



Cognos within UTS: The Theory of Evolution



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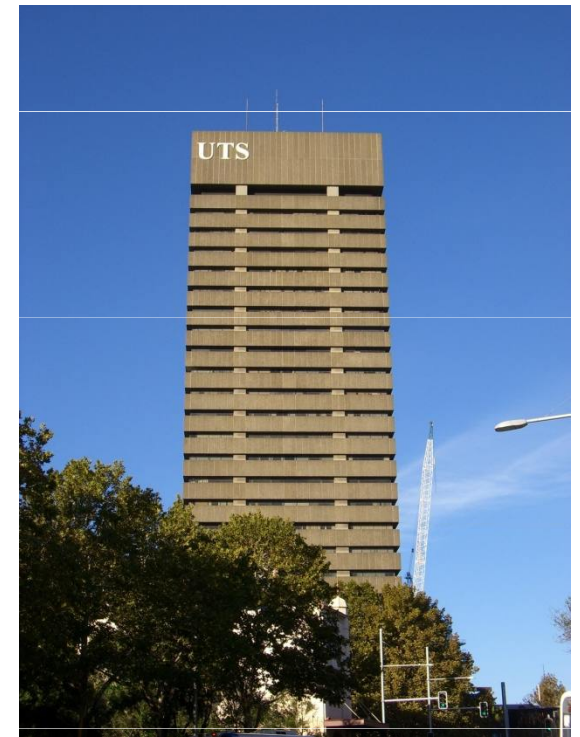
Agenda



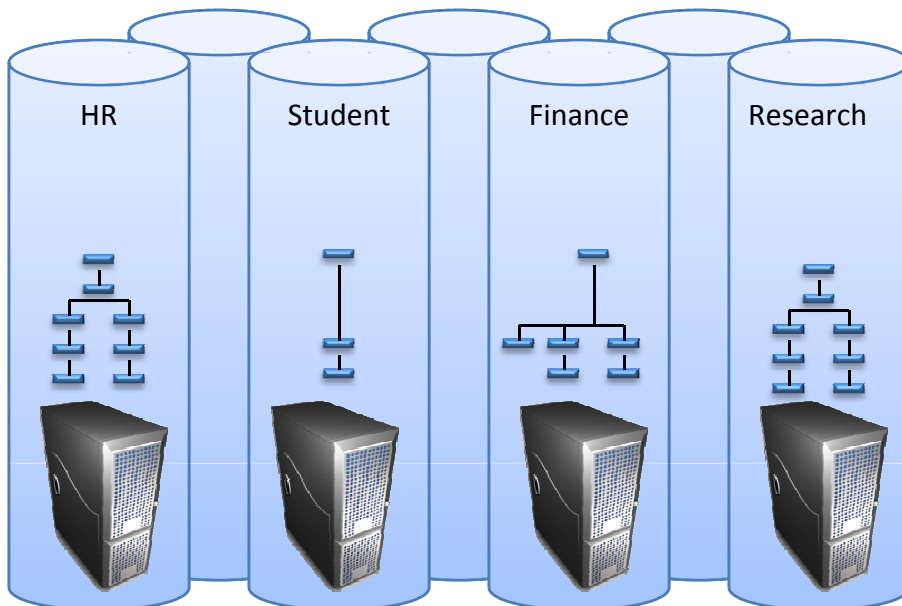
- Introduction
- UTS:BI – Strategic System
- UTS:CI – Student System Reporting
- Conclusion

UTS

- Approx 33,000 enrolled students
- Approx 3000 staff
- 21 years old
- Voted 2007 ugliest building in Sydney



Silos! Silos! Silos!



- Issues:
- Organisational structure
 - Disparate data sources
 - Data Inconstancies
 - Communication
 - Resource skills
 - Documentation
 - Multiple Source formats (technology)

Cognos within UTS

Current:

MIR

Service Desk

UTS Online

Research
Master

AVS

Development and Future:

UTS:BI

UTS:CI

Finance

Library

Others

**Cognos defined as the
standard reporting platform for
UTS**

UTS:Projects



UTS:BI



PUBLICATION & CREATIVE WORKS

OPTIMAL1 STEP 2: Choose Faculty | OPTIMAL1 STEP 3: Choose Research Strength | OPTIMAL1 STEP 4: Click Refresh | Open 2nd view of report

Weighted Publications by Faculty for 2009 | Weighted Publications per Research Equivalent FTE (2009) | Weighted Publications per Research Equivalent FTE - 2010

Weighted Publications Distribution | Weighted Publications by Year | Weighted Publications per Research Equivalent FTE

Weighted Publications

Year	2006	2007	2008	2009	2010	2011	2012	2013
Weighted Publications	1,076,201	1,176,330	1,215,445	1,066,126	886,569	0	0	0
Weighted Publications Target	0	1,182,721	1,291,963	1,136,990	1,173,750	205,225	0	0

Actual as % of Target: 64.96% (2008), 87.67% (2009)

Year	2007	2008	2009
Weighted Publications	1,261,705	1,085,514	1,431,300
Target	1,261,705	1,085,514	1,431,300
Actual as % of Target	100.00%	100.00%	100.00%

Research Student Completion and Attrition

Year	2007	2008	2009
Actual	3.3	3.0	0.0
Target	4.4	4.3	0.0
Actual as % of Target	80.23%	70.00%	-

Research Income

Year	2007	2008	2009
Actual	132,708	89,526	81,281
Target	132,708	89,526	81,281
Actual as % of Target	100.00%	100.00%	100.00%

Research Income per FTE

Year	2007	2008	2009
Actual	122.97	82.61	75.96
Target	122.97	82.61	75.96
Actual as % of Target	100.00%	100.00%	100.00%

Research Income per FTE

Year	2007	2008	2009
Actual	132,708	89,526	81,281
Target	132,708	89,526	81,281
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Research Income per FTE

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Actual as % of Target	100.00%	100.00%	100.00%

UTS:BI Logo

UTS:BI



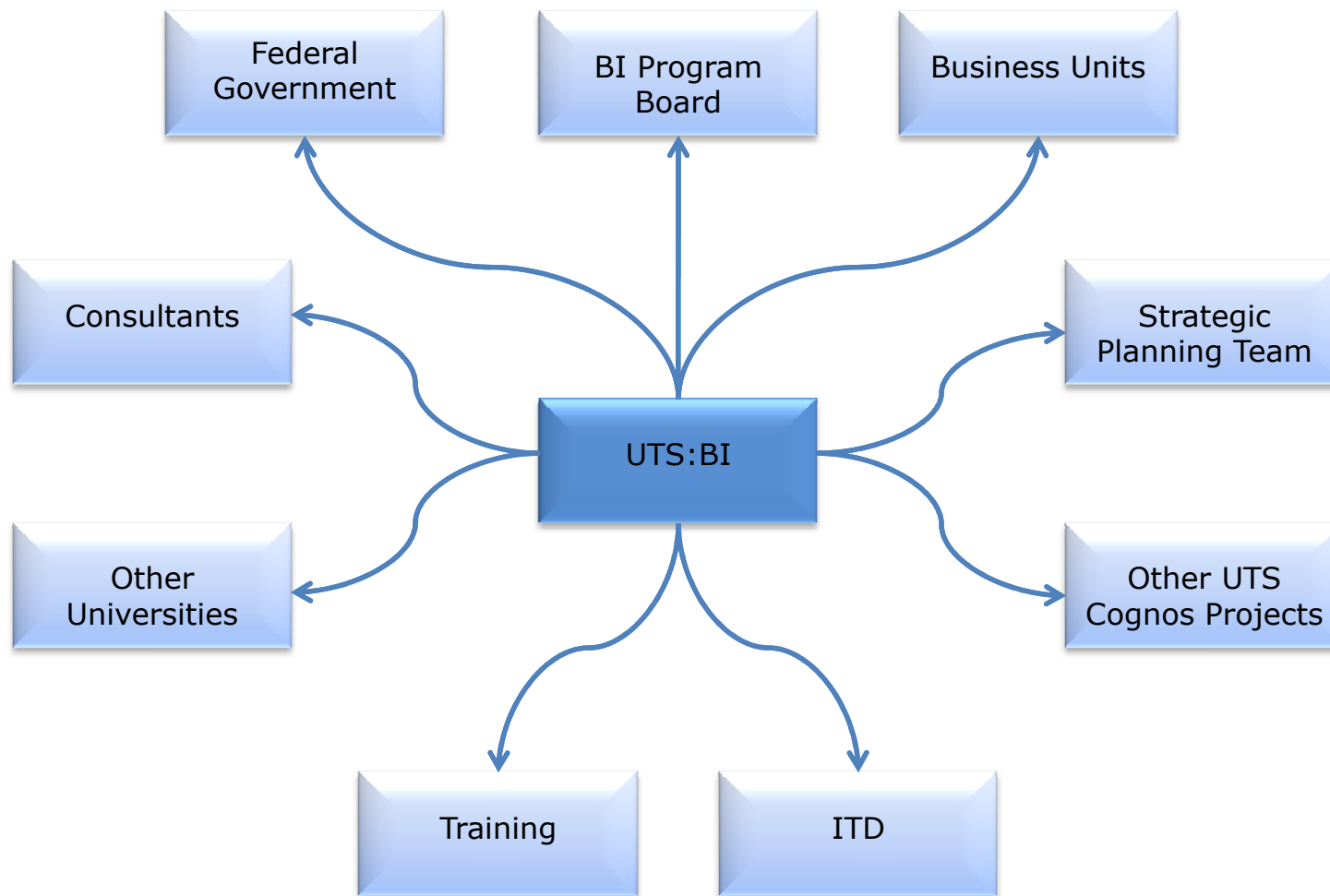


What UTS:BI is NOT

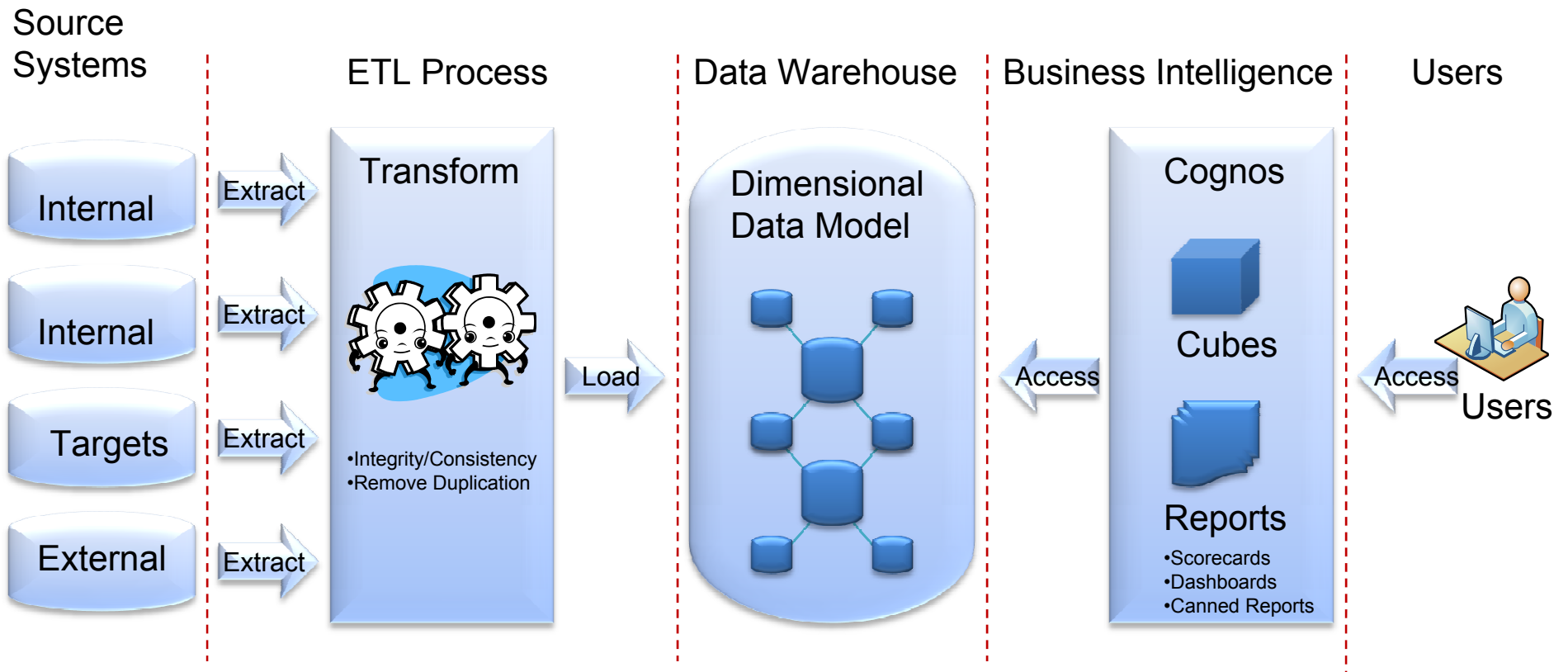


- A one stop shop
- Replace the existing source systems
- A data dump for all data
- Operational reporting system

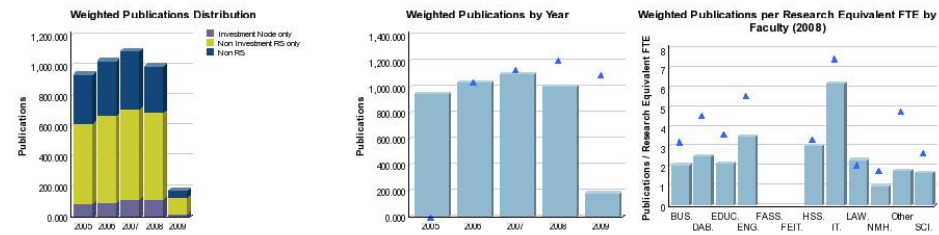
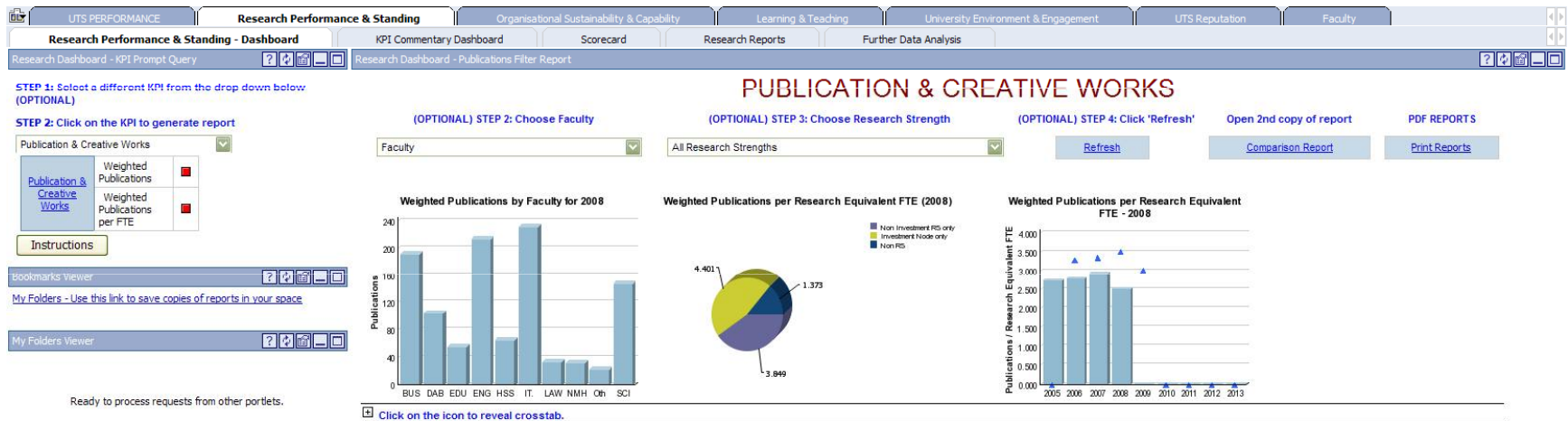
Communication & Co-ordination



UTS Architecture Approach



UTS:BI – Dashboard



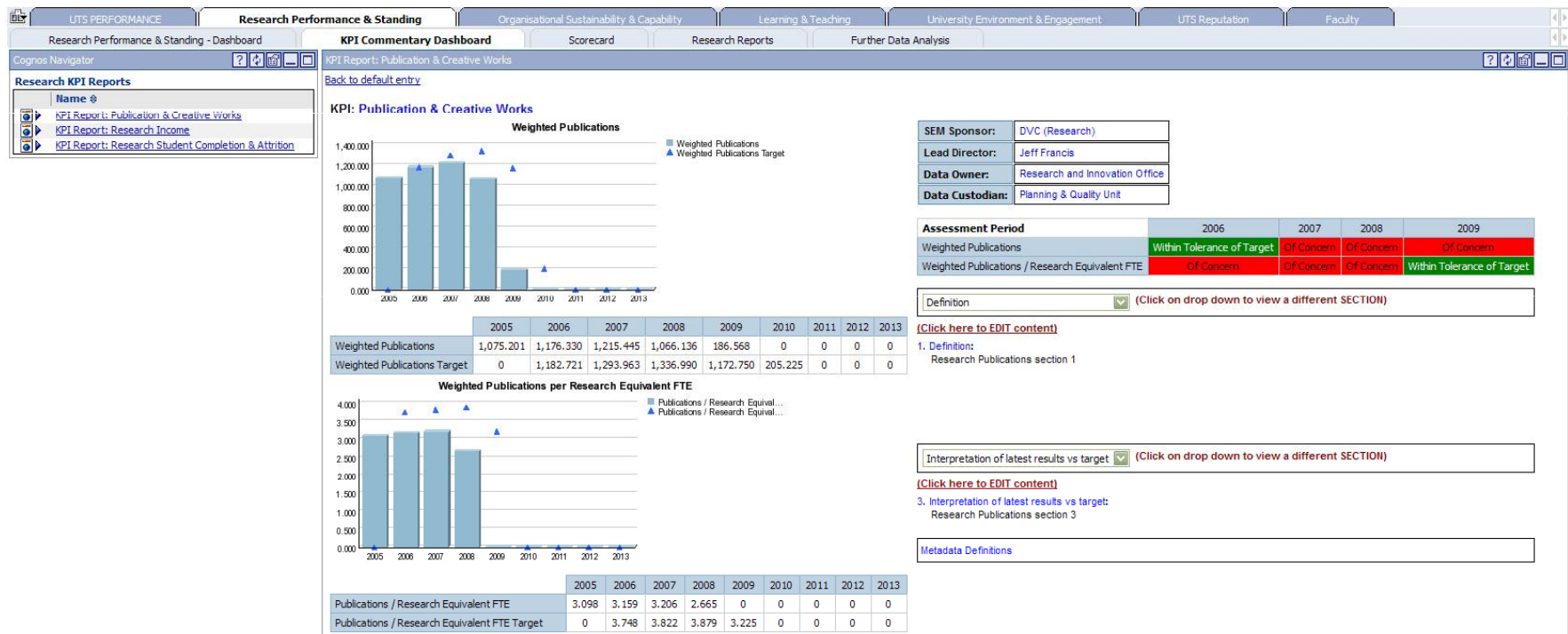
UTS:BI - Scorecard

UTS PERFORMANCE		Research Performance & Standing			Organisational Sustainability & Capability			Learning & Teaching			University Environment & Engagement			UTS Reputation			Faculty			
Research Performance & Standing - Dashboard		KPI Commentary Dashboard			Scorecard			Research Reports			Further Data Analysis									
Research Scorecard without links																				
OBJECTIVE 2: Generate research outcomes that benefit society, particularly through research strengths that have impact nationally and internationally.																				
RES3: Publication & Creative Works									RES3: Publication & Creative Works											
Metric		Values			Tolerance	Trend	Status PY	Status CY	Intended Direction	Metric		Values			Tolerance	Trend	Status PY	Status CY	Intended Direction	
		2007	2008	2009								2007	2008	2009						
Weighted Publications	Actual	1,260.7	1,085.9	140.3	10%	▼	■	■	↑	Weighted Publications per FTE*	Actual	3.3	2.7	0.0	10%	▼	■	■	↑	
	Target	1,373.5	1,386.8	1,194.5							Target	4.1	4.0	0.0						
	Actual as % of Target	91.79%	78.30%	11.75%							Actual as % of Target	81.96%	67.47%	-						
RES2: Research Student Completion and Attrition									RES2: Research Student Completion and Attrition											
Metric		Values			Tolerance	Trend	Status PY	Status CY	Intended Direction	Metric		Values			Tolerance	Trend	Status PY	Status CY	Intended Direction	
		2007	2008	2009								2007	2008	2009						
Attrition Rate	Actual	7.40%	10.90%	0.00%	10%	▲	■	◆	↓	Completions per FTE*	Actual	0.43	0.47	0.00	10%	▲	■	■	↑	
	Target	7.40%	8.20%	0.00%							Target	0.49	0.47	0.00						
	Actual as % of Target	100.00%	132.93%	-							Actual as % of Target	87.76%	98.94%	-						
Average Time to Complete	Actual	3.5	3.8	0.0	10%	▲	■	■	↓	No. of HDR Completions	Actual	163	187	0	10%	▼	■	◆	↑	
	Target	4.4	4.2	0.0							Target	183	179	0						
	Actual as % of Target	80.27%	90.80%	-							Actual as % of Target	89.27%	104.29%	-						
RES4: Research Income									RES4: Research Income											
Metric		Values			Tolerance	Trend	Status PY	Status CY	Intended Direction	Metric		Values			Tolerance	Trend	Status PY	Status CY	Intended Direction	
		2007	2008	2009								2007	2008	2009						
Absolute Research Income	Actual	Category 1	\$12.70M	\$9.83M	\$2.20M	8%	▼	■	■	↑	Research Income per FTE*	Category 1	\$33.50K	\$24.57K	0	10%	▼	■	■	↑
		Others	\$0.60M	\$1.26M	\$0.16M							Others	\$1.57K	\$3.16K	0					
		Category 2,3	\$9.01M	\$9.43M	\$1.51M							Category 2,3	\$23.76K	\$23.58K	0					
	Target	\$23.06M	\$24.54M	\$22.58M	Target							\$68.12K	\$71.19K	0						
	Actual as % of Target	96.73%	83.64%	17.12%	Actual as % of Target							86.37%	72.08%	-						

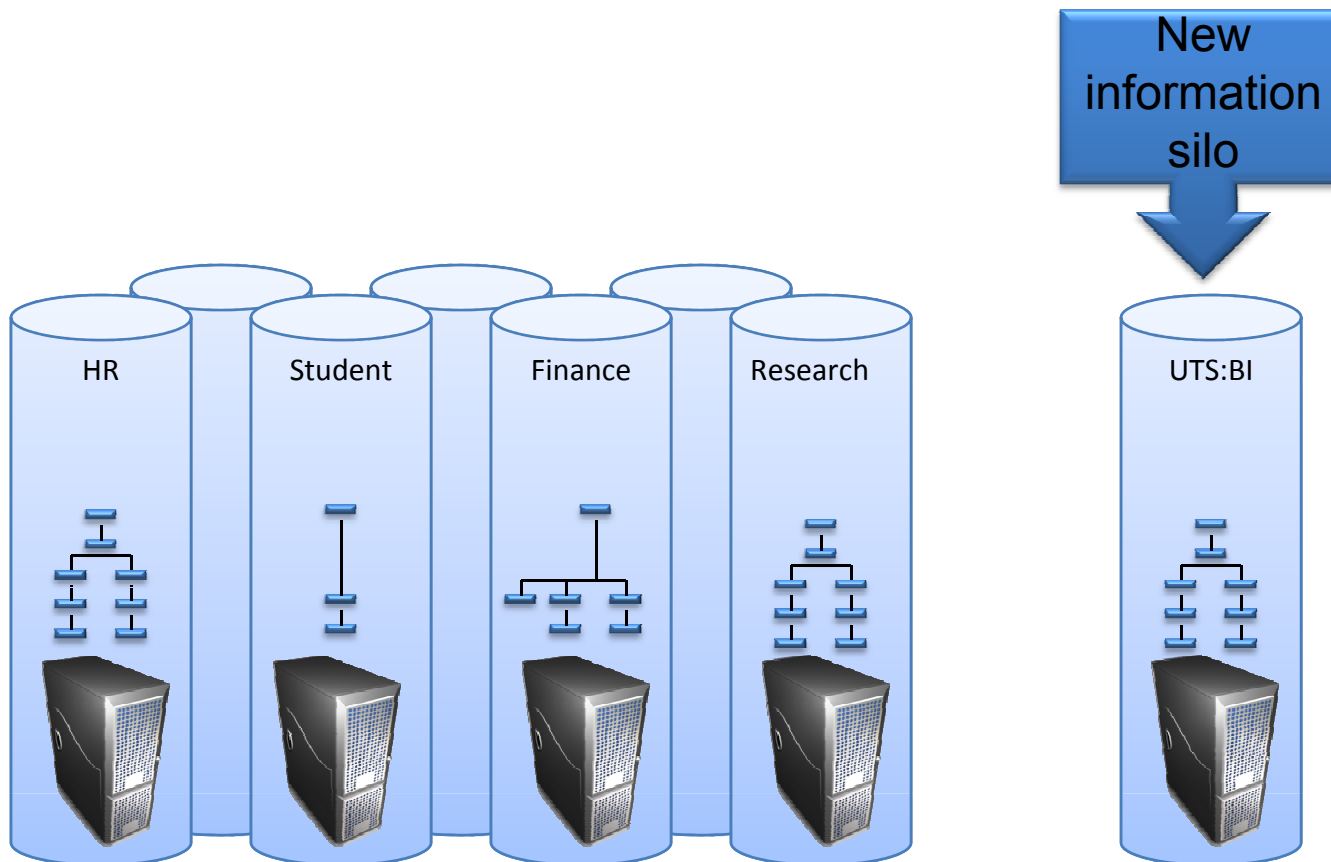
DEFINITIONS

* FTE means RESEARCH EQUIVALENT FTE.

UTS:BI – KPI Report



Another Silo!



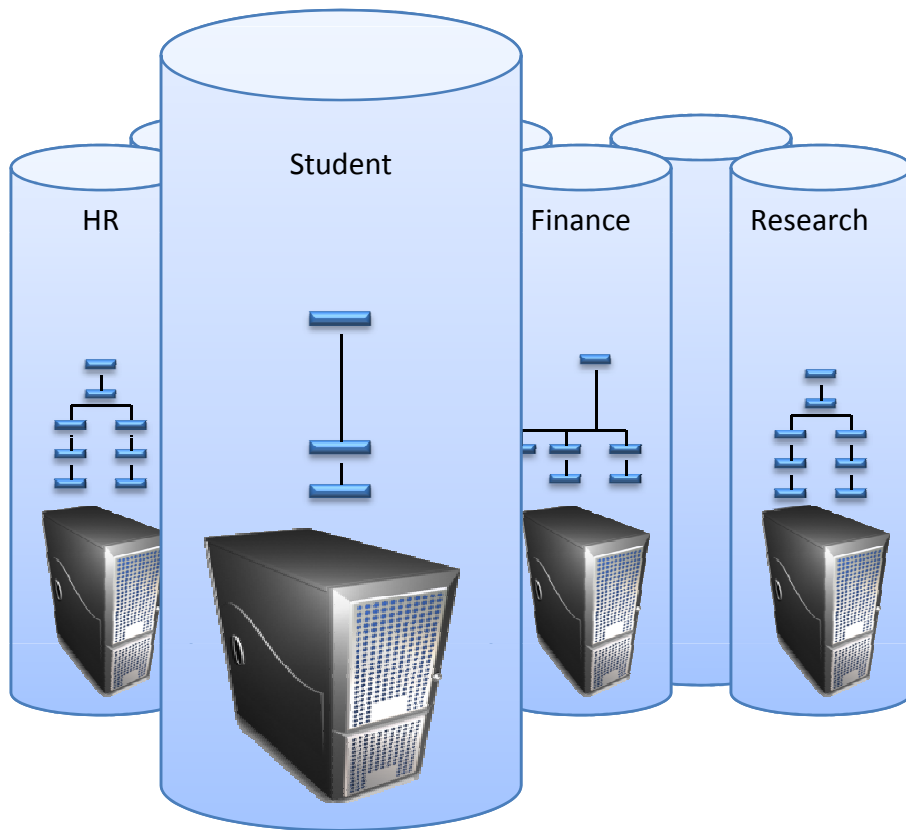


Defining Standards for UTS

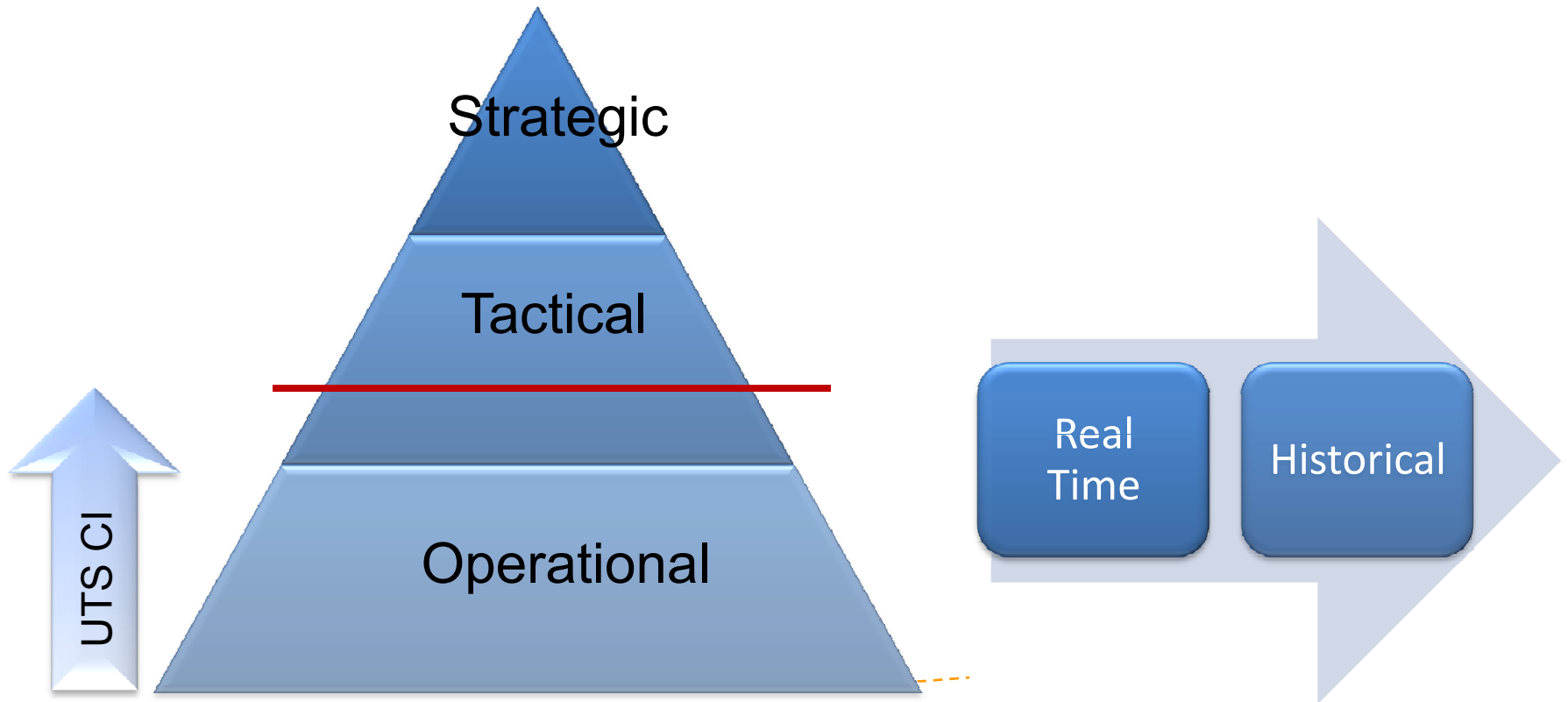


- Design Standards Document
- Documentation standards/templates
- Metadata
- Communications Model
- Tools
- Business Process Standards
- Virtual Standards

UTS:CI – Student Management Reporting



UTS:CI





What is UTS:CI

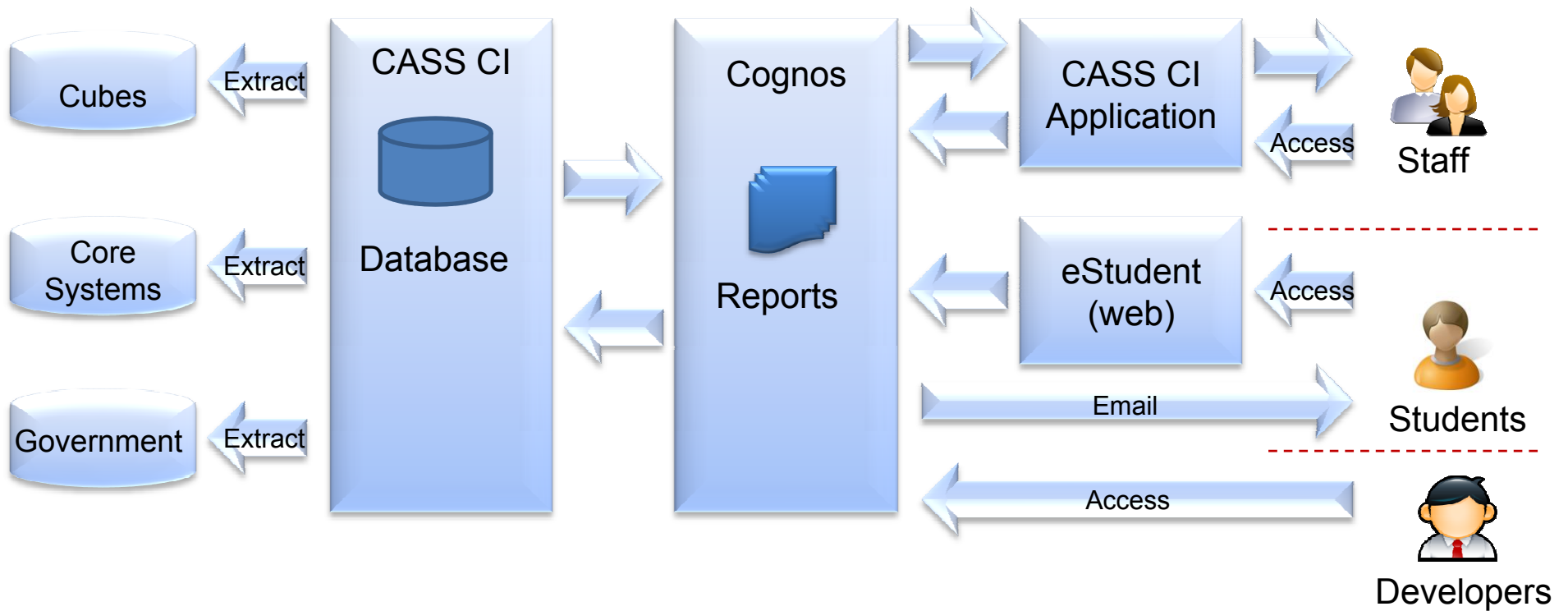


- Student System Application at UTS
 - Complete student lifecycle management for staff and students
 - Approx 33,000 Students and 700 Staff
- 600+ Crystal Reports in Production
 - Tax Invoice
 - Real Time
 - 15,000 pages in 45 min
 - Enrolment Advice
 - Staff requests 15 per min
 - Student requests 50 per min

Review use of Cognos as Core Reporting Tool

Feature	Cognos 8.3	Crystal XI
Licence	Minimal Cost to UTS	Additional Cost to UTS
Integration in CI	Embedded browser on Application servers	Crystal runtime on XenApp servers
Integration in UTS	Future integration with UTS: BI and Powerplay	None
Developer Knowledge and Availability	High	Limited
Vendor Relationship	Good	None
Security Model	In Cognos and Ci	Internal to Ci
Access	Via customised Ci functions	Via shipped and customised Ci functions
Reports	PDF, Excel formats	PDF, Excel formats
Auditing	Per user, per report, and site wide	None
Intuitiveness	Web form with preset criteria	.NET form with user defined criteria

UTS:CI Architecture Approach



Report List within CI

The screenshot displays the 'Student Reporting - Student Management - castst_ntier ntier' web application. The interface includes a menu bar with 'File', 'Edit', 'View', 'Tools', 'Actions', 'Window', and 'Help'. Below the menu bar, there are navigation tabs for 'Admission / Application Reports', 'Curriculum Reports', 'Graduation / Alumni Reports', and 'More'. The main content area is divided into three columns:

- Admission / Application Reports:**
 - Admission Headcount (ENR066)
 - Admissions Headcount By Staff (ADM038)
 - Career Service Detail (ADM037)
 - Career Service Summary (ADM036)
 - Client Registration Details (ADM021)
 - Client Registration Summary (ADM020)
 - Comment Report (ADM004)
 - Exchange Offer Letter (APO002)
 - External Articulation Register (ADM044)
 - External Articulation Tracking (CSP061)
 - Student Course Status Report (ADM007)
 - Student Course Status Summary Report (ADM009)
 - Student Major Status Report (ADM043)
- Curriculum Reports:**
 - Application Details By Owning Org (APO005)
 - Committee Outcomes Summary (CSP046)
 - Course Award Details (CSP047)
 - Course Credit Point Check (SDY003)
 - Course Limits Report (CSP044)
 - Course List with Prior Learning (APO026)
 - Course Versions with No Committee Outcomes (CSP051)
 - End Accreditation Date (CSP025)
 - External Study Packages (CSP060)
 - Links Analysis Report by Org Unit (CSP024)
 - Organisational Unit List (CSP003)
 - Phasing Out Course Versions (CSP039)
 - Pre-Requisite Links (CSP030)
 - Pre-requisites by Faculty (CSP018)
 - Primary Course Version (CSP056)
 - SP Links Report / SP Links Analysis Report (CSP012/13)
 - SPK Classifications Comparison (CSP048)
 - SPK Structure and Template (S1CSP005)
 - Structure/Credit Point Check (SDY004)
 - Study Package Flags and Quotas (CSP040)
 - Study Package Orphans Report (CSP014)
 - Study Package Result Type (CSP022/006)
 - Study Packages by Award Level Type (CSP002)
 - Study Plan Maintenance Report (CSP007/008)
 - Subject Credit Points by Faculty (APO024)
 - Subjects for Upversioning on Study Plans (CSP043)
 - Template Links (CSP029)
- Graduation / Alumni Reports:**
 - Alumni Graduation Extract (GRD059)
 - Ceremony Forecasting (GRD038)
 - Changes Check for Graduands (GRD026)
 - Enrolled Student List - Prizes (GRD042)
 - Graduating Students Extract (GRD052)
 - Graduation Pronouncements (GRD058)
 - Qualifications Verification (GRD053)
 - Weighted Average Report (GRD041/55)

A smaller inset window on the right shows the 'Menu List' and a filtered view of the 'Admission / Application Reports' section.

Prompt Page within CI

Admission Headcount by Staff

Report Output Format:

- PDF Format
- Excel Format

The screenshot displays the 'Student Reporting - Student Management - castst_ntier.ntier' application window. The main content area is titled 'Comment Report' and is divided into several sections for configuring report criteria:

- Mandatory Criteria:**
 - Comment Effective Date:** Includes 'From' and 'To' date pickers, both set to 03/07/2006 and 03/07/2009 respectively.
 - Live Data:** A dropdown menu with 'Live' selected and 'Snapshot' as an alternative option.
- Optional Criteria:** A section with a collapsed arrow icon.
- Student Optional Criteria:** A section with a collapsed arrow icon.
- Course Optional Criteria:** A section with a collapsed arrow icon.
- Subject Optional Criteria:** A section with a collapsed arrow icon.
- Comment Optional Criteria:** A section with a collapsed arrow icon.

At the bottom of the form is a 'Finish' button. The status bar at the very bottom of the window shows 'Done'.

Report Output within CI

MSA Class List

CITY CAMPUS

Autumn Session, 2009

Unit Name: Macroeconomics: Theory and Applications | 25555

Lecture						
WORKSHOP DETAILS		VENUS DETAILS			TIME AND DATE DETAILS	
Activity Code	01	CB06 03 26			Start Date	End Date
Unit Convenor	TBA	Capacity			24/02/2009	02/06/2009
		Room	Max Students	Current Reg	Start Time	End Time
		40	40	38	12:00:00 PM	2:00:00 PM
					Day Of Week	Tuesday
					Duration	1 hr
ID Number	Name	Email	Course	Name		
01076017	MS Sarah Elizabeth Elliot	vod@student.uts.edu.au	C10126	BBus LLB		
10876618	MISS Jenny Le	vod@student.uts.edu.au	C10026	BBus		
02048647	MISS Heather Frances Raazgever	vod@student.uts.edu.au	C10026	BBus		
10177210	MR Nafid Razi Islam	vod@student.uts.edu.au	C10219	BBusBSc		
10206071	MISS Miranda Sue Li	vod@student.uts.edu.au	C10026	BBus		
10291346	MISS Mary Solman	vod@student.uts.edu.au	C10020	BBus BA Int St		
10436234	MISS Rachael Lucy Nash	vod@student.uts.edu.au	C10020	BBus BA Int St		
10562790	MR Daniel Gary Kydd	vod@student.uts.edu.au	C10020	BBus BA Int St		
10594160	MS Samantha Ellen Alvarez	vod@student.uts.edu.au	C10020	BBus BA Int St		
10567941	MR Martin Allan Edward Borg	vod@student.uts.edu.au	C10020	BBus BA Int St		
10089601	MR Joel Carbone	vod@student.uts.edu.au	C10020	BBus BA Int St		
10560443	MISS Alessandra Marie Groch	vod@student.uts.edu.au	C10021	BBus BA Int St		
10163741	MR Wan Di Wu	vod@student.uts.edu.au	C10026	BBus		
10167702	MR Hitesh Dip Mehta	vod@student.uts.edu.au	C10026	BBus		
10179671	MR Amr Ahmad	vod@student.uts.edu.au	C10026	BBus		
10305047	MR Ayo Vweka Kaimara	vod@student.uts.edu.au	C10026	BBus		
10302274	MISS Ting Xu	vod@student.uts.edu.au	C10026	BBus		
10376349	MR Pomeera Arachthage Don Thimira Kasun Caldera	vod@student.uts.edu.au	C10026	BBus		
10414685	MISS Jessica Mendelsohn	vod@student.uts.edu.au	C10026	BBus		
10416434	MR Andreas Daniel Manne Fitzma	vod@student.uts.edu.au	C10026	BBus		
10421611	MR Oscar Joel Paterson	vod@student.uts.edu.au	C10026	BBus		
10427907	MR Theodore Drivas	vod@student.uts.edu.au	C10026	BBus		

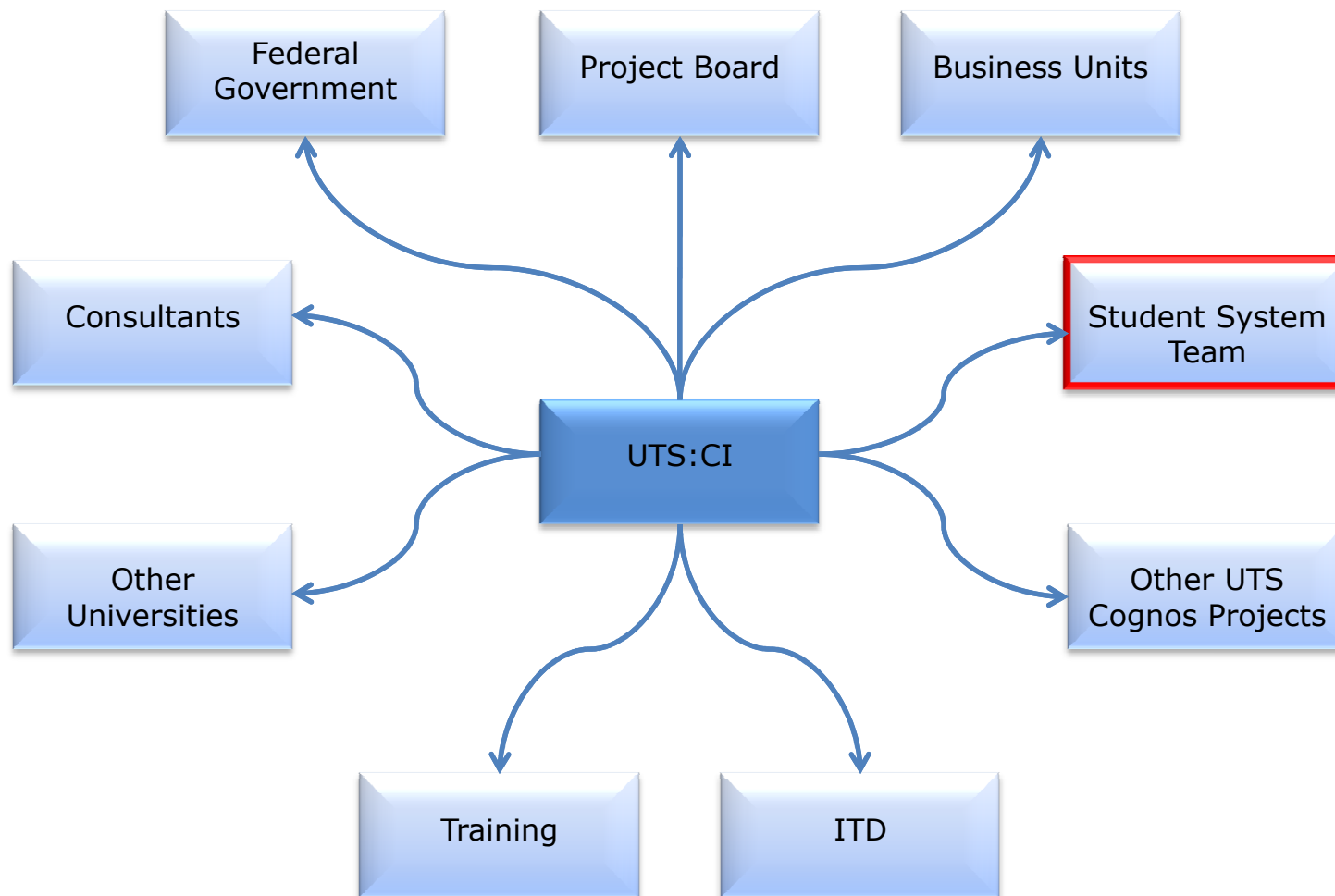


Influencing Standards



- Update Design Standards Document
- Documentation standards/templates
- Add to and utilise Metadata
- Utilise shared Communications Model
- Virtual Standards

Communication & Co-ordination





The Future

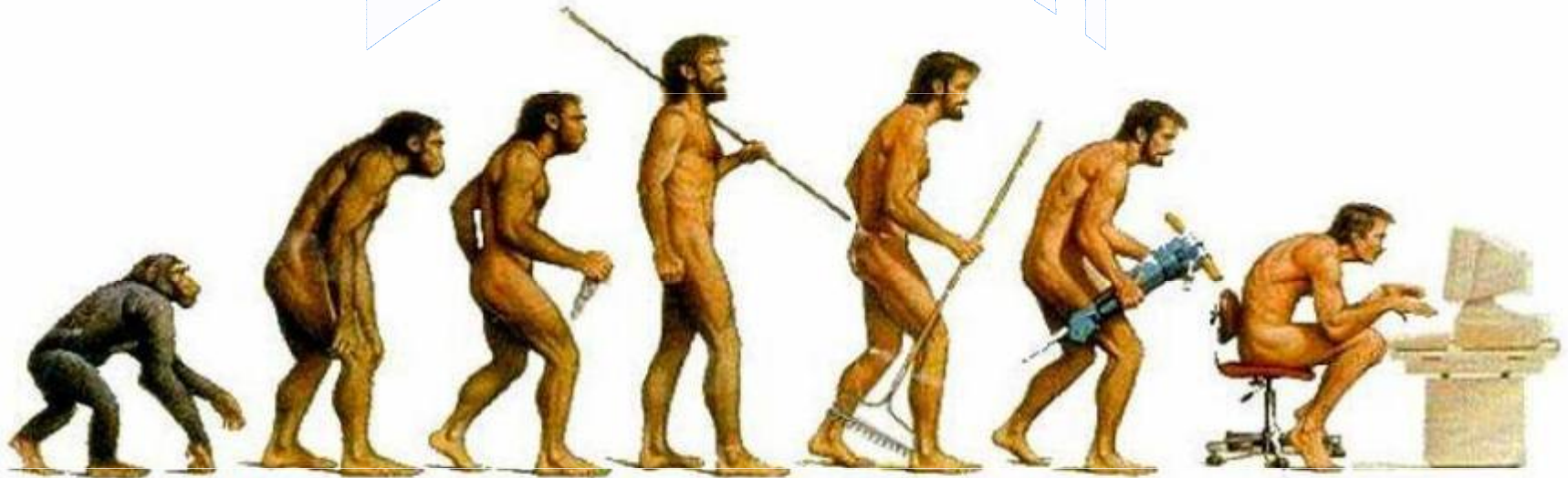


- Single Access
 - Senior Executive and Managers via Portal
 - Operational Staff via CI
- Ad hoc Analysis

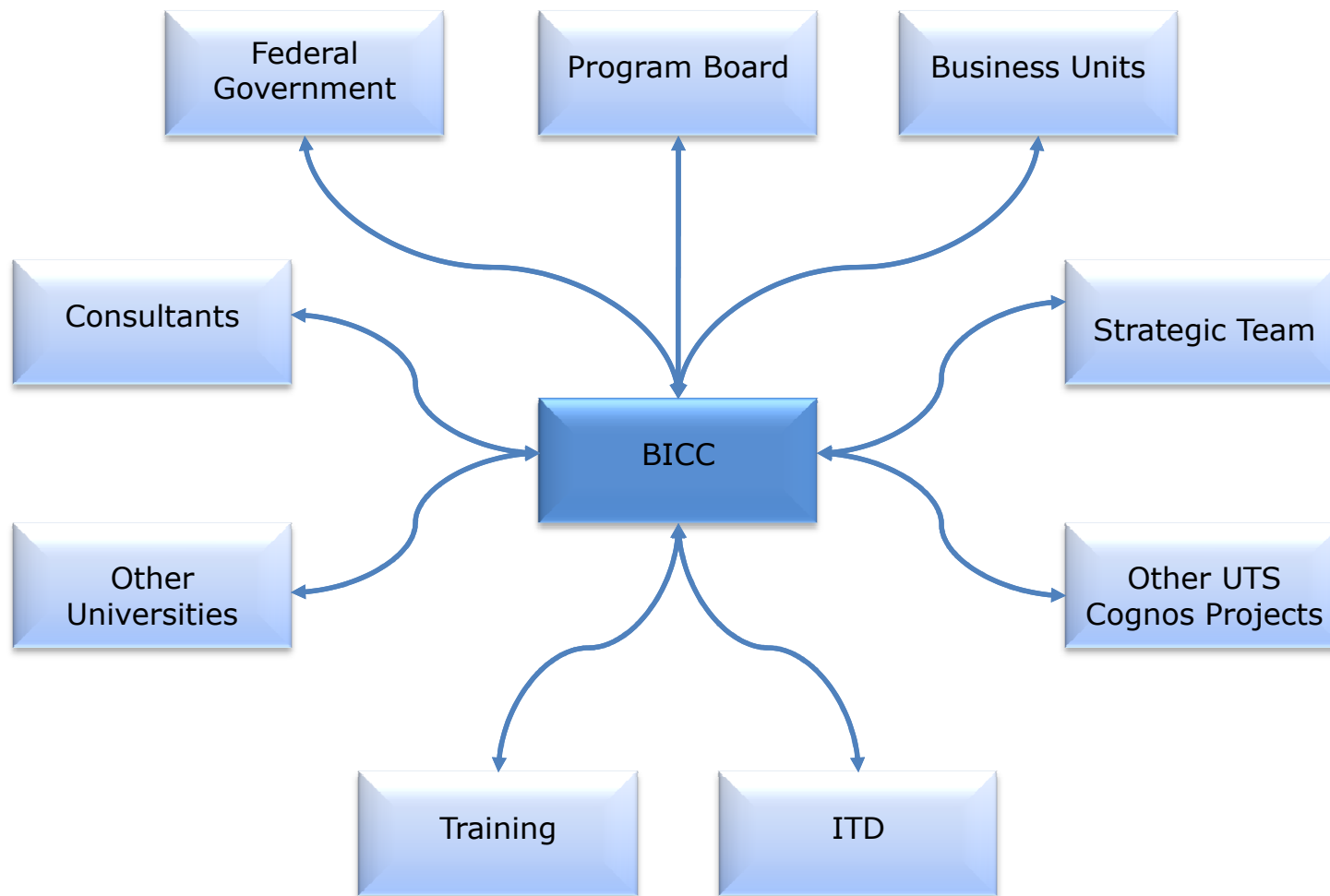
“One view of the truth”

Conclusion

Evolution



Communication & Co-ordination



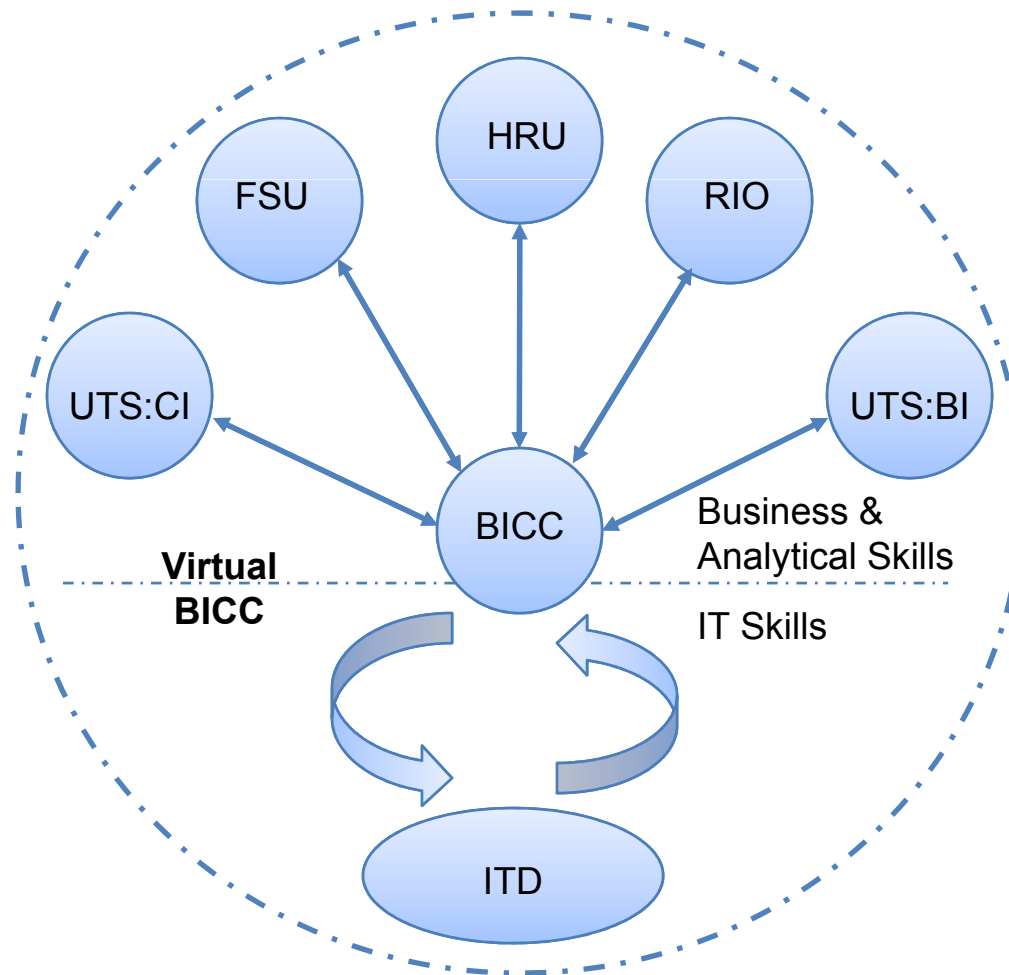


Business Intelligence Competency Centre (BICC)



Gartner Research defines a BICC as a cross-functional team with specific tasks, roles responsibilities, and processes for supporting and promoting the effective use of Business Intelligence across the organisation. The hope is that a BICC can act as a centre of expertise for Business Intelligence and drive and support its use throughout the organisation. This more holistic approach to BI encompasses more than just technology-it is part of an overall BI strategy.

UTS:BICC





Challenges still being Faced



- Achieving agreement on definitions to be used across the University
- Organisational structure
- Mapping the data from disparate data sources
- Integration of all UTS Cognos projects
- Communication (two way communication)
- Ownership and acceptance of ownership



Leaving Thoughts



- Communication! Communication! Communication!
- Senior sponsorship
- You have got to start somewhere
- Don't underestimate how disparate data sources could have become
- Reluctance to change; Expect confrontation

Thank you



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miranda.brookes@uts.edu.au

Further Reading:

- Business Intelligence Competency Centers – Gloria J. Miller, Dagmar Brautigam & Stefanie V. Gerlach
- The Data Warehouse Toolkit 2nd Edition – Ralph Kimball & Margy Ross
- Web search 'Gartner' & 'BICC'

