

10 Years in Institutional Research

Reflections from New Zealand

My background

As institutional researchers, we all bring a little bit of ourselves to the work that we do. It makes our research unique.

“How do you think the way you think?”

Why institutional research?

“We say WHAT we do, we sometimes say HOW we do it, but we rarely say WHY we do WHAT we do”

“Finding WHY is a process of discovery, not invention”

Simon Sinek, Start with why

The beginning – Engagement (2008)

- “Tertiary Education Organisations are increasingly utilising formal institutional research mechanisms to provide staff with information to support internal decision making and strategy development.
- “A coordinated approach for institutional research at Massey University will enable departments and sections to have timely and effective access to information which in turn will assist staff in their planning or development of strategies”.

First steps

- Consultation (about 3 months) – expectations, coordination, sharing of information and gaps
- Investigating what systems/internal datasets were available
- Finding out what external datasets/sources of information were available
- Developing a programme of institutional research, with milestones, outcomes and resources required

What we found (2008-9):

- A “perceived” lack of data analysis capability and capacity available within University management;
- Need for one source of the truth;
- Existing duplication efforts;
- Planning for the future focusing on the past;
- Poor internal communication;
- Need for institutional research to be transparent and effectively shared;
- Management of expectations (what can be realistically achieved);
- The data available was not integrated.

The beginning – Planning Stage (2009)

- Information gaps defined, reports proposed, work plan developed (remember: no dashboards back then...)
- Directory of internal IR (repository, how others can contribute, quality assurance process)
- Establishing ongoing communication and collaborations (mechanics of it)
- Framework for environment updates (how do we make sense of the external environment in a way that makes sense to us)
- E-zine (how do we effectively tell people what is happening out there)

The IR needs back in 2008-9

- Student and qualification profiles
- Student satisfaction survey analysis
- Māori and Pasifika profiles
- Staff profiles
- KPI analysis
- Participation rates, learner achievement information including completion, retention and progression rates
- International student profiles

The needs back then

- Research profiles (PBRF, research degree completions)
- Financial reports
- External data – Environmental outlook
 - Demographic changes (including regional analysis)
 - Technological changes
 - Labour market
 - Government/legislative changes
 - Tertiary Education uptake (participation growth and share)
 - Secondary school sector analysis and projections

The journey begins

- Reports get produced; information is disseminated – we are onto winners! We want more reports! We want less words and more charts!
- The University begins the process to develop its own data warehouse and enterprise reporting framework – performance reports as focus.
- Institutional Research is seeing as a “customer” / “stakeholder” of BI/Data Warehousing/Enterprise Framework. IR informs the development process but does not lead it.
- Our existing information reporting system is replaced with a new enterprise reporting solution (initial disruption and progress / change)

And then, it all happens...

- Funding caps (managing funding risks)
- Investment Plans (from Charters to Investment Plan, the Investment Approach) – 3 year plan on a two year cycle
- Introduction of sector-wide Educational Performance Indicators (moving away from internal measures to external measures)
- Introduction of Performance Linked Funding (managing funding risks)
- Improvements in technology (making access to data/analysis faster)
- IR needs remain – still doing reports and studies, plus all the above

And more...

- New strategies: Road to 2020, Road to 2025, MU 2018-2022
- Boom of international rankings – from Shanghai to QS and Times Higher. Explosion of sub-rankings, all requiring analytical support.
 - Increase in interest, substantial increase in the amount of external data collection
 - Understanding methodologies, evaluating results and providing recommendations
- New government priorities – requiring more information, analysis and monitoring (Plan Commitments, caps, formal and informal EPIs)
- Internal system changes – Development of a data warehouse, enterprise reporting (focus on ETL) and change in SMS system.
- Greater need for compliance, data validation and benchmarking

Change Drivers shaping IR – Summary in one word

- NZ Tertiary Education strategy and funding policies – investment
- Our own change in strategy – focus
- Technology improvements – more
- Pace and focus of our BI/Data Warehousing – data accuracy/trust
- Changes in internal systems (e.g. SMS change) - disruption
- External benchmarking - rank
- Becoming more international - competition/collaboration

The journey so far...

- We are still moderating expectations. BI/Data Warehouse provides the basis for analysis through data. The “so what?”, and “what does it mean?” reporting still needed.
- IR Reports come with insights and recommendations. IR is beyond the data analysis; it is about the application of knowledge (strategy). Clear separation in roles: BA that produce data reports and IR that would interpret the results and provide recommendations.
- Data visualization has not been well adopted yet; we are at the beginning of the journey. IR and other parts of the University are more advanced in the use of DV tools.

University Sector Profile



Updated annually in July

Sector Profile 2017.twbx

This Tableau report looks at five year EFTS and Headcount market trends and market share across the NZ University sector. Trend and market share data can be filtered by a number of single attributes.

Interactive Graphs

- EFTS Trends and marketshare for all NZ Universities
- Headcount Trends and Marketshare for all NZ Universities
- EFTS Proportions of various demographics for all NZ Universities
- Headcount Proportions of various demographics for all NZ Universities

What hasn't changed?

- The need for effective analysis of current information/data to enable good decision-making (this is beyond integrating data or making data available on dashboards);
- Data quality and integrity of analysis, research methods and, where required, effectiveness of recommendations made;
- IR practitioners to be technologically competent and be prepared for continuous learning, and work within a team that has a mix of qualitative and quantitative skills. More complex analyses require different sets of skills to enable good research practices;

What has changed?

- More compliance work – more monitoring;
- More external requests for information (e.g. ranking, benchmarking, etc).
- On the other hand, a wealth of tools and datasets available for analysis. More benchmarking.
- Planned work is very cyclical – teams fully committed. Unplanned work pushes workload. E.g. new ranking emerging (e.g. Times Higher Ed SDG ranking), new policy and/or compliance from government (e.g. Fees Free implementation)
- A wider range of tools and datasets available for analysis;

The journey ahead – what's the next stage? Strategy driven

- Information/analytical needs will remain unchanged, topics might change;
- More integration/coordination within and across teams to make better use of resources and more effective research;
- Data visualization great focus for our teams;
- Supporting our BI/Analytics team to simplify reports – user friendly;
- **Producing and disseminating “Environment Updates” becomes a priority**
- Sharing best practice in IR. More networking. Learning from others.
- Data warehouse x more dynamic analysis (e.g. data lakes)
- Data science, machine learning, AI → How will these change IR?