Data Plan and Business Solution
POAP (Proposal on A Page)

Business requirements:

In this digital age, we are confronted with many uncertain environments that make individuals to prefer online shopping rather than in-person. In this case, many supermarkets are experiencing a common business problem known as product unavailability in online platform which create friction between consumers and given platform (ADRENALIN 2023). As a result, many consumers leave this platform within a short time due to a lack of interaction with the webpage and the expected product and seek another online store with a similar product (Reforge n.d.). Here, Coles supermarket is confronting the above difficulty that needs to be addressed within a certain timeline to minimise their consumer friction point accurately (Coles 2023).

Possible solution:

Here, possible solution would be reaching out to consumer who are likely to cancel their subscription from the online platform and targeting them with a marketing campaign such as automated email or social media. Continuously monitoring online platform to check the product availability. Apart from this, Coles need to extend their collaborative approach to the parent companies and the suppliers to increase their product availability in everywhere for every uncertain environment.

How can the problem be solved:

To solve the above problem, Coles needs to adopt some approaches and tools such as consumer personas using qualitative and quantitative data from census data (Australian Bureau of Statistics n.d.). Moreover, Coles can apply RFM (recency, frequency and monetary) and CLV (customer lifetime value) models to determine potential customers, understanding their online purchasing behaviour and predicting their next purchase to improve their online businesses (Wong and Wei 2018). Apart from this, Coles can use DSA or Data Science Analytics tools such as ML or machine learning approaches to predict the consumer churn (Simplilearn 2018).

Feasibility:

To train the ML algorithm such as classifier algorithm, we need to collect some census data (e.g., age, gender, usage history and payment history) to predict the consumer churn. In this case, it is necessary to check the volume and features of the train data to increase the accuracy of the consistent model to make informed business decisions for the expected business requirements (UBC Science Writing 2014).

Proposed timeline:

(1) Retrieving data (e.g., 2 days)
(2) Manipulate data and test for probability of the proposed ML approach (e.g., 1 week)
(3) Prepare data in a form (i.e., table) that can be used to build a ML algorithm (e.g., 5 days)
(4) Build and test ML algorithm (12 days)
(5) Operate ML algorithm using MLOPs approach. (2 weeks)
(6) Present preliminary results and insights for feedback (14 days)
(7) Ongoing testing and monitoring MLOPs or machine learning operations (Continuing).

Success criteria:

Adopting data analytics strategy plan and applying appropriate machine learning approach will help to drive Coles business insights and solve consumer friction points accurately.

Risks:

Ample data is vital to complete the analytical process. If Coles cannot provide adequate data to train the machine learning model, they will discover errors, or inaccurate results that will bring vulnerable decisions. As a result, Coles supermarket will lose their potential customer for forever for their upcoming businesses.

Supporting Documentation

Description of the Coles Organisation:

Coles is a one of the leading retailers in Australian supermarkets with more than 800 supermarkets nationwide and selling fresh food, grocery items and general merchandise (Coles 2023). Apart from this, Coles consists of different sites such as online, liquor, flybuys, and financial services. In 1914, Coles started their journey in Melbourne with earning over 935 pounds. Coles has over 1,20,000 employees and accounts for around 27% of the Australian market (Coles 2023). In the change of era, Coles launched many discounting programs such as cosmetic range, little shop, miniature, trolly, down down and so on to increase the consumer retention and sales rates (Coles 2023).

Figure 1: Screenshot of the Coles physical store

Coles restructured their features with the evolution of 90's new technology that helped them to enable Flybuys program and online shopping activities within 23 Melbourne postcode (Coles 2023). In 2003, Coles online become the largest food retailer in Australia by 'providing customers with online grocery shopping, home delivery and click and collect pick up locations' (IBISWorld 2023).
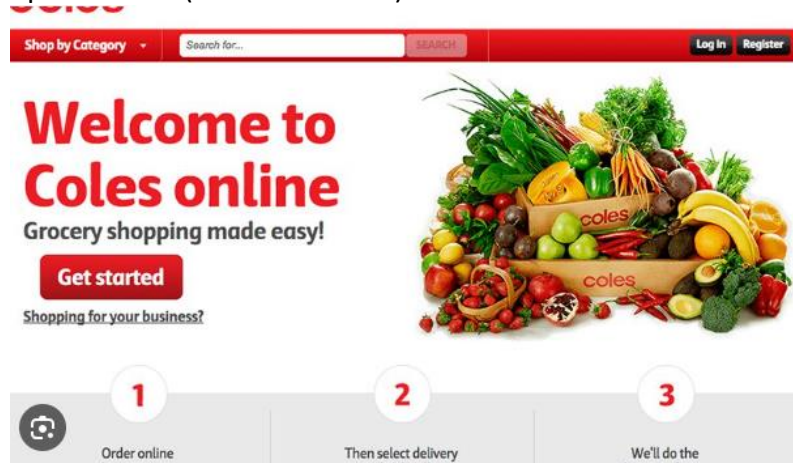

Figure 2: Screenshot of the Coles Online.

Competitive analysis for Coles organisation:

As many supermarkets are growing horizontally, Coles supermarkets need to focus on its entire marketing environment including Coles online shopping to stay competitive with the competitor. In this case, we need to analyse some qualitative and quantitative data of the required and competitive organisation to provide the best approach to the business environment. Here, study shows that Coles groups' financial profit for 2023 is over $40 million whereas Woolworth groups financial profit is over $50 million which indicates that Woolworths marketing strategy is better than Coles (IBISWorld 2023). To increase the profitability of the Coles organisation, they need to focus on whole analytical strategy including business strategy using consumer analytics and the best analytical model to prevent the consumer friction points for the organisation. To minimise the gap between the current and future state of Coles organisation, the following SWOT analysis approach can be considered where SWOT stands for Strengths, Weaknesses, Opportunities and Threats (BUSINESS RESEARCH METHODOLOGY n.d.).

Strengths	Weaknesses
1) Coles is adopting aggressively new technologies from 90's (McIntyre 2023). 2) Coles is launching different programs, promotions, campaigns to increase forever consumers and maximise the ROI (Wahba 2016). 3) Study represents over one third of children are primary consumer or shoppers who can help to increase the consumer retention.	1) All data are not collected from all the Coles groups which results business inefficiency and lower revenue than competitor (IBISWorld 2023). 2) Consumer shopping experience is vulnerable specifically in online due to lack of product unavailability (Coles 2023). 3) Demerged with the parent company 'Wesfarmers' that may affect delivering right product in a right time (Wesfarmers n.d.). 4) In accordance with analytical strategy, Coles is highlighting data inconsistency which is the major obstacle to adopting a clear vision or reducing consumer friction (Gartner 2023).
Opportunities	**Threats**
1) Coles can collect consumer data using census data and unique identifier or automated email (Australian Bureau of Statistics n.d.). 2) Coles can use consumer analytics to predict the consumer behaviour and derive some time-based attributes (Dummies A Wiley Brand n.d.). 3) Coles can apply personalisation spectrum of consumers to identify 'the right product at right price and time' (CAMERON 2022).	1) Collecting substitute products from the competitor may result in consumer churn or friction point (Woolworths 2023). 2) Data inconsistency or analytical gap can cause a threat of future development. 3) Vulnerability in consumer experience may bring reputational damage as well as lose forever customer. 4) Bargaining or lack of collaboration with suppliers and distributors may result in limited product delivery which will impact on the organisation's financial profit.

Justification for the consumer friction:

From the above observation, it is identified that Coles online has some friction points where products unavailability in the digital platform is indicating consumers to complete their shopping from another online platform. It is hypothesised from the consumers' lifecycle and the different stages of the consumer journey that consumers are interested with some daily products that are recorded by a visual tool known as marketing funnel (Myob 2023). In this case, if the consumers represent their irregularity through the purchasing process, it is enlightened as a consumer friction point for that required platform. Moreover, COSBA or customer online shopping behaviour analysis depicted that identified high-valued customers and integrated system such as pricing, customer profile, and behaviour indicate the results of predicting subsequent destinations where to buy consumers' desired products (Wong and Wei 2018). Therefore, according to the consumer retention strategy, it is proved that unsuccessful prediction of consumer behaviour or their data is responsible for increasing consumer churn or consumer friction points enormously (Medium 2019). Additionally, a following mind map of consumer friction point is illustrated elaborately.
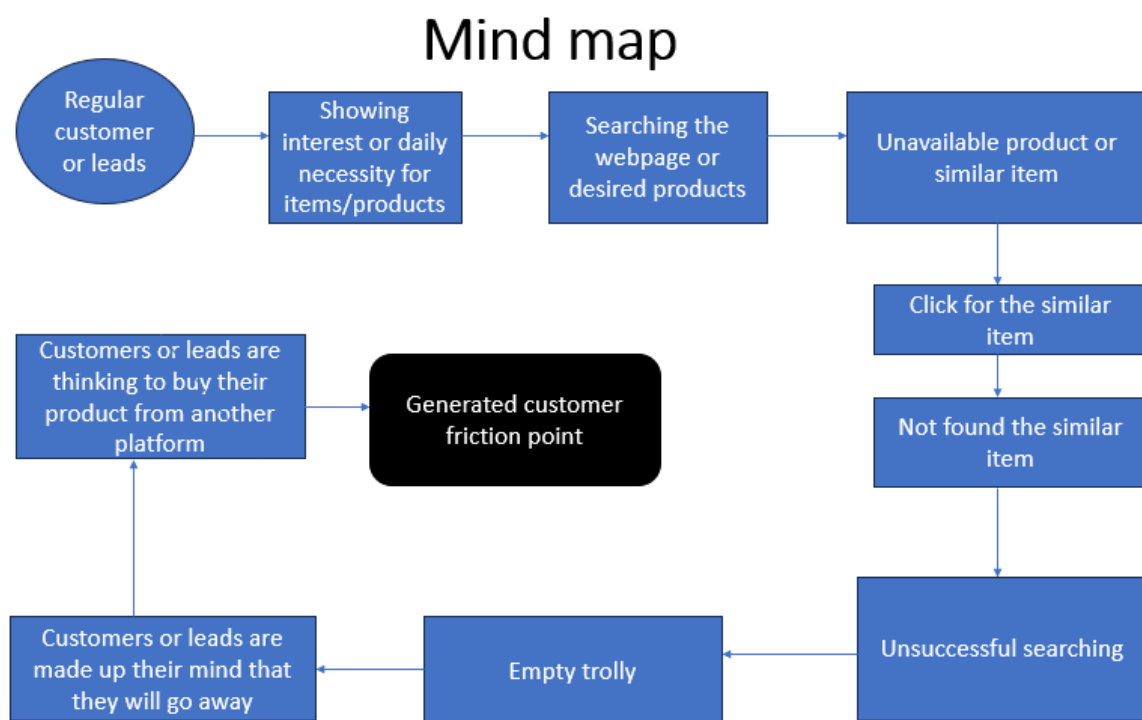

Figure 3: Screenshot of the Mind map.

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