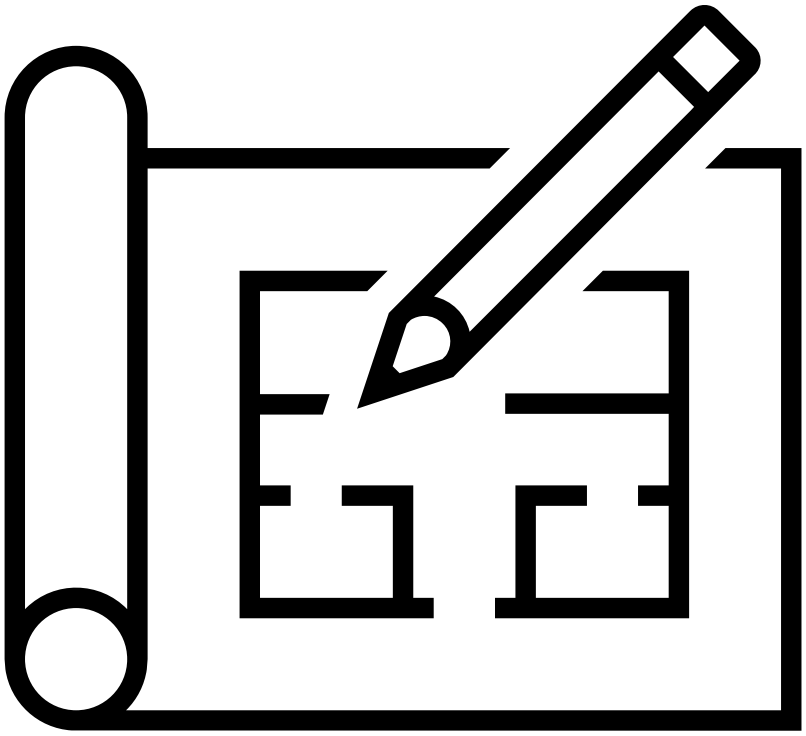
Data Management Plan for Itikan



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Introduction

Itikan is an emergent eCommerce company that needs to increase the customers' interest to cooperate with outside the advertising agencies for email marketing, social and search advertising, trade fairs and customers' seminars. But its DMP is currently not well developed and proper management of data may lead to issues of consistency, security, and the law.

A sample dataset used by Itikan includes sensitive customer information such as:

- Customer ID
- Customer Name
- Recent Purchase Date
- Purchase Amount
- Address Details
- First Purchase Date
- Purchase Frequency
- Total Amount Spent

Here's a snapshot of the sample data:

Customer ID	Customer Name	Recent Purchase	Amount	Street Number	Street	State	Postcode	First Purchase	Frequency 6 months	Amount 6 months
211	Jenny Robinson	2023-05-15	26.24	3	Maple Avenue	New Zealand	624	2022-08-14	2	52.48
212	Ann Foster	2023-05-14	60.25	50	Oak Street	NSW	2537	2022-07-16	3	180.75
213	Mark Clapham	2023-05-14	37.85	7	Elm Road	NSW	2444	2022-05-26	3	113.55
214	Kirsty Walsh	2023-05-16	18.45	30	Cedar Lane	NSW	2560	2023-01-18	2	36.90
215	Anne Parnell	2023-05-16	65.40	35	Pine Drive	NSW	2880	2022-08-26	1	65.40

This is important data for marketing communication, but the information is very confidential. Any violation carries a huge risk of negatively impacting the financial and image of the company. When the internal and external data are to be managed without a well-formulated DMP, it becomes very difficult.

The following is a Data Management Plan for Itikan to tackle these issues in the handling of data safely, effectively and in conformity to the present data protection laws and policies.

Data Management Plan

2.1 Data Collection

Data should be gathered correctly and uniformly so that correct information is used to make right decisions. Structurally relevant inconsistent data or inaccurate information for decision making hinders business and opportunity loss occurs. Standardized collection of data at Itikan becomes even more important as it is advancing.

Decisions for Itikan:

- ***Standardize Data Entry:*** The system shall be interested in standardization of data entry. Thus, make the format of the customers' names consistent, for example, using two different fields for first and last name, addresses and dates.
- ***Automate Data Capture:*** Utilize the various technologies while getting various information from customers from issues including purchase of products online or use of websites.
- ***Data Validation Rules Implementation:*** There should be checks on the various entry ways to minimize problems in data. For example, ensure that the ''Recent Purchase Date ''cannot be less than the '' First Purchase Date.''

Benefits

- Higher accuracy and uniformity of the data collected.
- The activity has improved the capacity in reporting and analytics reliably.
- Reduction of risk related to mishandling of loads through manual handling.

2.2 Metadata

Metadata is important because it gives necessary background information about data and helps to understand what each piece of data is and how it should be used (ABS, n.d,). If metadata does not exist, the data will be incorrect and will not lead us to create accurate analyses.

Decisions for Itikan:

- ***Metadata Repository Design:*** Encouraging teams to use the same documentation catalogue to record all data fields Suggest an exact definition for instance, "Frequency: 6 months", and the frequency is the number of transactions of a particular customer within the 6 months period.
- ***Standard Definitions:*** It must make sure that such terms like "Amount 6 months" are meant same throughout the company.
- ***Regular Updates:*** It should be updated whenever there were changes or new additions to the field as well as changing the previous fields.

Benefits:

- Makes people aware of data and its proper utilization by all.
- Increases mobility of analysis and data search.
- Compliance with Data governance policy.

2.3 Ethics and Legal Compliance

It is obligatory to fulfil data protection laws. In Australia, the Privacy Act 1988 together with the Australian Privacy Principles holds the rules of handling personal information (OAIC, 2020). Protecting customers right promotes customer confidence and the unlawful use of data attracts fines.

Decisions for Itikan:

- ***Anonymize Personal Data:*** If for instance the data to be shared needs to be shared with an outside party, erase the personal information such as the names and the addresses.
- ***Informed Consent:*** Ensure that customer understand and consent to what their data shall be used for particularly in marketing.
- ***Perform Regular Compliance Audits:*** Carrying out general audit of the data processing activities in relation to the current legislation.

- ***Employee Training:*** Provide awareness of the data protection legislation as well as ethical procedure of handling data.

Benefits:

- Protects customer privacy.
- Reduces chances of legal and financial problems.
- Enhances corporate image and acts as a boost to customer confidence.

2.4 Storage and Backup

The safe storage of data and the routine backing up of data may significantly prevent losses on all fronts. Apart from unauthorized access, data breaches entail a lot of cash loss in addition to defamation. The average cost of a data breach in Australia was found to be roughly AUD 4 million, according to analysis from the report "Cost of a Data Breach Report 2024" by IBM Security.

Decisions for Itikan:

- ***Centralize the storage of data:*** Relocate a process to a secure cloud that is encrypted unlike an open server that can be accessed by anyone.
- ***Implement Encryption:*** Encode the data even when they are stored as well as when they are transferred through the world wide web.
- ***Access Controls:*** Implement controls where only a certain staff can access certain data input and retrieve it.
- ***Regular Backups:*** Perform system backups on a set time basis and always examine the way and security of database restoration.

Benefits:

- Supplies the protection of the data and makes so that the data should be in the required format when required by the user.
- Curtailing of risk linked to data breach.
- permits fast recovery whenever data is deleted.

2.5 Preservation

Data preservation refers to the state in which information remains usable while being maintained in accordance with legal documentation concerning the extent of time that data or certain forms of data should be retained. It also enables the future business needs for requirements (National Archives of Australia, 2021).

Decisions for Itikan:

- ***Identify Data Retention Periods:*** It should also describe in details how long various categories of data should be retained. This could range from seven years for purchase history information as per the legal requirements of the financial domain.
- ***Implement Secure Disposal Procedures:*** It should be possible to develop the methods of deletion of the data that are not needed any more.
- ***Routine Policy Review:*** Switching the data retention policy every time there is a change in the law or business goal.

Benefits:

- Meets the legal mandate and feasible for the business.
- Reduces storage and retrieval costs and risks of data that may not be need anymore.
- Also, makes sure large amounts of important data can be accessed when required.

2.6 Data Sharing

While engaging external partners it is necessary to ensure that data is not leaked to other unknown people. Failure in handling data produces legal complications and lowers customer confidence (Australian Cyber Security Centre, 2024).

Decisions for Itikan:

- ***Establish Data Sharing Agreements:*** Sign contract with the other outside organizations explaining how data can be utilized and how data will be secured.
- ***Limit Data Sharing to What's Necessary:*** Never share complete data, only relevant data to a task; always mask personal data.
- ***Use Secure Transfer Methods:*** Transfer data through secure mediums such as SFTP or on HTTPS.

- ***Internal Access Controls:*** Ensure that only those in the staff who need the data will get the data.

Benefits:

- High level of security that prevent cases of leakage and misuse of the data.
- Protects legal interests.
- Ensures that the customers do business with the company and retain confidence in the organization.

2.7 Data Governance

Data governance is defined as the operational practices that may help in the effective, successful management of data. It enhances the quality of data and data security and compliance, (DAMA, 2017).

Decisions for Itikan:

- ***Establish a Data Governance Team:*** Form a board that would oversee the use of data in the business entity with a particular emphasis on the manner that they would be employed.
- ***Develop Data Policies:*** Explain how the data must be processed according to given quality standard and security measures.
- ***Designate Data Stewards:*** Delegation of authorities for various forms of data like customer data, sales data etc.
- ***Provide Training:*** educate the employees regarding the data governance policies and create a document on the right approach to managing data.
- ***Monitor Compliance:*** Daily ensure that the data management activities that are being affected corresponds with the laid down policies.

Benefits:

- Assists in maintaining accuracy of data and their quality.
- Aligns with the goals of the business.
- reduces mishandling of data

Conclusion

Adoption of this Data Management Plan will enhance the rationality of collecting, handling, trending, transmission, storage, and disposal of important data; as well as ensure that Itikan does not violate any laws. By directing work on areas such as data acquisition, metadata, ethics and legal considerations, storage and backup, archiving, sharing and data management, the company will be able to minimize the risks and increase its efficiency and use of data for marketing and decision making.

This plan ensures the growth of Itikan while at the same time preserving customers trust as well as its reputation in the market.

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Appendices

5.1 Sample Metadata Template

Field Name	Description	Data Type	Source	Collection Method	Usage	Owner/Department
Customer ID	Unique identifier for each customer	Integer	Customer Database	Automated via CRM	Customer identification	Marketing
Customer Name	Full name of the customer	String	Customer Input	Online Registration	Personalization, communication	Marketing
Recent Purchase Date	Date of the customer's most recent purchase	Date	eCommerce System	Automated at checkout	Sales analysis	Sales
Amount	Amount spent on the most recent purchase	Decimal	eCommerce System	Automated at checkout	Revenue tracking	Finance
Street Number	House or building number in the customer's address	Integer	Customer Input	Online Registration	Delivery logistics	Operations
Street	Street name in the customer's address	String	Customer Input	Online Registration	Delivery logistics	Operations
State	State or region of the customer's address	String	Customer Input	Online Registration	Market segmentation	Marketing
Postcode	Postal code of the customer's address	Integer	Customer Input	Online Registration	Delivery logistics	Operations
First Purchase Date	Date of the customer's first purchase	Date	eCommerce System	Automated at checkout	Customer lifecycle analysis	Marketing
Frequency 6 months	Number of purchases in the last six months	Integer	Sales Data	System Calculation	Customer engagement tracking	Marketing
Amount 6 months	Total amount spent in the last	Decimal	Sales Data	System Calculation	Revenue analysis	Finance

	six months					
RFM Score	Combined score based on Recency, Frequency, Monetary value	Integer	Analytics Platform	Calculated monthly	Customer segmentation	Marketing

5.2 Data Retention Policy Outline

Data Type	**Retention Period**	**Reason**
Customer Personal Data	5 years after last activity	Customer relationship management, legal compliance
Transactional Data	7 years	Financial reporting, auditing requirements
Marketing Campaign Data	3 years	Performance analysis, future planning
Customer Support Records	5 years	Service improvement, legal protection
Inventory and Product Data	If products are active	Inventory management, historical sales analysis
Anonymized Analytical Data	Indefinitely	Long-term trend analysis, business strategy
Financial Records	7 years	Legal requirements, auditing