Celcom rolls out data governance program, laying a foundation for greater value

Who?  
Celcom Axiata Berhad (Celcom) is one of six operating companies within the Southeast Asian telecoms conglomerate Axiata Group, which provides telecommunications services across 10 Asian markets and has become a champion of digital transformation in the region. Celcom serves almost 13 million users across Malaysia.

What?  
Enterprise data governance program implementation

How?  
Built strategic and operational components of data governance, engaged key employees to activate programs across the organisation, and used TM Forum Digital Maturity Assessment to baseline and measure progress

Results

- Increased data governance score in TM Forum Digital Maturity Assessment from 30% in January 2019 to 95% in November 2019
- Established common strategic frameworks and standard operational workstreams where scattered data governance practices had previously existed
- Trained 52 data governance champions from all parts of the organisation, defining four data roles and identifying individuals to fill them
- Enhanced capability to protect and leverage data, reducing liabilities while expanding the potential to drive value through better analytics

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Celcom launched its data governance program in 2018 after having built a centralized data lake for the collection and use of data across its business. High-level objectives of the governance program included ensuring data availability, usability, integrity and security. The business goals included the development of a single source of truth, developing descriptive, predictive and prescriptive analytics models as well as risk mitigation purposes, i.e. the reduction of duplicated data across the organization.

Sunny Nirala, who was Tribe Master and led Celcom’s Cross Functional Team (CFT) on Enterprise Data Governance (EDG) said, “The primary objective was about protecting the data of the people we serve. In a world where data breaches are happening, we wanted to be in a place where we could reassure customers, and of course avoid getting fines, but also knew we needed to have a practice around this that would put us on the path of excellence.”
Celcom’s CFT on EDG focused on two broad areas: Strategy and Operations. The overall team was comprised of 52 individuals, broken into eight squads that worked within scrums on three strategic and five operational pillars of data governance.

The three strategic teams focused on building long-term frameworks, ensuring that an overarching operating model, data privacy and protection, and data quality policies were in place. The operating model team addressed questions such as what a data governance organization would look like. It leaned on the DAMA Data Management Book of Knowledge (DMBoK), which the Axiata Group company had endorsed. The data privacy and protection team looked at the applicability of certain models, such as the EU’s Global Data Protection Regulation (GDPR). The data quality team addressed how to keep data accurate, consistent and usable over time.

The operational teams addressed five components and were reviewed on a periodic basis given changing circumstances:

- **Roles and assignments**
  The roles include data stewards (who ensured that data is correct), the data owner (who holds accountability), data custodians (who ran the systems) and data citizens (who used the data). Assigning particular employees to fill these roles helped in bringing this work stream to life.

- **Book of Definitions**
  Similar terms may have different meanings, which can impede progress; the effective use of data requires a common and current language.

- **RACI**
  The responsible, accountable, consulted and informed (RACI) model for linking processes with offices or departments during an organisational change.

- **KPIs**
  Which metrics matter most in data governance? They could involve adherence to policy, customer experience, risk reduction, data quality, etc.

- **Tools**
  Software tools to help improve data quality, automate previously manual activities and address other issues, such as automated data lineage, data profiling, stewardship and more.
The output of this program was not only the eight documents addressing these topics, but also the approach taken, in particular the team’s engagement in scrums, sprints and daily standups. The overall effort was framed and influenced by TM Forum’s Digital Maturity Assessment, which relies on TM Forum best practices and includes governance as one of its ten operational areas. The completion of the program and its transition into business-as-usual (BAU) operations was marked by a “Data Festival” event which hosted a number of external speakers along with various stands related to cyber security, data management, and data related entertainment.

Moving forward, Celcom has operationalized the newly set up Enterprise Data Governance department, under the Strategy & Value Creation Office.

### Program results

The most significant metric associated with this program resulted from the TM Forum Digital Maturity Assessment. An external assessor set a baseline in January 2019 and then repeated the test in November 2019 to measure progress. Over that ten-month period, Celcom’s data governance score rose from 30% to 95%, indicating a widespread and significant growth in relevant documentation and actual adoption.

Several factors contributed to the dramatic increase in Celcom’s data governance score:

1. Although data governance had existed in a few pockets across the organization prior to this initiative, the new frameworks and work streams set standards and company-wide expectations.
2. Participation within the eight scrum teams indirectly trained participating employees to become data champions in their respective departments.
3. By taking better care of data, Celcom was positioned to boost confidence amongst customers and internal teams, driving an increased value into the business from both ends.

Another result has been to advance Axiata Group’s goal of becoming a digital leader. "Data really is at the center of the company now," said Nirala, who also led and managed the data lake program in 2018. "It’s quite humbling to see something start from zero to where now hundreds of people rely on it." Digital transformation may be the target, but getting there requires hitting many intermediate goals.

### Lessons learned and next steps

Celcom learned that changing a fundamental business activity, such as its use of data, requires continuous and ongoing engagement with a wide range of employees. Linking new processes with individuals is another way to overcome inertia and deliver a more lasting change. As for technology, it can both disrupt and simplify, especially where automation is involved. Framing such deployments can accelerate its adoption.

Meanwhile, the digital mission of Celcom continues. After creating a data lake and building a data governance infrastructure, the third phase of its digital transformation involves enhancing data quality. Celcom has already laid a solid foundation for achieving its next goal.