

Government Resource Planning (GRP) Digital Transformation and Big Data Science

Situation

- Public Financial Management (PFM) leaders are encouraged to make evidence-driven decision
- Governments possess significant amounts of internal financial and non-financial data to enable decision-making
- Data is often considered as the “new oil” because of the need to refine information to be made useful for decisions¹
- “Big Data” technology exists for governments to leverage data from external sources, combined with unstructured data from documents, audit trails, social media, imagery, and the Internet of Things (IoT) to augment decision support
- Financial Management Information Systems² (FMIS) can provide core fiscal structured data for data science

Complication

Governments often experience:

¹ Attributed to [Clive Humby](#)

² Commercial-Off-The-Shelf (COTS) FMIS software designed exclusively for PFM, like the [FreeBalance Accountability Suite™](#), is known as Government Resource Planning (GRP)

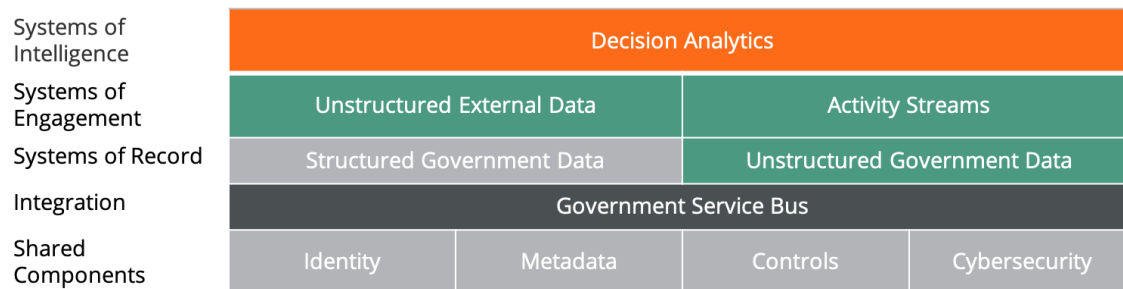
- metadata inconsistency across data sources, making data science and analysis difficult
- information overload leading to confirmation bias and the preeminence of dogma over data
- data silos within governments that prevents information sharing for decision analysis across Ministries, Departments, and Agencies (MDAs)

Question

How can governments and finance ministries build Big Data solutions supporting evidence-based decision-making?

Solution

Big Data analytics drives digital transformation, particularly **Systems of Intelligence**. The key to fiscal metadata enabling integration is the Chart of Accounts.



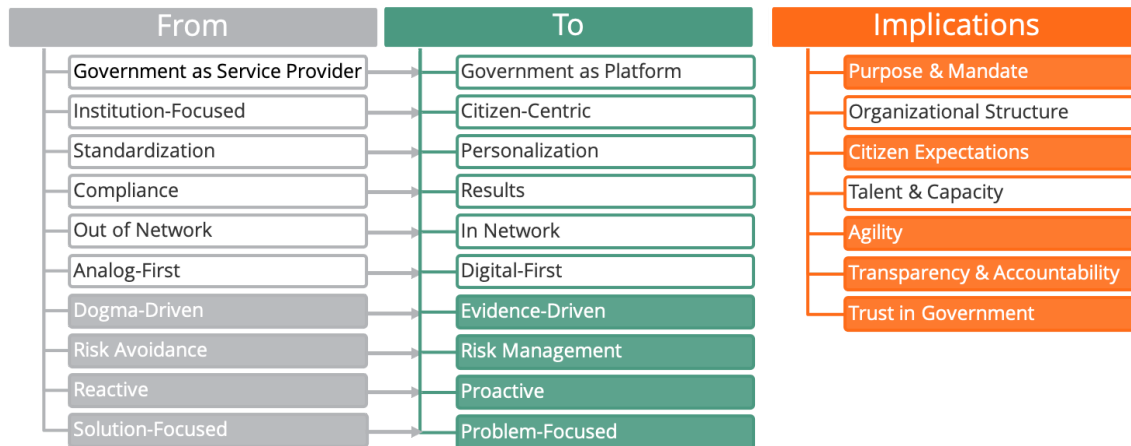
Governments leverage the combination of FreeBalance [advisory services](#) to achieve fiscal evidence-based decisions:

- [Governance Valuations](#) updates Chart of Accounts and other metadata, including performance structures, across budget cycles, including the integration of macroeconomics with data science
- [Government Resource Planning](#) (GRP) evaluations recommends technology infrastructure and interoperability updates to support decision analytics
- [Modern Ministry](#) provides the capacity building, organizational structure upgrades, and change management necessary to leverage evidence and data science

The characteristics of a digitally-transformed modern finance ministry, enabled by Big Data are:

- **Evidence-driven** with multi-year monitoring and evaluation
- **Risk management** approach by leveraging evidence to mitigate risks and leverage innovation
- **Proactive** through early-warning alerts and visualization in near real-time

- **Problem-focused** through data analysis to identify policy and budget solutions that work in unique country contexts



Big Data analytics enhance transparency, accountability, and trust in government. Analysis and open data supports transparency. Oversight agencies leverage evidence for accountability. Improved government effectiveness through evidence-based decisions improves citizen and business trust.

Appendix: Supporting Material

Supporting FreeBalance blog entries

- [Why is Public Financial Management the Brain Behind Country Resilience?](#)
- [Government Digital Transformation: From Systems of Record to Systems of Innovation](#)
- [How to Get Government Digital Transformation Right](#)
- [Interoperability in Public Financial Management Systems](#)
- [What is Government Digital Transformation?](#)
- [Why are Governments Digitally Transforming?](#)