Ushering in a New Era of Connectivity with AI:
Celcom Improves Data Governance to Accelerate 5G Innovation

“Informatica AI and ML capabilities have greatly improved our intelligent data governance processes. As an example, one report which previously took more than 150 man hours to create, now takes a fraction of the time.”

Jacky Cheong
Head of Enterprise Data Governance
Celcom Axiata Berhad

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<th>Goals</th>
<th>Solution</th>
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<td>Strengthen information governance to become an innovative digital organization driven by trusted data</td>
<td>Use Informatica Axon Data Governance tool to build a foundation for enterprise data governance defense and offence model, where enterprise dashboards are available to monitor the data assets</td>
<td>Speeds up data deduplication with data quality check up to 30x faster, consequently driving faster decision making with governed data</td>
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<td>Creating a data driven culture whereby the organizations prioritizes data insights, quality and rules, which is pivotal in creating an accountability model of Data Owner &amp; Stewardship</td>
<td>Enable enterprise-wide data discovery by classifying and organizing data assets with Informatica Enterprise Data Catalog and assigned ownership, KPI, policy and process workflow</td>
<td>Sets foundations to enable data protection, Risk and Privacy management for data asset helping Celcom become a more trusted brand</td>
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<td>Make smarter business decisions and ensure regulatory compliance with faster reporting</td>
<td>Proactively monitor and improve data quality of critical Data Elements and customer data in source systems and data lake which has been onboarded into Axon</td>
<td>Helps Celcom transform data into rich insights to create more monetization opportunities and the analytics insights will create meaningful customer experiences</td>
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<td>Improve data quality through automation to reclaim employee time for more strategic tasks</td>
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<td>Identify poor quality data in existing systems and trigger remediation to improve overall customer data quality</td>
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Informatica Success Story: Celcom Axiata Berhad

Celcom is creating a more connected world — one that changes the way people live, work, and play across Malaysia. The company already provides the most extensive mobile coverage in the country, giving subscribers unmatched speed and quality as they work and learn, stream movies, play games, and talk with friends and family.

But its sights are set on the future and the potential of 5G. Celcom envisions smart cities that are safer, cleaner, and more efficient. It sees the Internet of Things (IoT) linking everything from mobile devices to driverless cars and smart home technology. It pictures a healthier society enabled by telemedicine and Agriculture 4.0. In this connected future, Celcom strives to be more than a telecommunications provider. It aims to grow its business through innovation, developing digital products and services that will bring this vision to life for people and businesses throughout Malaysia.

To do this, Celcom needed to become a data-driven organization. The company knew data was the key to making smarter decisions about how to steer the business, where to invest in new products and services, and how to meet the needs of customers. Virtually every area of the business stood to benefit from deeper insights into customer behavior and operations. With more than 8 million subscribers, Celcom had plenty of subscriber and service data to tap into. Having that much data, it was clear to Celcom that it needed enhanced capabilities to truly maximize the value of its data.

Trustworthy and Accessible Data

Celcom’s multiple divisions and source systems made for a complex data landscape, bringing about multiple versions of truth. With information being frequently extracted and combined for reporting and data science purposes, Celcom needed to preserve the lineage and integrity of data as it moved around while maintaining clarity on the ownership of the data. The company also wanted to minimize time-consuming, manual data reconciliation and remediation processes.

One of the most important ways Celcom uses its data is for regulatory reporting, particularly with the Malaysian Communications and Multimedia Commission (MCMC), which oversees the country’s communications and multimedia industries. Without automated data governance processes, one report took around 150 man hours to create. At times, employees had to extract, transform and load (ETL) the data from several source systems to account for data inconsistencies. Employees also had to manually check for data quality issues for up to 1 million subscribers prior to generating the final report.
“When we formalized our data governance program, we had no proper data dictionary, a lack of metadata, and limited data discovery and integration capabilities,” says Jacky Cheong, Head of Enterprise Data Governance at Celcom. “Naturally, data integrity suffered, so it took us a long time to produce critical reports. In order to become the most inspiring digital organization in Malaysia, we needed to use artificial intelligence (AI) and machine learning (ML) to enable more intelligent data governance.”

**Strong Data Governance and AI is the Foundation for Data-Driven Decision Making**

Given the complexity and scale of Celcom’s data, it needed an intelligent, automated data governance solution that would allow it to build a large-scale catalog and dictionary — helping data owners organize their data, preserve its integrity and lineage, and make it more accessible for insights and reporting. Based on ease of use and recommendations from industry analysts, Celcom chose Informatica Axon Data Governance, which integrates with Informatica Enterprise Data Catalog and Informatica Data Engineering Quality for an end-to-end solution. Celcom is the first telco in Southeast Asia to deploy Informatica Axon Data Governance into production, giving the company an advantage over competitors when it comes to providing data-driven services.

“We are leveraging the competencies and AI/ML capabilities of Informatica to assist us in building a sustainable, automated foundation for data governance,” says Cheong. “Working closely with Informatica Professional Services, we were able to deliver a proven solution to the business in just six months.”

With a central, enterprise-wide solution for data governance, data owners and data stewards can keep information clean, organized, accurate, and accessible for business intelligence across Celcom. Therefore, Celcom will be able to move to a position where there is no more confusion over where a dataset came from and whether it can be trusted. The solution’s AI-powered catalog captures and stores metadata, helping users discover the information they need and know precisely where it comes from. Informatica Data Engineering Quality scans for quality and consistency on connected systems, that enables Celcom to count on the accuracy of its data.

**Faster Reporting Drives Innovation, Increases Efficiency, and Enhances Compliance**

A solid foundation for data governance is key to Celcom’s digital transformation. With trusted data at its fingertips, it can build the future of mobile connectivity, with inspiring and engaging customer experiences. In the short term, that includes analyzing customer data to find out what subscribers need — boosting satisfaction and retention with more responsive customer service. It also includes launching personalized...
gaming and entertainment services to take advantage of the speed and scale of 5G networks, which will soon be ready for the public.

“We have ambitious plans for new digital services, and enterprise data governance is our key to success,” says Cheong. “Informatica advances our goal of reusability, giving us data that is more timely, accurate, complete, accessible, useful, and valuable. That helps us comply with industry regulations, improve data transparency, reduce risks for fines, improve collaboration, and enhance privacy and security.”

Due to process optimization, automation, and data integration, the report that previously took around 150 hours to produce now takes only five hours. This is just one example of how Informatica is enabling faster decision-making and helping Celcom respond quickly to regulators.

Cheong concludes, “Informatica solutions have greatly improved our regulatory reporting processes, and we have seen a huge improvement on the turnaround time for reports.”

Inside The Solution:

- Informatica Axon Data Governance
- Informatica Enterprise Data Catalog
- Informatica Data Engineering Quality
- Informatica Data Engineering Integration