

UNIVERSITY OF CAPCOAST  
SCHOOL OF ECONOMICS  
DEPARTMENT OF DATA SCIENCE AND ECONOMIC POLICY  
PROGRAM: MASTER OF SCIENCE IN DATA MANAGEMENT AND ANALYSIS  
(SANDWICH)  
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COARSE: DATA CURATION AND MANAGEMENT OF DATA  
ASSIGNMENT

One page commentary on data policy of your respective organizations covering the following areas:  
(1) Structure of data dissemination

(2) Format of data dissemination

(3) Data sharing protocols and procedures if any

(4) Data visibility (websites/social media handle)

A data governance policy is essential for organizations such as Kanvili Presby. JHS to manage data effectively. The following are key components one should consider when creating such a policy:

**Data Governance Objectives:** Clearly define the goals and objectives of your data governance initiative. Whether it's improving data quality, enhancing security, or ensuring compliance, having well-defined objectives provides a roadmap for success.

**Data Governance Framework:** Establish the structure, roles, and responsibilities of the data governance program. This includes decision-making hierarchy, key stakeholders, and their roles in managing data assets.

**Data Standards and Procedures:** Develop guidelines for data collection, storage, processing, and sharing. Specify data naming conventions, formats, dictionaries, metadata practices, and data lineage documentation.

**Data Quality Management:** Implement processes to ensure data accuracy, completeness, timeliness, and consistency.

**Data Security and Privacy:** Address security measures, access controls, data protection, and compliance with privacy regulations.

**Data Lifecycle Management:** Define how data will be captured, stored, archived, and eventually disposed of. In conclusion each organization's policy will be unique, reflecting its specific needs and context.

Suggest ways by which the mentioned area of data curation can be improved/implemented in your organization.

(B) Certainly! Kanvili Presby. JHS can explore ways to enhance data curation in the organization through the following:

**Structure of Data Dissemination:**

**Centralized Repository:** Establish a central data repository where all relevant data is stored. This ensures consistency, reduces redundancy, and facilitates easy access.

**Metadata Standards:** Implement consistent metadata standards across datasets. Clearly document data sources, variables, and their meanings.

**Version Control:** Maintain version control for datasets to track changes and updates.

**Format of Data Dissemination:**

**Standard Formats:** Use widely accepted formats (e.g., CSV, JSON, XML) for data sharing. Ensure compatibility with common tools and platforms.

APIs: Develop APIs for programmatic access to data. APIs allow seamless integration with other systems.

Data Protocols and Procedures:

Data Entry Guidelines: Train staff on accurate data entry practices. Define validation rules and error-checking procedures.

Data Validation: Regularly validate data to identify inconsistencies or anomalies.

Data Audits: Conduct periodic audits to ensure adherence to protocols.

Data Visibility (Websites/Social Media Handles):

Interactive Dashboards: Create user-friendly dashboards for data visualization. Make them accessible via websites or intranet portals.

Social Media Sharing: Share relevant data highlights or insights on official social media channels.

Remember, continuous monitoring, user feedback

## (2) ASSIGNMENT

(1) Outline six (6) data quality performance indicator recommendable for meeting the vision of your institution.

When assessing data quality, organizations often rely on key performance indicators (KPIs) to measure the effectiveness of their data management practices. Here are six data quality indicators that can help meet Kanvili Presby exp. JHS vision:

Completeness:

Measures the presence of expected data values. It can be calculated at different levels:

Dataset/Database: Total data across all tables in the dataset or database.

Table/Schema: Data populated in specific tables (e.g., Customers, Orders).

Metadata: Populated technical and business metadata (e.g., descriptions, security tags).

Records: Total number of records.

Attributes: Number of attributes in a schema definition.

Accuracy:

Assesses the correctness of data values compared to a trusted source or standard.

Calculated by comparing data against a reference dataset or known values.

Consistency:

Measures uniformity and coherence across data sources.

Detects discrepancies or contradictions within the data.

Validity:

Determines whether data adheres to predefined rules or constraints.

Validates data against specified formats, ranges, or business rules.

Timeliness:

Evaluates how up-to-date the data is.

Compares data timestamps with expected refresh intervals.

Uniqueness:

Ensures that each record or entity is unique.

Detects duplicate entries within the dataset.

Lastly, these indicators should align with your institution's specific goals and context. Regular monitoring and continuous improvement are essential for maintaining high-quality data.

Identify and justify five (5) administrative data points your organization should prioritize for archiving for the next five (5) years.

(2) When considering administrative data points for the next five years, Kanvili Presby exp. JHS should prioritize the following:

Employee Records:

Justification: Employee records are crucial for managing personnel, payroll, benefits, and performance evaluations. Tracking employee data ensures compliance with labor laws and facilitates workforce planning.

Financial Transactions:

Justification: Financial data, including revenue, expenses, and budget allocations, informs strategic decisions. Accurate financial records are essential for audits, tax reporting, and financial forecasting.

Customer/Client Data:

Justification: Maintaining comprehensive customer/client profiles enables personalized services, targeted marketing, and relationship management. It also supports data-driven insights for business growth.

#### Inventory and Supply Chain Data:

Justification: Efficient inventory management relies on accurate data about stock levels, suppliers, lead times, and demand patterns. Optimizing supply chains enhances cost-effectiveness and customer satisfaction.

#### Security and Access Logs:

Justification: Monitoring access to systems, facilities, and sensitive information is critical for security. Regularly archiving access logs helps detect anomalies, prevent breaches, and comply with data protection regulations.

Remember, these priorities should align with kanvili presby presby exp.JHS goals and industry context. Regularly review and update data archiving practices to stay agile and responsive.