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**DATA 1201-Data Collection**

**Assignment 4: Data Impact Analysis**

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**Assignment Summary**

**Purpose:** Impact Analysis quantifies the risks inherent in collecting and owning the data. In this assignment, the data impact will be documented so that other parts of the organization can assess the legal and regulatory risk in collecting and using the data.

**Assignment Objective:** This assignment will analyze the legal and privacy impact of the Data Sources in the Data Collection Plan. The Data Subject, Data Controller, and Data Processor will be identified for each Data Source. The impact of Physical Privacy, Organizational Privacy, and Informational Privacy will be considered.

The Legal and Privacy Impact of the Data Sources in Data Collection Plan will be addressed.

**For each data source, the following is identified:**

1.The description of the data source

2.Who the Data Subject is.

3. Who the Data Controller is

4. Who the Data processor is.

5. Assess the data source for:

5.1 Physical Privacy

5.2 Informational Privacy

5.3 Organizational Privacy

**Key Definitions:**

* **Data Subject**: an identified or identifiable natural person. An identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural, or social identity.
* **Controller**: The natural or legal person, public authority, agency, or any other body which alone or jointly with others determines the purposes and means of the processing of personal data.
* **Processor**: A natural or legal person, public authority, agency, or any other body which processes personal data on behalf of the controller.
* **Physical Privacy**: Freedom of intrusion into your **physical person**, possessions, or space*.*
* **Informational Privacy**: An expectation of privacy when **personal information** is collected, stored, and shared in digital or some other format.
* **Organizational Privacy**: Government agencies, **organizations**, and business expect to be able to keep activities or secrets from being revealed to others.

**Summary of Business Problem and Objective:**

* **The organization name**: **Tangerine Bank**
* **Tangerine Bank** is a subsidiary of Scotia Bank, and it is an online bank.
* Tangerine, launched in Canada in April 1997, and introduced the country’s first no fee, high interest savings account.
* It was the first bank in Canada to offer the direct banking business model, and the **motivation** for Tangerine Bank was to offer more favorable rate compared to competing banks by avoiding the costs associated with running a network of branches.

**Business Problem Organization is trying to solve:**

* Tangerine Bank has a growing customer base. It offers services such as savings accounts, chequing accounts, credit card services, mutual funds, and mortgages. Majority of the customers at the bank are liability customers with deposits of varying sizes.

**Problem Definition:** The **number of customers who are borrowers (asset-based customers) is small**, and the bank is **interested in expanding** **its asset-based customers** to bring in **more loan business, and in the process, earn more revenue for the bank through interest on loans.**

* The retail marketing departmenthas decided to devise campaigns to better target their marketing and **increase the success ratio of loan borrowers and retain them as bank customers.**
* The department wants to build a model that will help identify the potential customers who have a higher probability of purchasing a loan. This will increase success ratio and **reduce the costs of the marketing campaign by only targeting those with more chance of success.**

**Business Objective:** **Service quality** is the top reason customers switch banks. Banks have a lot of customer data, but effective and personalized service is lacking because there is a lack of big data analysis to **learn about customers and their expectations**. Tangerine Bank needs **to employ data analysts** and professionals in the marketing and finance field to **gain insights** from the large amount of data the bank collects. Tangerine Bank plans to **achieve greater customer loyalty** through **personalized offers.** The bank will **utilize the power of big data** to get an understanding of each customer. Through analytics process, Tangerine Bank **will reduce business risk by using predictive analytics and saving costs**.

**Data Impact Analysis and Purpose** In data impact analysis, the legal and privacy impacts of the selected data sources in Data Collection Plan are assessed. The Data subject, Data Controller, and Data Processor are defined and identified for each data source. Finally, in the end how each data source impacts physical privacy, informational privacy, and organizational privacy will be considered and look into with detail.

**Data Sources** In the data collection plan, it was noted that the data required would be gathered from both **private internal sources**, and **public external sources**. The **data sources** for this project include the **bank’s internal data, social media blogs and company website, and customer service department voice and transcript**. The data must be classified **into private data sources and public data sources** to make informed decisions around the business problem. Tangerine Bank collects **personal information** in many different ways such as during the course of a customer’s registration with the bank, during a transaction, during a customer service phone call, and also in marketing campaigns for the company’s promotions, programs, and events. Tangerine Bank ensures **privacy & security protocols** are being followed when collecting personal information for the company database. **Open data sources include tangerine bank blog website and social media blog websites** where information is public and open for everyone to see. The bank is able to collect personal information such as contact information, opinions, search terms customer used, and key words on blog posts.

**Tangerine Bank Collects Personal Information in the following way:**

* **Directly from Customers:** Customers of the bank may provide personal information such as their Name, Job, Marital Status, Education, Type of Loan they wish to apply for, etc. Personal Information may be collected during telephone calls, the company’s customer service communication methods, and from marketing campaigns where potential customers are selected from marketing department database for further interest in special offers and promotions.
* **From Third Parties:** Tangerine Bank may receive personal information from other sources such as information aboutcredit score from a third-party company called Equifax which provides full credit reports when a customer requests for a loan from the bank.
* **Marketing Division Records:** Customer personal information is collected from the marketing departments who run promotions and offers. The marketing department might want to know a customer’s personal opinion on a previous campaign or new service to advocate for the promotions, as well information about a customer’s demographics to determine if they are a good candidate to make use of a new offer, promotion or program.
* **Websites, Social Media Applications, and other electronic means:** Tangerine Bank may collect personal and non-personal information electronically, directly from customers, and through third parties. Tangerine Bank may access information about a customer through social media blogs where a customer may share information about themselves. Personal information may also be shared electronically through the company’s databases, websites, emails, mobile applications, social media blogs and online marketing promotions. When a customer visits the Tangerine Bank website or blog, the company collects personal information that the customer might choose to submit to the company such as name, contact information, opinions and any other information the customer may choose to share to the company so that Tangerine Bank can respond to an inquiry the customer has made, or for other reasons that are disclosed to the customer at the time of data collection. Information collected by browser cookies may be collected and processed by Tangerine Bank and saved on the website browser.

When customers use Tangerine Bank’s website or click on ads that are associated with Tangerine Bank and its marketing promotions, Tangerine Bank may collect customer’s information through **cookies, web beacons, and other technologies to collect personal and non-personal customer information to determine customer trends and interests**. This will allow Tangerine Bank to **deliver services that are personalized to user preferences**. When a customer logs in to their account on the Tangerine Bank website**, blog posts can be tailored to the user’s interests based on demographics and interactions on blog website.** Tangerine Bank may track user and usage data, such as when users click on a certain blog post, how many times user click on a certain blog post, interaction etc., which website, search term or add user clicked to reach Tangerine Bank. This can hep Tangerine Bank make improvements to the company’s website, generate reports, create marketing campaigns based upon the keywords and interests of different customers. Customers do have the option to disable and not use these technologies via their web browser. **Disabling the sharing of their personal information may prevent customers from getting the benefit of personalization of their Tangerine Bank account.**

If customers choose to use a **mobile to download the Tangerine Bank app, personal information about the customers phone number, bank information, and location may be detected** to provide options for nearby customer service and partnering retail stores in the area that reward points can be acquired for if they use their credit card. **However, most devices, tablets and browser allow for the disabling of location and if customers choose to do so, may not be able to enjoy all the features and benefits associated with the app.**

The following are **Data Sources** mentioned in the Data Collection Plan for this Project:

* **Company Departments**: Tangerine Bank has a large Core Banking System that holds many records that are organized and categorized by specific information related to each Department by databases. The various Departmental Records used in this project include:
* **Tangerine Bank Customer Department**: Data related to customer information will be collected by this department and maintained.
* **Tangerine Bank Financial Department:** Data related to customer finances, including transactions, deposit, loans, etc. will be collected by this department and maintained.
* **Tangerine Bank Marketing Department**: Data related to marketing campaigns, promotions and offers and customer outcomes of campaign will be collected by this department and maintained.
* **Tangerine Bank Customer Service Department:** Data related to customer service surveys, audio transcripts, emails, etc. will be collected by this department and maintained.
* **Tangerine Bank Information Technology Department:** Data related to Blog engagement, Social Media Blog Posts, Website Maintenance and Engagement, etc. will be collected by this department and maintained.

**Non-Company Associated Data Sources** include:

* **Reddit&Quora Blogs:** These social media platforms are able to collect a lot of personal data on their platforms.
* **Internet/Wi-Fi Providers:** Internet Companies can collect data from customers when the customers use devices with their features.
* **Third Party Credit Report Company Equifax:** Equifax manages a credit score detailed report company through its database and can determine credit history based upon SIN number. These reports are shared with the bank when a customer requests for a loan.

The following are **the Data Subjects** according to the Data Collection Plan for this Project:

* **Bank Customers (Online Application or Affiliate Branch In-person Sign up)**: The Bank Customers are the target for the company since the main business objective is to increase the number of customers who are taking loans with the bank and retain them as long-term bank customers, as well as increase the overall number of customers with the bank through marketing. Customer data is collected by the bank including their demographics such Age, Job Category, Marital Status, Education Category when they sign up. Account Transactions, Loan Approvals/Rejections, Credit Reports, and Marketing Campaign information are also recorded. Identification numbers are assigned to each customer and this provides a large data pool of information for the business to do analysis on.
* **Blog Engagement Users/Customers, and Users of Social Media Blogs with Tangerine Bank thread or bank related posts:** Though all information about a customer might not be displayed to the bank if customer does not access a blog post through their personal bank account, Tangerine Bank may gain information about what blog posts and topics a certain customer engages with the most, their names, phone numbers or emails if they choose to provide it, through what media stream have they accessed the Tangerine Bank website, what marketing add have they clicked on, what main topics and key words are discussed on social media blog platforms such as Quora and Reddit related to Tangerine Bank,etc.

The following are the **Data Controllers and Processers** for our Data Subjects with reference to the Data Sources:

The **Data Controllers and Data Processors for the Data Collected about the company’s customers will be considered**:

* In **GDPR and other Privacy Regulations in various nations, it is noted that the data controller has the most responsibility when it comes to protecting the privacy and security of the data subjects**. The **data controller** controls the procedures**, purpose, and how and why the data will be used by the organization.**
* **Data Controllers** can process collected data using their own processes but in some instances a data controller needs to work with a third party or external service to work with the data that is gathered. In this situation the Data Controller still does not give up control of the data to the third-party service. **The data controller remains in control by specifying how the data will be used and processed by the external service. The role of the data processor is to simply process the data that the controller provides to them**.

**1.Data Collector and Processor is only Tangerine Bank.**

According to the Data Collection plan, the following **customer information** is collected by **the Tangerine Bank who is the Data Controller and acts as per the information above.** Data from customers in relation to their demographic information includes the following: Age, Job Category, Marital Status, Education Level.

The following data is collected regarding **customer financial matters in Finance Department** **database**: ‘Account Balance’, ‘whether customer has a housing loan or not’, ‘the deposit amount’, ‘whether customer has approved for a loan or has requested one’, ‘credit default’ and ‘number of account transactions.

The following data is collected regarding **customer marketing campaign information in Marketing Department database**: ‘contact’,’day’, ’month’, ’duration’, ’campaign’ ’P-days’, ‘previous’,’poutcome’.

**2.Data Collector and Processor is both Tangerine Bank and Third Parties**

**The following measures are processed by not only Tangerine Bank but also third parties such as the internet /Wi-Fi providers, social media websites, and third-party service providers who provide credit reports and phone audio transcripts to the bank:**

* **Customer Feedback Survey on the app or website- The feedback survey and Tangerine Bank Blog** may be processed by the internet provider/Wi-Fi when user accesses it and some information such are username, and login information can be stored in the cookies or web browser. In addition, social media blog posts such **as Quora and Reddit have processed their own posts** and Tangerine Bank can attain information from them. **Phone audio transcript providers and Credit Report Providers such as Equifax** who are specialized service providers with Tangerine Bank must meet the Bank’s rigorous privacy standards.

**In the following section, the Privacy of Data Sources in terms of Physical, Informational, and Organizational Privacy for Each Data Source will be explained:**

1. **Company Departments**

**Physical Privacy:** There is constant surveillance in offices and in all departments. The surveillance camera systems follow and record all employees and visitors to offices during business hours and have a security system with surveillance cameras in place for non -business hours.

Tangerine Bank stores all recordings of the surveillance cameras. Customers, employees, and visitors are aware of this when they enter the offices. A privacy breach and exposing of these recordings may result in lawful action, as it an unwarranted breach of an individual’s privacy and exposing their location at a certain day/time.

**Informational Privacy:** Tangerine Bank is committed to keeping personal information of Clients and prospective Clients accurate, confidential, and secure. The Tangerine Privacy Code reflects this commitment.

This Privacy Code is based on the Personal Information Protection and Electronic Documents Act (PIPEDA). It describes how Tangerine complies with the principles of PIPEDA. A copy of PIPEDA is available at [**priv.gc.ca**](https://www.priv.gc.ca/en/).

**Principle – Tangerine’s accountability: Tangerine** Bank is accountable for all personal information in possession or control, including any personal information transferred to third parties for processing. Tangerine Bank has established procedures to comply with this Privacy Code and have designated one or more persons to be accountable for compliance (Section 1 of Privacy code)

**Principle-Tangerine Bank will identify the purposes of collecting personal information.**

* Tangerine Bank will take care to explain purposes which are not as obvious as others. While the purposes for collecting a name or address may be obvious and do not need to be explained, the purposes for collecting other information may not be as self-evident.
* Tangerine Bank will clearly identify the purpose for which we are collecting your personal information either through writing, verbally when we are speaking with you or through any other means we use to communicate with you. There are some cases where we are not required to obtain your consent/ (Section 2 of Privacy Code)

**Principle – Obtaining consent**

* Tangerine Bank will collect, use or disclose personal information without client consent only in limited circumstances as permitted by law.
* Subject to certain legal, regulatory, and contractual obligations and reasonable notice, an individual can refuse or withdraw their consent to the collection, use or disclosure of personal information about them at any time. In certain instances, that means we may not be able to offer customer certain products and services. (Section 3 of Privacy Code)

### Principle – Limits on the collection of personal information

* Tangerine limits the amount and type of personal information it collects. Tangerine Bank will collect personal information only for purposes that have been already identified to you or as permitted by law.

### Principle – Limits on using, disclosing and keeping personal information.

* Tangerine Bank will use or disclose personal information only for the reasons it was collected unless consent is given to use or disclose it for another purpose. Under certain exceptional circumstances, Tangerine Bank may have a legal duty or right to disclose personal information without knowledge or consent. (Section 5 of Privacy Code)

**Principle – Keeping personal information accurate.**

* Tangerine Bank will keep the personal information in Tangerine Bank possession or control accurate and complete based on the most recent information available to us. From time to time, Tangerine may contact to ask to confirm contact information and marketing communication preferences. (Section 6 Privacy Code)

### Principle – Safeguarding personal information.

* Tangerine Bank will protect personal information with safeguards appropriate to the sensitivity of the information.
* Tangerine Bank will safeguard personal information in our possession or control from loss or theft and from unauthorized access, disclosure, duplication, use or modification. (Section 7 Privacy Code).

### Principle – Making information about policies and procedures available to customers.

* Tangerine Bank will be open about the procedures used to manage personal information. Individuals will have access to information about these procedures through Tangerine’s Privacy Code, by contacting our Associates or by writing to the Privacy Office. The information will be available in a format that is easy to understand. (Section 8 Privacy Code)

### Principle – Access to personal information

* When you request it, Tangerine will advise what personal information we have in our possession or control about you, what it is being used for and to whom it has been disclosed.
* In certain exceptional situations, we may not be able to give individuals access to all of the personal information about them. (Section 9 Privacy Code)

### Principle – Handling complaints and questions

* Individuals may challenge Tangerine’s compliance with this Privacy Code. We have policies and procedures to receive, investigate, and respond to individuals’ complaints and questions relating to privacy. (Section 10 Privacy Code)

**Organizational Privacy:** Tangerine Bank must follow guidelines for Organizational Privacy as highlighted by Canada’s Personal Information and Protection and Electronic Documents Act (PIPEDA) and create their own organizational privacy rules. Administrative policies have been planned out by Tangerine Bank for privacy governance and management to define organizational structures, roles and responsibilities to achieve privacy requirement. There is ongoing privacy training for employees, audits are performed for good privacy compliance, information security and management standards are safeguarded against unauthorized disclosure. Modification, interruption, removal, or disruption, and company employees must sign legal non-disclosure agreements to provide security of customer and employee data.

Privacy Breaches such as revealing of financial data, customer personal data, revenue loss, hacking of systems, cyberattacks, inappropriate use of electronic devices to transmit personal information, including telecommunication devices, phishing, fake websites, etc. can occur within organization and should be considered in privacy and security policies of company.

1. **Social Media Platform Blogs such as Reddit and Quora**

**Physical Privacy-** The data subjects here are the users/customers accessing the Quora or Reddit Tangerine Bank thread, or Tangerine Bank related posts. The Social media Quora and Reddit do not come into physical contact with the people writing these posts, so there is no case of physical privacy violations or breaches.

**Informational Privacy-**Personal Information about customers and the website visitors is controlled by Quora and Reddit companies individually independent of Tangerine Bank. Both companies have their own privacy policies regarding data security, privacy, and protection. Tangerine Bank can get insights about posts using various insight and analytical tools.

**Potential threats include malware or virus threats as insights are being downloaded, or the websites are being accessed.** Hackers can get sensitive data when they enter the organizations systems and gain personal information, it is important for the organization to have strong security software installed to prevent these threats and scan the system for ant risks of data loss and vulnerabilities.

**Organizational Privacy-** Reddit and Quora have their own privacy policy for data security, privacy, and protection. Tangerine Bank uses various tools and analytics to get insights from these websites, but this also exposes the organization to more threats. When website is being accessed a trojan or malware could get past the firewall and hack into organizational system. The organization should have a strong Information Technology and Security policy in place that discusses how to prevent such situations and invest in high- end protective software for their databases and systems.

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