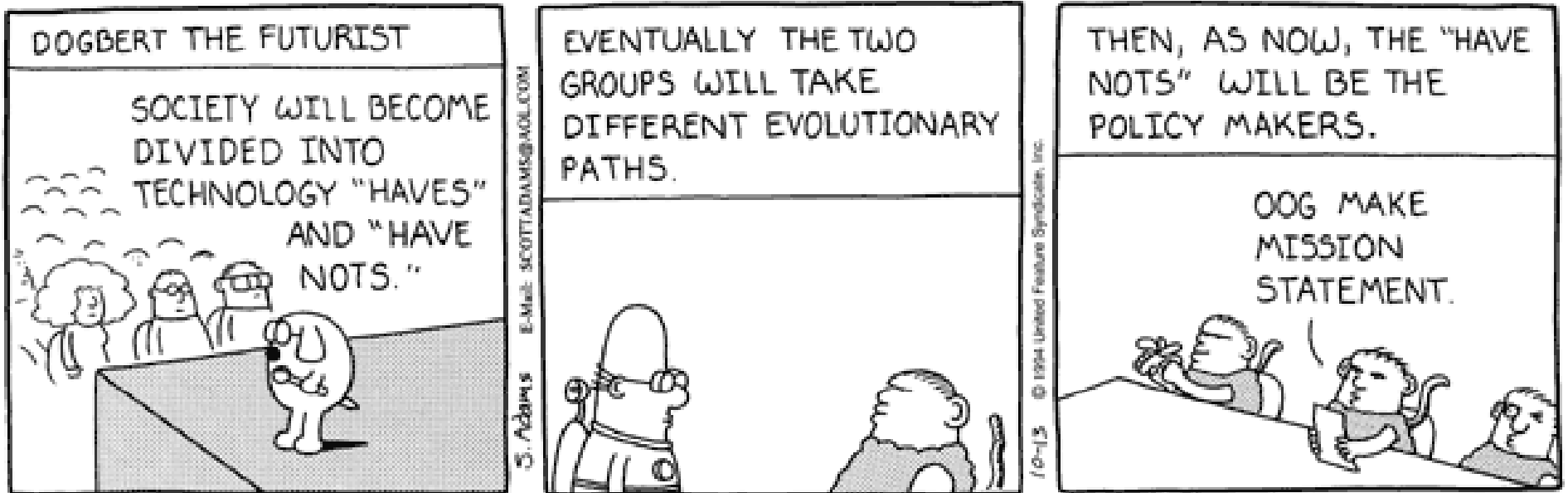
---

- Usable warehouse of Faculty activity data
- Usable warehouse of Student and Enrollment data



# Our reward...

- Build more applications!



# Seriously, though...

---

- Our access to the data is better
  - Our understanding of the data is better
  - Our techniques for reporting the data have improved
  - More opportunities to give it back to *them* in meaningful ways
-

# And this means...

---

- *Their* access to the data is better
  - *Their* understanding of the data is better
  - *Their* decisions based on the data are better
-



# And this means...

---

- “Making data more accessible also serves to improve data quality over time. As people use the data, errors can be corrected as they are found.”

- Scott Thorne, MIT



# And this means...

---

- The quality of *the institution's* data improves over time
  - Academic officials can see the connection between their operational processes and higher analytical functions
-

# Academic Profiles

---

- Consolidates enrollment & faculty data, presented in higher level reports
- Breadth, not depth
- Easy, intuitive, understandable



# Academic Profiles

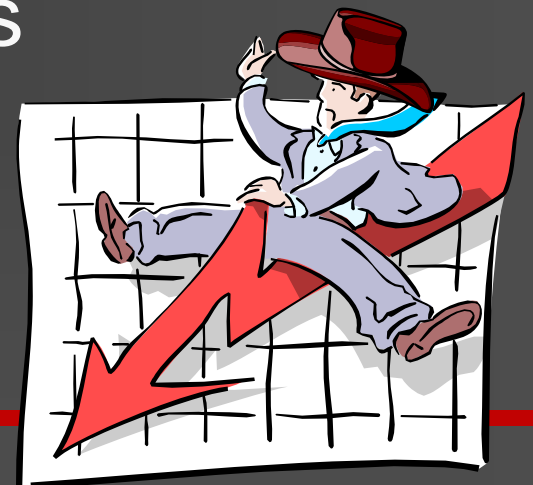
---

- Provide meaningful information to support strategic planning for deans and departments, but...
  - ...keep the application manageable for us!
-

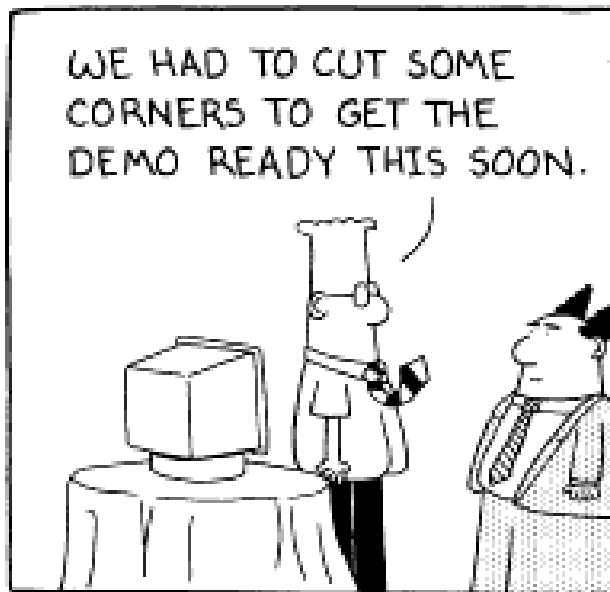
# Dynamic Academic Profiles

---

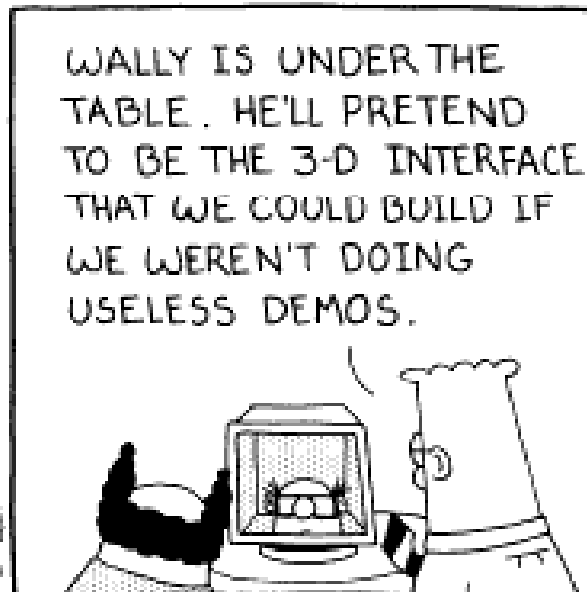
- Reports are dynamically generated on the web, with live queries to the respective databases
- Simple updates in conjunction with our existing warehousing processes
- Do the hard work just once



# Demo



SCOTTADAMS@aol.com



© 1996 United Feature Syndicate, Inc. (NYC)



# Additional Considerations

---

- *Dynamic* requires consistent data structure and access each term
  - User authentication
  - Addressing organizational changes
-

# Dynamic Academic Profiles

---

*Props to my partners in crime:*

Kari Coburn, Diane Muntal, Christina Drum,  
Lynne Personius, Mary Williams



Mike Ellison  
702-895-3771  
[mike.ellison@unlv.edu](mailto:mike.ellison@unlv.edu)

---