Building a Culture of Data Enablement: Embedding the Use of Data in an Organisation

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Culture is the game changer

‘Culture eats strategy for breakfast’
- Peter Drucker
Peter Drucker once said culture eats strategy for breakfast. We learnt this lesson early in our journey.

Peter Ferdinand Drucker (1909 – 2005) was an American management consultant, educator, and author, whose writings contributed to the philosophical and practical foundations of the modern business corporation. He has been described as "the founder of modern management".
Context
But before we begin a bit of organisational context: MoJ has between 3400-4000 staff nationally who provide the following services:

• Administration of courts and tribunals
• Support the judiciary – a constitutionally separate arm of government
• Collection of fines and reparations
• Administration of legal aid
• Public Defence Service – largest law firm in the country
• Wide ranging policy advice from criminal and family justice to civil and constitutional matters
• Negotiation of Treaty of Waitangi settlements
In the beginning

Important **ENABLERS** are needed ...

... so we can consistently deliver enterprise-wide **INSIGHTS** on ‘why, and what next’ – to support modern, effective people-centric services.

**L1**
**UNAWARE**

**L2**
**TACTICAL**

**L3**
**FOCUSED**

**L4**
**STRATEGIC**

**L5**
**PERVASIVE**

**2014**
**DESCRIPTIVE**

**DIAGNOSTIC**

**2018**
**PREDICTIVE**

**PREScriptive**
2014 – CEO returned from summer break and wanted a data driven organisation.

In 2014 we were low down the maturity curve and displayed the characteristics of low maturity many of you will recognise:

• It took a long time to get answers to seemingly straightforward questions – and the answers were varied.
• Decentralised structure delivering line of business reporting which was descriptive, backwards focussed and offered little or no insight and no enterprise view.
  • Eg: Static reports on A3 format contained around 30 graphs with tiny commentary that repeated what the numbers said
  • Eg: We knew the length of time a family matter was taking before it entered the court process; we knew the time the same matter took through the court process, but were unable to bring the ‘out of court’ and ‘in court’ data together to get the holistic view
  • Minister asked how the family reforms were working – could only count the descriptive inputs and outputs (in court and out of court) – didn’t know how this was connected to outcomes
• Data quality was variable.
  • Eg: System dates (when data was entered) were sometimes used in calculations rather than event dates
• When we did create a good product, it was not scalable or extensible.
  • Eg: Methodology used to calculate prison forecasts was unable to be used in performance reporting
• We were not getting enterprise value from the cost of BI services (high hidden cost).
• No data governance.
• Different data definitions, lack of consistent standards and procedures (no policy framework).
  • Eg: Source system data was modified by different ETL processes producing different results
• … and the list goes on!

What we wanted:
• Quick easy access to reliable data.
• Turn data into insight and insight into action.
• An enterprise view of our data that provided both operational and strategic insight for better informed decisions.
• Future focussed, predictive insight and analysis to enable proactive decisions.
The journey
This journey was incremental. We had a good understanding of the desired outcomes and a route to getting there. BUT, we did not know or plan all the details.

Our journey started with an enterprise information strategy that was closely aligned with our business strategy. We soon realised that having a good strategy did not produce change – cultural barriers where inhibiting progress. We needed to change!

Driven from the top by the Chief Executive, we embarked on a journey of cultural change starting with our leaders. Change did not happen overnight. It took time, patience and commitment.

Having a clear strategy enabled us to be opportunistic when unforeseen events happened, and use them to further improve our maturity. It also kept us focussed on the bigger picture and the desired outcomes. Eg: structural change in our operational service delivery group was used to focus leaders’ attention on what the data was telling us across services. Such as, a rise in legal aid was a forerunner of higher court volumes; increase in admin stage leads to increase at trial stage which we can predict; first big test of trust in the data

Change was leader-led and business value focussed.

Turning data into insight (and insight into action) was a key priority for the organisation.

With a data-focussed leadership culture, we were able to bring change and build capability built on the values, culture and outcomes we were seeking. This was linked to our organisational RISE values (Respect, Integrity, Service, Excellence).

Capability development was multi-disciplinary, collaborative and focussed on both soft and technical skills. Data management and information delivery was the foundation for insights and analytics.

Only when a new culture had been established in the data and analytics teams did we turn our attention to tools and technology.

Putting good technology into a dysfunctional environment usually fails and discourages further change. We focussed on getting the environment right so that tools and technology could enable the next step change.

Technology implementation was not an end in itself. It was always positioned as a business focussed change and built on the preceding cultural and capability development.

We are now beginning the stage of embedding the use of data and analytics. Data has started to become a strategic asset, with its value increasing with use. We have refocused our strategic priority in this area to “using data insights to deliver better services”.

Managers are being held accountable for using data in operational and strategic decision-making – using data insights to deliver better services.

We are now exploring the innovative use of broader data sets (including voice data) to gain insight and answer specific business questions.

We are also beginning to explore exciting new possibilities in advanced analytics with a responsible attitude towards privacy, human rights & ethics.
How did we climb?

- **Strategy**
  - Focused
  - Specific
  - Aligned to business strategy

- **Leadership Culture**
  - Centralise and co-locate
  - Common purpose
  - **Committed leadership**
  - Behaviours & skills
  - Multi-disciplinary work groups
  - Diversity

- **Capability**
  - The light bulb moment: we have to change!

- **Tools & Technology**
  - Operational use
  - Strategic asset
  - Convergence
  - Advanced analytics
  - Privacy, human rights & ethics

- **Embedded use**
Now for the practical part of the story – what did we do and what did we learn along the way?

Strategy
• This is not a presentation about strategy, so I am not going to linger here, but we have a focussed and specific strategy aligned with our business strategy with a clear description of where we want to be and what good looked like (L2-L4).

• But for months.... Nothing changed! Culture was eating strategy for breakfast.
Culture (Leadership)
Culture (Leadership)
• This was a change driven from the top by the Chief Executive.
• Strategy alone did not deliver the desired change.
• We had to let go of a siloed LOB ‘cottage industry’ approach.
• Bust some cherished myths and slaughter some sacred cows (facts based conversations).
  • Eg: Operational system change to add simple validations was perceived to be too difficult and too expensive so very complex business rules were coded in ETL processes but not consistently applied. We implemented a ‘Minor Works’ operational system change process that delivered fortnightly system change releases used to add data validation in source systems.
  • Eg: There was a widely held belief that late start times were driving courts to sit late. Data clearly showed that court sitting did not start late, but additional adjournments was driving the late sitting times.
  • Adjournments are important in improving timeliness through the system. Good adjournments (more evidence; more discussion between parties) & bad adjournments (administrative issues – people don’t turn up; right info not available). Leads to disruption in people’s lives – justice delayed is justice denied.
• Leadership had to make a leap of faith and embrace good practice principles (governance; data management; data quality; linking data to business processes; business accountability). This was the light bulb moment: we have to change our configuration; but more importantly, we have to change the way we think about data, its importance and how we use it.
• Executive leadership’s role: Champion change; Focus on investing in the enablers (people, process, data, technology) AND demand data & analytics products and services. Established a CDO capability and formalised technical capability.
• Appoint the ‘right’ executive sponsor – the right person at the right time (be prepared to be flexible).
Capability
Capability
• Centralised and co-located teams.
• Built capability aligned to focussed strategic outcomes with clear roles and responsibilities (functional model – data mgt; info delivery; operational insight, advanced analytics – Why? What if?)
• Built the functional model to aligned to the organisation’s culture. This may look different for other organisations as there is no single ‘right’ answer. Some people found it hard to come on the journey
• Co-location alone was not enough. Committed leadership at all levels with a common purpose was the catalyst of cultural and behavioural change.
• Focussed on developing behaviours and interpersonal skills as well as technical skills. Business results orientation; relationship management; influence, teamwork.
• Formed multi-disciplinary work groups focussed on answering specific business questions/solving specific business problems. E.g. business metrics.
• Encouraged and building diversity (backgrounds, skills, experience, personality types, work preferences & styles). Recruited to a different profile.
• Storytelling (the ability to communicate data in context) – changed the perception of value and consumption
• Removed single points of failure.
• Governance: tiered (exec; working group, community of practice). This is hard – took a number of iterations; we changed the membership and level; creating a policy framework that can be operationalised.
• Been able to increase the enterprise use of data and analytics – E.g. people data
Tools & Technology
Tools & Technology

- We focussed on two use cases for BI tools (BI continuum):
  - Enterprise reporting – governed data for operational management insight and decision-making (self-service) – Mode 1. Minimal data skills
  - Insight and analytics – verified and non-verified data for insight and advanced analytics – Mode 2. Advanced data skills
- Users didn’t know what good looked like. Would have asked for a faster horse.
- Proof of concept (PoC) approach to define requirements – we prototyped analysis and reporting needs using modern tool sets with real users based on real business data and real business questions. Eg: Being able to focus on timeliness of serious harm cases by presenting the data based on various segmentations and drill downs; being able to look at the geographic spread of technology incidents correlated to court case volumes
- PoC itself delivered business value and answered real questions.
- Co-designed the business case with vendors (more accurate).
- This approach assisted vendor product development.
- Operating model and business-driven change management was in scope and central to the technology implementation.
- Focussing on developing products and services roadmaps.
Embedded use
Embedded use (the fruition of our strategy AND next steps into our next journey)

- Data only becomes valuable when it is used. It is an asset whose value increases with use.
- Self-service use is embedded into operational and management practices. Managers are held accountable for business use of data.
- Use of BI tools is closely aligned with data quality improvement (which is business owned and driven). Took time to tell people why it is important in outcomes terms (e.g. sentence calculation, reparation).
- Training includes teaching managers data literacy and provides a managerial toolbox to help answer the “so what?” question.
- There is leadership commitment and accountability for embedding the operating model for both use cases. Data is just another expression of what they are doing operationally.
- We are extending the use of data and data sources: moving into text and content analytics for insight.
- We are exploring possibilities for the future: decision support; probabilistic scheduling; machine learning.
- Content analytics; data analytics as a service (partnering with vendors and other agencies – data “hotels”; analytics to the front line)
- All enabled with PHRaE (“just because we can, doesn’t mean we should”)
- Delivering convergence of IM/BI; embedding use (up, across, out) and info as a strategic asset.
Questions

“Every mountain top is within reach if you just keep climbing.”
- Barry Finlay

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