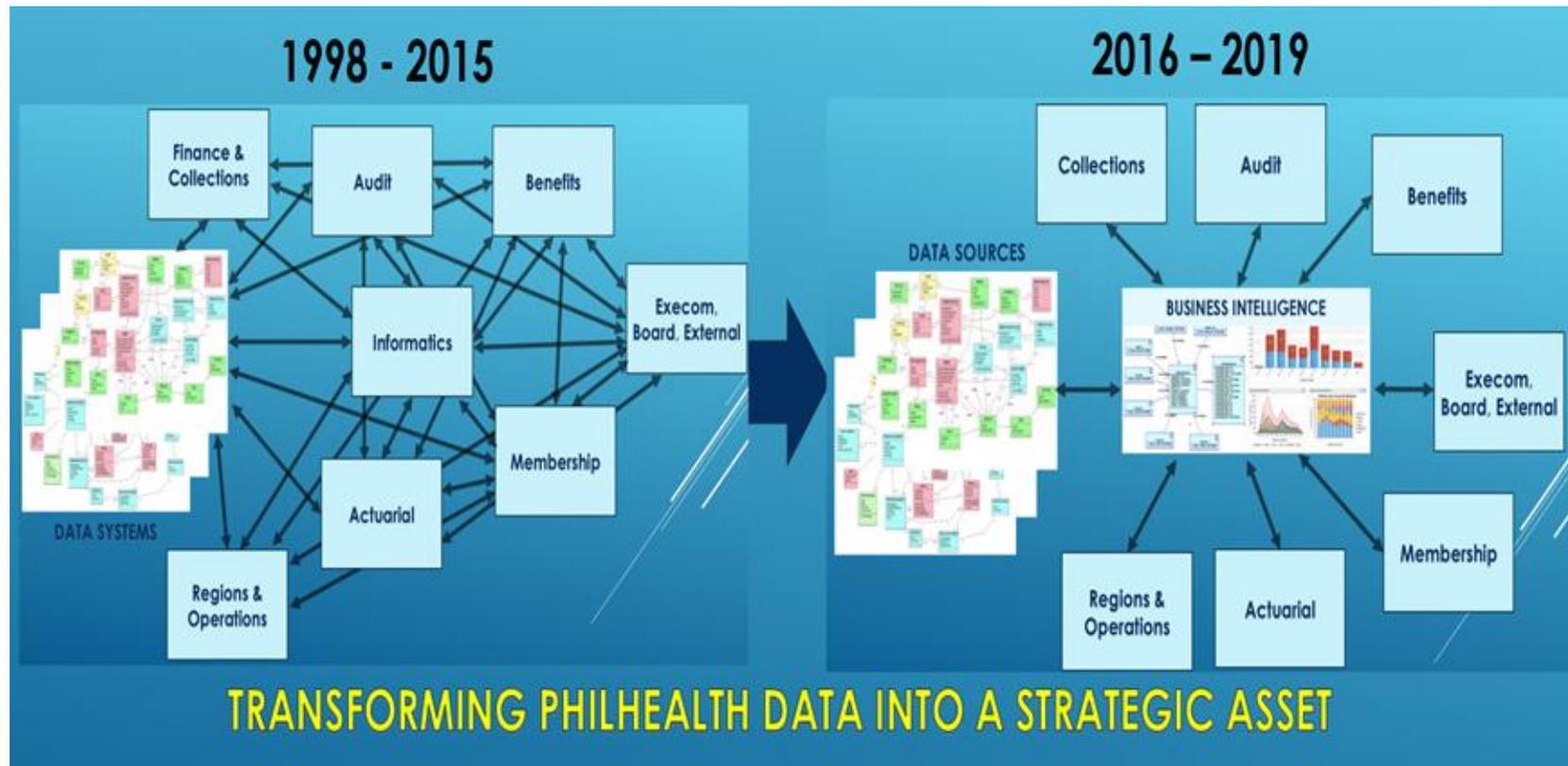


PhilHealth Data Driven Transformation

(Information Visionary)



OBJECTIVE & NATURE OF PROJECT



Transform fragmented data and information processes into a 'single source of truth' solution to support all levels of decision making.

OBJECTIVE & NATURE OF PROJECT

SSOT

Trusted Data is managed and integrated to provide the right information and insights for all decision-makers across PhilHealth.

Traditional practices and processes have to be changed ...

- Replace silo and overlapping data consumption → highly collaborative and efficient analytics process that clearly defines the roles and responsibilities of all information consumers and data processors.

OBJECTIVE & NATURE OF PROJECT

Traditional practices and processes have to be
changed ...

SSOT

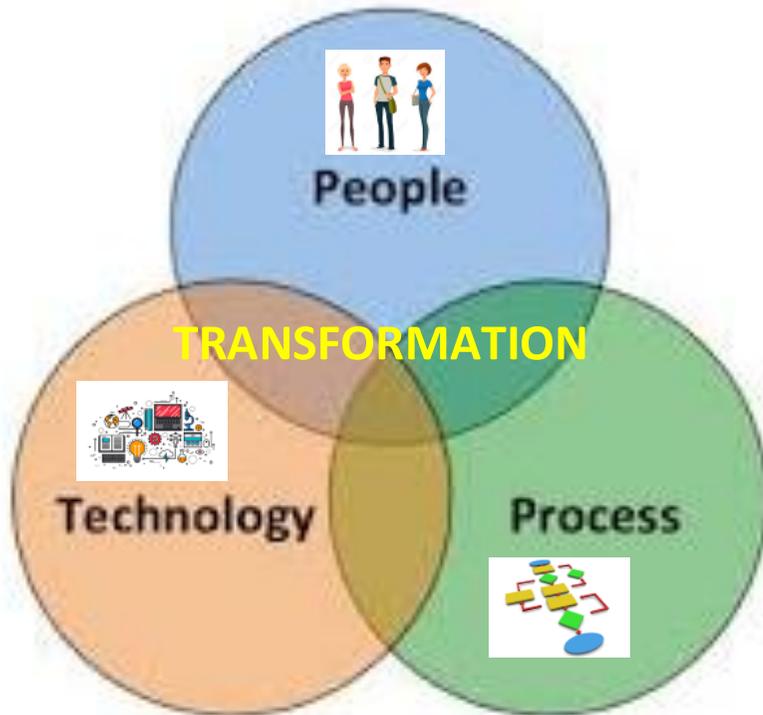
- Integrate and standardize data extraction and reporting into a **common decision-support solution**.
- Replace incompatible reporting tools by a standard tool to allow decision makers to efficiently focus on **actionable information**.

OBJECTIVE & NATURE OF PROJECT

Traditional practices and processes have to be **SSOT**
changed ...

- Decompose key performance indicators into granular indicators for **effective setting, monitoring, and management** of all processes and resources.
- Transition manpower resources into **knowledge workers and objective decision makers**.

OBJECTIVE & NATURE OF PROJECT



PROCESS changes → new data management, data governance, and data quality approaches alongside enhanced business processes.

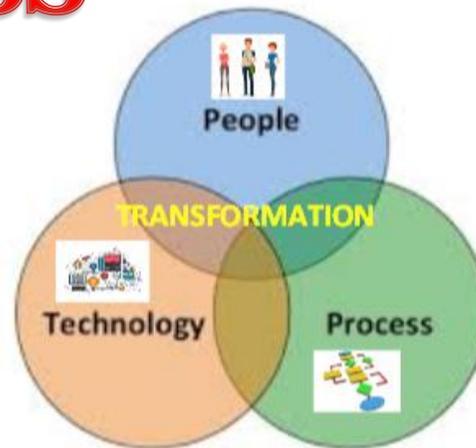
PEOPLE → new and revised organizations to create and support knowledge workers at all levels and across business units

TECHNOLOGY changes → use of state-of-the-art analytics and cloud solutions to integrate and visualize PhilHealth data.

OBJECTIVE & NATURE OF PROJECT

The success of PhilHealth through trusted and timely data and insights, is of paramount importance in the delivery of **citizen-centric** and **quality benefits** and services while improving **operational efficiencies, fraud control**, and various mission-critical activities

SUCCESS



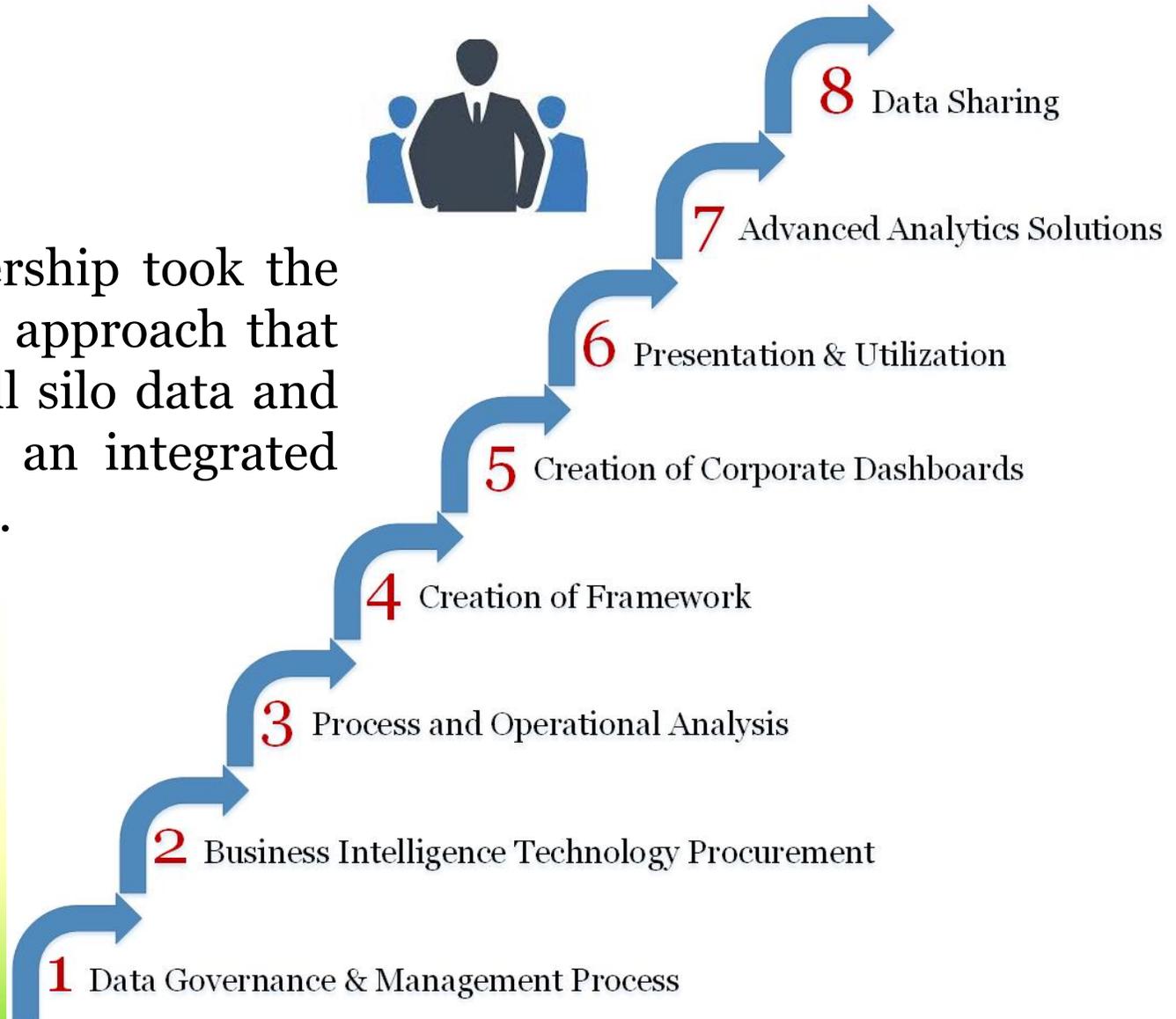
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TECHNOLOGY changes → use of state-of-the-art analytics and cloud solutions to integrate and visualize PhilHealth data.

TRANSFORMATIVE BUSINESS INTELLIGENCE STEPS AND SOLUTION

PhilHealth senior leadership took the old step of adopting an approach that will gradually replace all silo data and reporting systems with an integrated decision support system.

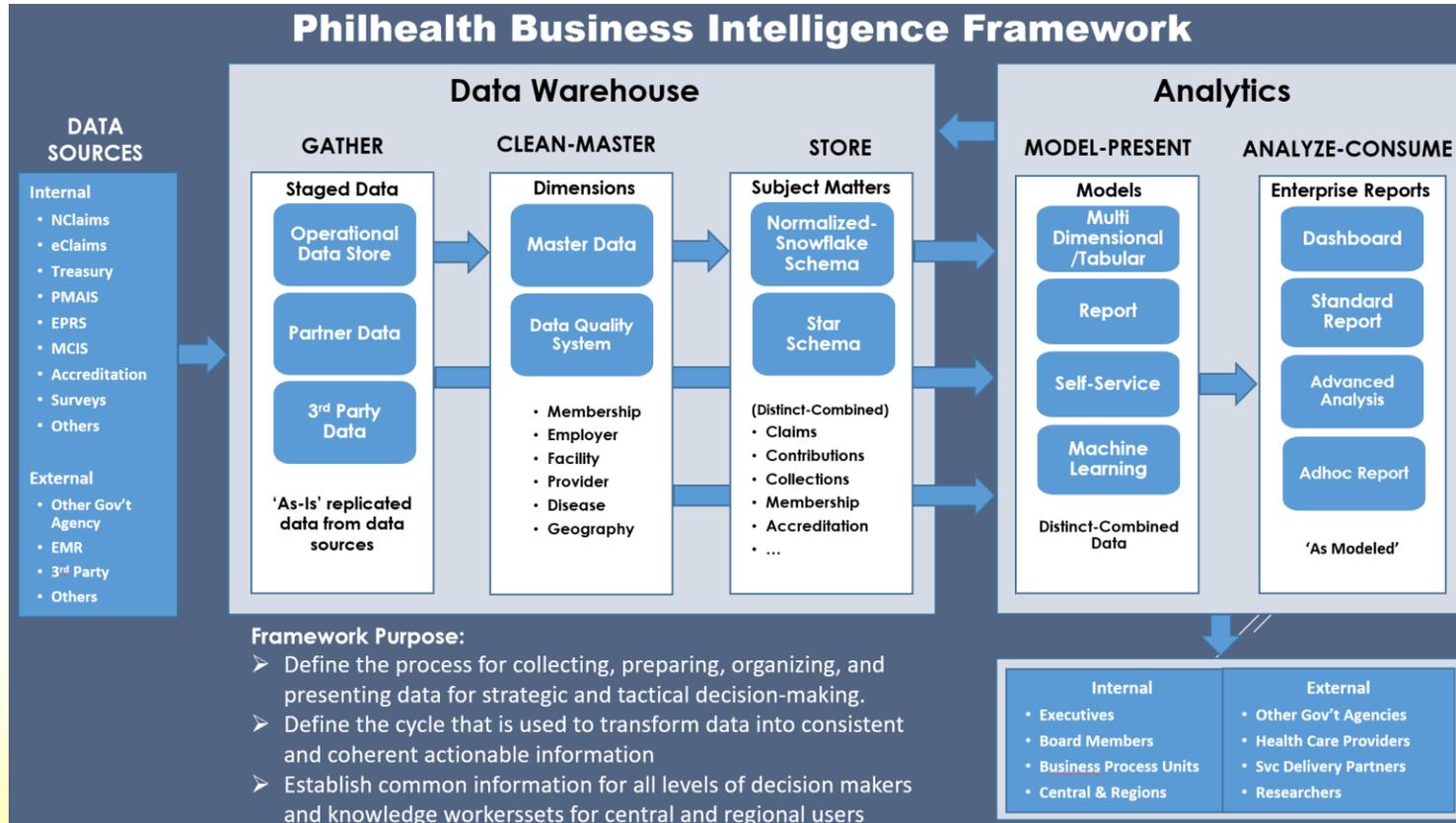


TRANSFORMATIVE BUSINESS INTELLIGENCE STEPS AND SOLUTION

- 1) Creation of a data governance & management process led by executive-level leaders -- steer the creation of new-age solutions along with appropriate budget, manpower, and policy.
 - Enterprise reporting, data quality management, and Corporate Dashboard policies have been crafted to date.
- 2) Procurement of the best business intelligence technology as rated by Gartner and similar global technology expert organizations -- optimal data integration and processing while providing unprecedented, rich, and friendly information consumption experience for users.
- 3) Assignment of leaders and subject matter experts from various units -- conduct analysis on priority process/program and operational issues.

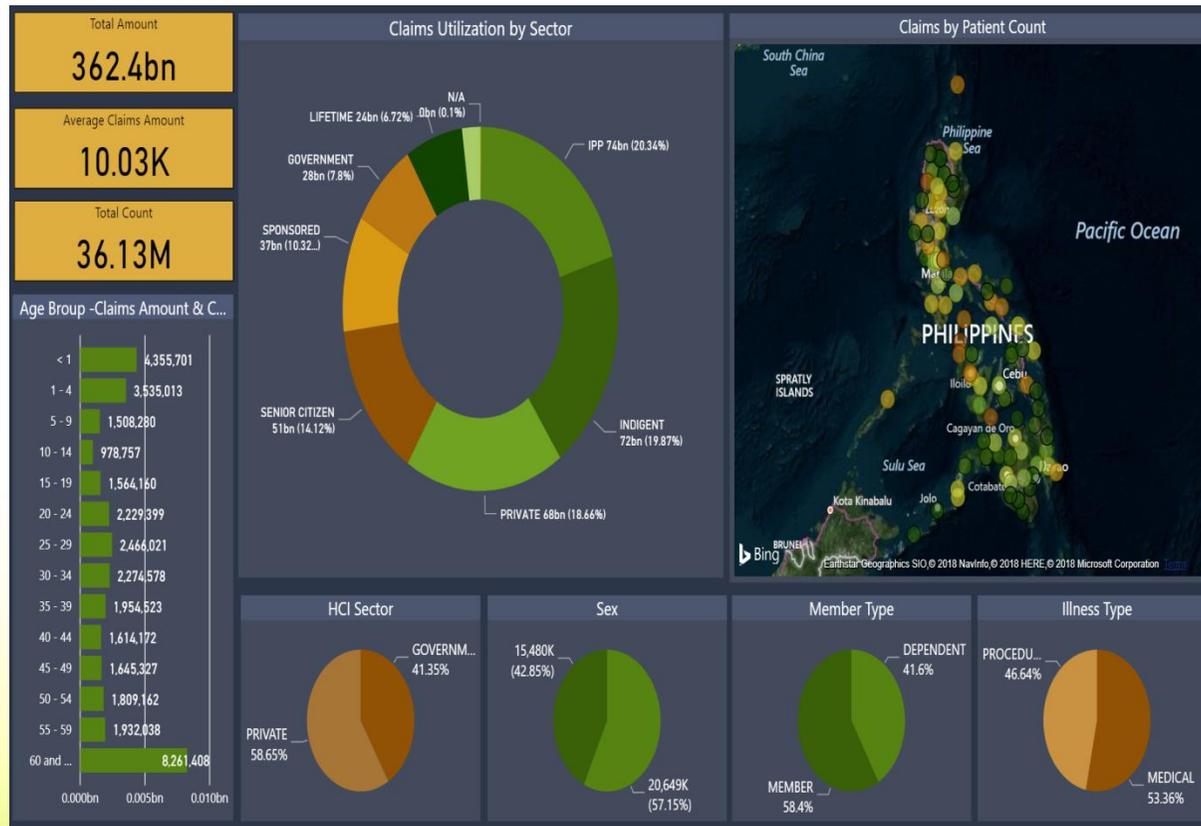
TRANSFORMATIVE BUSINESS INTELLIGENCE STEPS AND SOLUTION

4) Creation of best practice framework.



TRANSFORMATIVE BUSINESS INTELLIGENCE STEPS AND SOLUTION

5) Creation of Corporate Dashboards – standardization of data preparation, reporting, and consumption.



TRANSFORMATIVE BUSINESS INTELLIGENCE STEPS AND SOLUTION

- 6) Presentation and Utilization of PhilHealth's solution to internal and external stakeholders -- garnered accolades, and validated the soundness of the solution as one of the best planned, designed, implemented, and innovative new solutions within the Philippine government to date. Various agencies have since followed the lead of PhilHealth.
- 7) Commenced of advanced analytics solutions planning into predictive claims fraud & abuse using the foundational data and model of the new solution -- artificial intelligence (machine learning) in detecting anomalies and outliers, and could eventually replace the intensive and manual claims adjudication process.

TRANSFORMATIVE BUSINESS INTELLIGENCE STEPS AND SOLUTION

8) Data sharing with the Department of Health (DOH) in support of national health and insurance program, and harmonization between the agencies has commenced with the new solution.

SOLUTION FEATURES, BENEFITS & TIMELINE

- 1) **Comprehensive analysis of health insurance claims** over time periods, diseases, social classes, national-LGU geographical areas, demographics, benefits programs, payment schemes, and other insurance-health dimensions. (Stage: Commenced in 2016 and on-going).
 - Growth, trends, coverage, and inclusiveness of PhilHealth benefit programs
 - Indicators on the effectiveness of PhilHealth benefit programs and improvement considerations
 - Improved transparency of PhilHealth programs

SOLUTION FEATURES, BENEFITS & TIMELINE

- 2) Consolidated view of health insurance claims and corporate financial statements. (Stage: Commenced in 2017 and On-going)
- One-stop shop for PhilHealth key performance indicators
 - Mechanism for on-going integration of all significant PhilHealth data
 - Growth, trends, coverage, and inclusiveness of PhilHealth benefit programs
 - Indicators on the effectiveness of PhilHealth benefit programs and improvement considerations
 - Improved transparency of PhilHealth programs

SOLUTION FEATURES, BENEFITS & TIMELINE

- 3) Key mechanism to integrate & correlate PhilHealth claims information with DOH information on health services/outcomes. (Stage: Commenced in 2017 and On-going)
- Validate data to improve its value and usefulness
 - Standards for the creation, presentation, sharing, and dissemination of key information for other government agencies and clusters

SOLUTION FEATURES, BENEFITS & TIMELINE

4) Dashboard, analytics, and data delivery using world-class and best-of-breed on-premise and cloud solutions. . (Stage: Commenced in 2016 and On-going)

- Efficient, agile, and secure methods
- Strong technology foundation
- Heighten PhilHealth commitment on essential transparency solutions
- Self-service analysis-reporting

SOLUTION FEATURES, BENEFITS & TIMELINE

5) Foundation for Advanced Analytics and Big Data. (Stage: Commenced in 2018 and On-going)

- Framework and technology for advanced analytics using artificial intelligence - machine learning in detecting fraud
- Capabilities for forecasting and predictive requirements of actuarial, benefits planning, and financial units
- Alternative for automating adjudication and other processes requiring intensive human analysis

DATA DRIVEN TRANSFORMATION

WHY?

Resulted in significant gains to transition silo data-reporting processes & systems into an integrated business intelligence solution for the entire Corporation.

- Decision makers and knowledge workers are now being focused on actionable information versus doing inefficient and fragmented data processing work.
- Dashboards and Analytics have been created → timely benefits utilization, potential fraud & abuse detection, claims processing efficiency, collection efficiency, and member coverage.
- Citizen-centric and quality benefits and services while improving operational efficiencies, fraud control, and various mission-critical activities.

In SUMMARY ...

The effective and efficient processing and use of data is a vital requirement for PhilHealth to achieve its mandate of providing financial risk protection for its members, and soon, for all Filipinos as Universal Health Care is enacted into law.

PhilHealth's reliance on data and report silos will be a thing of the past as the strategic people, process, and technology integration is fully achieved by 2020. PhilHealth envisioned optimal data management and consumption practices across its core business processes, and achievement of this vision has commenced and being felt with the new Business Intelligence solution.

The data-driven transformation is a key to PhilHealth's survival and success. Ground-breaking decisions and initiatives have started to take hold; appropriate actions being done because of the data value and usefulness; and will continue to reshape the decision making mindset and culture across the Corporation.

Thank You!