Actionable Intelligence: Data Alone is Not Enough

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Agenda: Graduating More Students

1. Technology and Innovation
2. Business Intelligence in Higher Education
3. A Changing World
4. Turning Hindsight into Foresight
5. Proactive Engagement
6. Freshman Learning Communities
7. Actionable Alerts
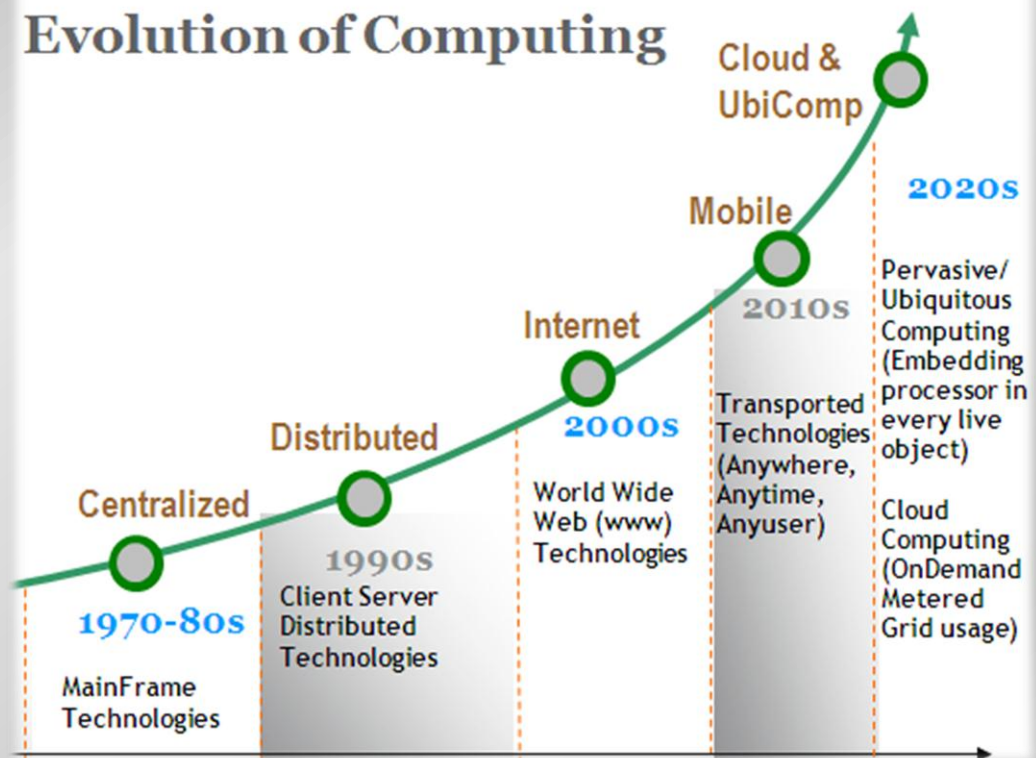8. Demo

The Cadence of Technology

Past

Soon to be past

Evolution

1. Any process of formation or growth.

2. A process of gradual, peaceful, progressive change or development....

3. A motion incomplete in itself, but combining with coordinated motions to produce a single action, as in a machine.

4. A gradual process in which something changes into a different and usually more complex or better form.

5. A process of continuous change from a lower, simpler, or worse to a higher, more complex, or better state.

Evolution of Computing

Cloud & UbiComp — 2020s
Pervasive/Ubiquitous Computing (Embedding processor in every live object)
Cloud Computing (OnDemand Metered Grid usage)

Mobile — 2010s
Transported Technologies (Anywhere, Anytime, Anyuser)

Internet — 2000s
World Wide Web (www) Technologies

Distributed — 1990s
Client Server Distributed Technologies

Centralized — 1970-80s
MainFrame Technologies

Data and Information

1. How long does it take on average to get a new report created? (hours, days, weeks, months)

2. How are you using data to make decisions and provide support where needed?

3. Must you find information or does information find you?

```
06-MAY-2004        03:12 PM
   REPORT: GURADDR                        Address Report


   ID            Name                     Address
   Q62100933     Clifford, Stephanie      22 EAST MAPLE ROAD
                                          DETROIT, MI 82134

   Q81337923     Serum, Tracy             6658 NORTH 69TH STREET
                                          HOUSTON, TX 02344



   PAGE: 2                                BANNER University
06-MAY-2004        03:12 PM
   REPORT: GURADDR                        Address Report


   ID            Name                           Address


   *********REPORT CONTROL INFORMATION*********
   Report Name: GURADDR
   Term Code: 200210
```

Business Intelligence (BI)

1. Ability of an organization to take all its capabilities and convert them into knowledge

2. The tools and systems that play a key role in the strategic planning process of the corporation

3. An umbrella term that refers to a variety of software applications used to analyze an organization's raw data
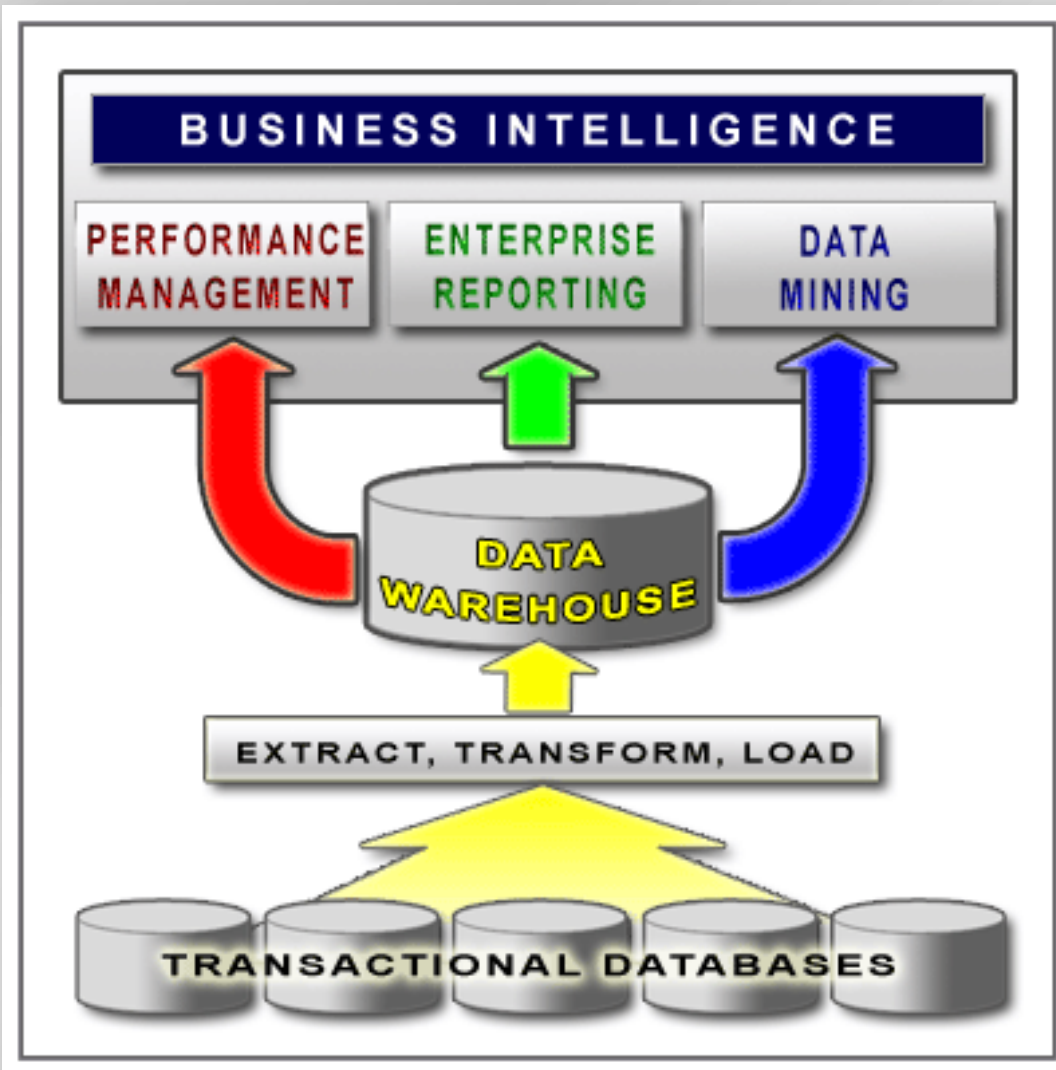
Unidirectional Concepts and Designs

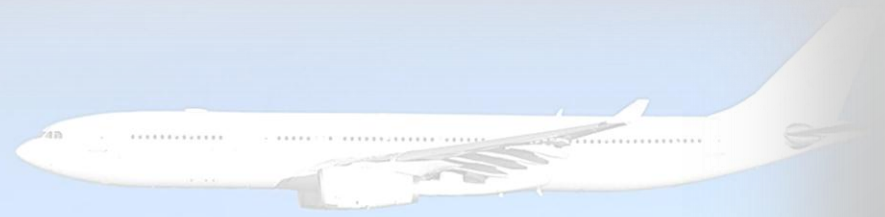# Oracle (OBIEE) Business Intelligence

Oracle (OBIEE) Business Intelligence

Oracle (OBIEE) Business Intelligence

You have data... What's next?

- Data-driven decision making
- Predictive Modeling
- Operational Performance

Student Information Updated.

Query Student

Enter a Student ID Number and Press Enter to Query. Erase the block and type a new Student ID Number and Press Enter to select a different student.

Enter Student ID (press Enter to Query) bahaugab@valdosta.edu   Clear

Selected Student   Haugabrook, Brian Antonio

Advisors

Advisor Name	Argyle, Nolan	Advisor Type	Academic Advisor

Special Flags

Set Flag

	Flag	Flag Set On	Flag Set By	Flag Lifts On
✎	Test Flag	17-SEP-2012	Haugabrook, Brian Antonio	-
				1 - 1

Student Information

Edit Student Information

Track	Full Time Program
Program Level	
Academic Status	Good Standing
Graduation Term	Not a SW Graduate
VSU Email Address	bahaugab@valdosta.edu
Other Email Addresses	-
Needs Follow Up	No

Photo

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Special Documentation
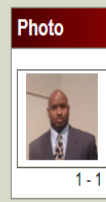
Add Special Documentation

No Special Requirements Found.

IV-E Funding

Add IV-E Funding Information

Department Forms

Request Additional Forms   Update Form Received Stamps   Perform Form Admin Actions

Form Name	Received On	Received By	View	Received	Reset Status	Delete Request	PDF
Student Contact Information	25-JUL-2011	Haugabrook, Brian Antonio	Download	✔	☐	☐	Upload/Replace
Statement of Understanding	25-JUL-2011	Haugabrook, Brian Antonio		✔	☐	☐	Upload/Replace
Official Program of Study	25-JUL-2011	Haugabrook, Brian Antonio		✔	☐	☐	Upload/Replace
Graduation Application	25-JUL-2011	Haugabrook, Brian Antonio		✔	☐	☐	Upload/Replace
Learning Plan 7612	* FORM NOT TURNED IN *	-		☐	-	☐	Upload/Replace
Foundation Practicum Application	* FORM NOT TURNED IN *	-		☐	-	☐	Upload/Replace
Concentration Practicum Application	* FORM NOT TURNED IN *	-		☐	-	☐	Upload/Replace
Foundation Liability Insurance	* FORM NOT TURNED IN *	-		☐	-	☐	Upload/Replace
Concentration Liability Insurance	* FORM NOT TURNED IN *	-		☐	-	☐	Upload/Replace

Application Directory

What is Enrollment Management

- Recruitment
- Admissions
- Orientation
- Financial Aid and Payment (Bursary)
- Then what???
  - Then **Enrollment Management** is equipping the campus (Faculty, Staff, and even Students) with the tools they need to support the students, and not let the students fall through the crack with making an attempt to help them.

Course Summary
By User Role

Class Roster with Photos and Direct Link to DegreeWorks

Custom Application Integrations

Automatic Alerts, Triggers, and Events

- Sends notification to the student's advisor and academic success center

- If the student lives on campus, a wellness check is automatically triggered through the housing office

- If the student is in an FLC, all other instructors are notified

Student Progress in all Courses

Student

STUDENT_PHOTO	STUDENT_NAME	EMAIL_VSU	FULL_CUMULATIVE_GPA	ADVISOR_NAME	ADVISOR_EMAIL
	John Doe	bahaugab@valdosta.edu	-	Robert Smith	bahaugab@valdosta.edu

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Return To List

Student Schedule

CRN	Course	Instructor Email	Attendance Status	Attendance Comments
80354	ENGL 1101 T - Composition I	jdoe@valdosta.edu	Level 2: Multiple Absences. At-Risk	Marlee has accrued three absences. We are in the process of setting up a meeting to discuss the matter.
80042	KSPE 1020 C - Weight Training	jdoe@valdosta.edu		
80643	VSU 1101 K - Keys to College Success	jdoe@valdosta.edu		
81056	PHIL 2010 B - Fundamentals of Philosophy	jdoe@valdosta.edu		
81213	HIST 2112 K - United States History Sn 1865	jdoe@valdosta.edu		

Course Withdrawal Alerts

- What happens if a student drops a course that is in his/her cohort?

- What actions should take place?

From: flc_coordinator@valdosta.edu [mailto:flc_coordinator@valdosta.edu]
Sent: Monday, September 17, 2012 8:13 AM
To: Brian A. Haugabrook
Subject: FLC NOTIFICATION Course Withdrawal (Gi   )

Dear Brian Haugabrook,

J Doe (@valdosta.edu) has withdrawn from PERS 2160 C FLC course and currently lives on campus. You are encouraged to follow up with the student.

Login to the FLC Portal for more information. https://apex.valdosta.edu/apex/f?p=FLC

Enrollment Management and Retention, Progression and Graduation

- Importance of Good Data

- Timely Data

- New Freshmen Learning Curve

- Faculty (need I say more)

- Orientation

- Advising

- Other Risk Factors (Financial Aid, Social Issues, etc…)

Risk Factors

- High School GPA (probably the best predictor of success)
- High School Rigor (in GA the lowest tier high school have an average Graduating HS GPA of 3.3 and the top tier a 2.7)
- Standardized Testing (SAT/ACT)
- First Generation
- Financial Ability and Aid
- HOPE
- Etc…

At-Risk Factors

- A three part process that examined:
  - Quality of High School
  - High School Grade Point Average (HS GPA)
  - SAT Scores (ACT converted)

HS Quality — **HS GPA** — **SAT Score**

At-Risk—Quality of High School

- Data obtained through Governor's Accountability website
  - Adequate Yearly Progress (AYP) data for the No Child Left Behind.
  - Data assigned points.
  - Points totaled.
  - Points quartile to produce rank (reverse quartiles).

CEEB	School Name	2011 AYP Status	2011 School Improvement Status	Consecutive Years In AYP	Corrective Action Status	State Directed Status
100001	Blue High School	Met	NI - Made AYP	1	NA	NA
100002	Green High School	Did Not Meet	NI	0	Yes	Yes
100003	Yellow High School	Met	Adequate	3	NA	NA
100004	Orange High School	Did Not Meet	Adequate-DNM	0	Yes	NA
100005	Red High School	Met	Distinguished	5	NA	NA
100006	Purple High School	Did Not Meet	NI	0	Yes	NA

CEEB	School Name	2011 AYP Status	2011 School Improvement Status	Consecutive Years In AYP	Corrective Action Status	State Directed Status	Quality points	Rank
100001	Blue High School	1	1	1	1	1	5	2
100002	Green High School	0	0	0	0	0	0	4
100003	Yellow High School	1	3	3	1	1	9	2
100004	Orange High School	0	2	0	0	1	3	3
100005	Red High School	1	4	5	1	1	12	1
100006	Purple High School	0	0	0	0	1	1	4

At-Risk—Quality of High School

- Data obtained through Governor's Accountability website
  - Georgia High School Graduation and Writing Tests.
  - Percent pass and mean quartile for points.
  - Advanced plus and honors calculated and quartile for points.
  - Points totaled for test and repeated for each test.
  - Overall points totaled and quartile for rank.

CEEB	School Name	LAR						
		Percent Pass	Mean	Percent in Below Basic	Percent in Basic Proficiency	Percent in Advanced Proficiency	Percent in Honors	Advanced/2 + Honors
100001	Blue High School	92	245	8	35	39	18	38
100002	Green High School	60	230	40	46	14	0	7
100003	Yellow High School	85	220	15	47	24	14	26
100004	Orange High School	70	219	29	36	21	14	25
100005	Red High School	95	270	5	21	40	33	54
100006	Purple High School	83	238	17	43	34	6	23

CEEB	School Name	LAR				Math	Social Studies	Science	Writing	Total	Rank
		Percent Pass Points	Mean Points	Advanced/2 + Honors Points	Total	Total	Total	Total	Total	Total	Rank
100001	Blue High School	3	4	4	11	9	11	12	10	53	1
100002	Green High School	1	2	1	4	3	5	7	4	23	3
100003	Yellow High School	2	1	2	5	5	5	3	3	21	3
100004	Orange High School	1	1	2	4	4	3	3	5	19	2
100005	Red High School	4	4	4	12	10	12	9	12	55	1
100006	Purple High School	2	3	2	7	8	8	6	7	36	4

At-Risk—Quality of High School

- Overall Rank for High Schools
  - AYP Rank and Georgia High School Graduation and Writing Test averaged together.

CEEB	School Name	GHSGT & GHSWT Rank	AYP Rank	Overall Rank
100001	Blue High School	1	2	2
100002	Green High School	3	4	4
100003	Yellow High School	3	2	3
100004	Orange High School	2	3	3
100005	Red High School	1	1	1
100006	Purple High School	4	4	4

At-Risk—HS GPA and SAT

- Students' HS GPA
  - HS GPA quartile for rank.
- Students' SAT scores (ACT Converted)
  - ACT scores were converted to SAT and the highest was used.
  - SAT scores quartile for rank.

At-Risk Factors

- Examined one-year retention rates of students by at-risk factors.
  - HS Quality
  - HS GPA
  - SAT Total (ACT Composite)

HS Quality, HS GPA, SAT Total	All High Schools				Likelihood	At-risk Indicator (65.0% or Below)
	Retained		Total	% Retained	(Out of a group of 10)	
	No	Yes				
1, 1, 1	42	150	192	78.1%	7	
1, 3, 2	52	116	168	69.0%	6	
1, 4, 1	48	73	121	60.3%	6	At-risk, Retention
2, 1, 3	31	103	134	76.8%	7	
2, 3, 2	80	127	207	61.3%	6	At-risk, Retention
3, 2, 4	50	123	173	71.0%	7	
3, 3, 1	33	38	71	53.5%	5	At-risk, Retention
3, 4, 3	57	63	120	52.5%	5	At-risk, Retention
4, 1, 1	46	146	192	76.0%	7	
4, 1, 4	15	79	94	84.0%	8	
4, 4, 4	69	79	148	53.3%	5	At-risk, Retention
9, 2, 3	18	54	72	75.0%	7	

At-Risk Factors

- Examined potential DFW rates of students by at-risk factors.
  - HS Quality
  - HS GPA
  - English: SAT English (Average ACT English and ACT Reading)
  - Math: SAT Math (ACT Math)

HS Quality, HS GPA, SAT Total	English Based Courses				At-risk Indicator (60.0% or Below)	Math Based Courses				At-risk Indicator (60.0% or Below)
	Pass	DFW	Total	% Passed		Pass	DFW	Total	% Passed	
1, 1, 1	382	20	402	95.0%		193	12	205	94.1%	
1, 3, 2	355	90	445	79.8%		132	48	180	73.3%	
1, 4, 1	216	95	311	69.5%		60	79	139	43.2%	At-risk, Math
2, 1, 3	441	38	479	92.1%		104	23	127	81.9%	
2, 3, 2	495	125	620	79.8%		124	90	214	57.9%	At-risk, Math
3, 2, 4	398	109	507	78.5%		102	94	196	52.0%	At-risk, Math
3, 3, 1	132	69	201	65.7%		50	37	87	57.5%	At-risk, Math
3, 4, 3	230	167	397	57.9%	At-risk, English	52	96	148	35.1%	At-risk, Math
4, 1, 1	422	31	453	93.2%		242	33	275	88.0%	
4, 1, 4	266	32	298	89.3%		80	32	112	71.4%	
4, 4, 4	200	154	354	56.5%	At-risk, English	51	103	154	33.1%	At-risk, Math
9, 2, 3	169	34	203	83.3%		45	20	65	69.2%	

Comments and Questions