

Digital Strategies for Business Transformation (Online)

Module 5: Domain 3: Data

Quick Reference Guide

Learning Outcomes

1. Develop a new data initiative using a data value template.
2. Analyze how your organization uses data.
3. Describe lessons learned from using data value templates to develop a new data initiative.

The role of data in an organization

- Data is a core strategic asset
- Every organization should have its own explicit data strategy

Applying the data strategy in your organization that is focused on habit formation

- Gather data of an individual consumer and their behaviors.
- Analyze data by focusing on the actions of new consumers to eliminate any concerns about correlation versus causation, and apply a statistical method (the Kaplan-Meier estimator) for consumer retention.
- Look at findings from the data and understand the habits that drive retention, and determine the impact on the retention rate and the current adoption rate.
- Implement data insights into the product design, user experience, and communications to new consumers and think about how to surface those features.

Different Types of Data

Data type	Example	Utility
Business process data	<ul style="list-style-type: none">• Inventory and supply chain• Sales• Billing• Human resources	Manage and optimize business operations, reduce risk, and provide external reporting
Customer data	<ul style="list-style-type: none">• Purchases• behaviour introduction• comments and reviews• demographics• survey responses	Provide a complete picture of the customer and allow for more relevant and valuable interactions
Product or service data	<ul style="list-style-type: none">• Maps data (for Google)• Business data (Bloomberg)• Weather data (TWC)	Deliver the core value proposition of the organization's product or service

Considerations for developing your own data strategy

- How to get the required data
- How to use that data for growth and new opportunities

Principles of an Explicit Data Strategy

- Get the data
 - Combine data across silos
 - Gather diverse new types of data
 - Watch what your customers do, not only what they say
- Use the data
 - Develop a 360° degree picture of your organization
 - Use data as a predictive layer in decision making
 - Design data into the product experience
- Watch what your customers do, not only what they say

Considerations for assessing the use of data

- Does your organization view data as a strategic asset?
- Where is data held in your organization?
- How are you applying the data you have?
- How do business processes need to change in your organization if you want to take advantage of your data effectively?

How industries use data

- Jet aircraft manufacturers use data from sensors in their engines to get a better understanding of the complex systems which allow them to better use it, manage repairs, and become fuel and energy efficient.
- Organizations in the agricultural sector provide sensors that farmers can put on their cattle to help them measure and understand the health of their livestock and understand what is happening in real time.
- In the retail sector, organizations predict whether the customer will stay or return in the future by comparing SKUs of products they bought with the purchase history of other customers.
- Organizations in the digital space capture data to understand customer behaviors and then feed those insights back to improve the design of the websites and apps.

The Four Templates for Value Creation

1. Insights: using data to reveal what was previously invisible about your business and your customers
2. Targeting: using data to narrow the field and figuring out the best courses of action
3. Personalization: using data to tailor a particular offering or experience to a particular customer
4. Context: using the power of data to provide a frame of reference

Organizational Issues in Data Driven Organizations

- Centralization vs decentralization
- Data governance
- Rethinking everyone's jobs
- Making decisions