

Business Intelligence & Business Analytics

Pineapple Specification Report

Master of Science in Data Analytics

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Abstract

Pineapple, an electronic reseller company that needs notable growth in their sales and customer base among major cities in United States over the years. In the wake of eased Covid-19 restrictions, there has been a notable surge in the market for second-hand and reconditioned electronic products. The global silicon shortage has driven up the prices of new electronic devices, prompting consumers to explore more cost-effective alternatives through the acquisition of pre-owned and refurbished items. Given the swift depreciation of electronic products, opting for such alternatives emerges as a more economically viable choice for consumers.

Pineapple envisions an expansion of its operations across North America to capitalize on the flourishing market for resold electronic products. Through the strategic utilization of Sales Force and Power BI, our proposed solution aims to streamline this expansion and establish a strong presence in the market. Pineapple is committed to crafting a customer-centric strategy and achieving its growth goals for 2023.

1. Background Information on the Organization and Project Scope

1.1 Company Overview

Pineapple, a progressive California-based enterprise, was established in January 2022 as a trailblazing electronic product reselling company. Committed to navigating the ever-evolving technological landscape, Pineapple initially set out with a vision to offer cost-effective and sustainable alternatives. Over time, the company has evolved into a prominent player in the reselling market, achieving significant milestones in its journey.

The genesis of Pineapple was rooted in a dedication to address the widening gap between the soaring prices of new electronic devices and the burgeoning demand for affordable options. This commitment propelled the company into the thriving market for pre-owned and refurbished electronic products. With a robust foundation and a customer-centric ethos, Pineapple strategically adapts to the competitive landscape, leveraging improved and efficient Customer Relationship Management tools.

As part of its evolution, Pineapple has delved deeper into sales and customer feedback analysis, employing interactive and explorative methods to dynamically update and visualize data. The reseller team remains steadfast in its dedication to fostering sustainable practices within the tech industry. Pineapple actively explores partnerships with environmentally conscious manufacturers and suppliers, furthering its commitment to reducing electronic waste. In essence, Pineapple stands as a testament to innovation, sustainability, and a customer-focused approach in the dynamic realm of electronic product reselling.

2. Gap Analysis

Pineapple Gap Analysis		
Desired State	Current State	Action
Required days for closing a case should be ≤ 7	Currently average number of dates to close a case is 12	<ul style="list-style-type: none"> Using Salesforce CRM and assigning a specific team to the tasks where the workflow is divided and streamlined allowing the teams to focus and organize everything within the mentioned time range.
Complete insight into the overall business, individual department, and their respective performance.	No current insights in the business in terms of performances.	<ul style="list-style-type: none"> Implementing Salesforce CRM to have a proper cognizance of the business, the respective departments, and their roles, which will eventually enhance the business performance.
Transparent understanding of the Sales pipeline and anticipating future revenue that enables business growth.	There is no proper pipeline or impactful visualizations to anticipate business growth.	<ul style="list-style-type: none"> Integrating Power BI, where multiple dashboards are created that allow the business to assess its current position as well as the future trends, leading to better decision making.
Creating a customer base by providing customers with a justified market price for the product so that customers do not suffer additional expenses on their purchase.	<ol style="list-style-type: none"> There was not an effective customer base present for the business due to unawareness of the price point of the products within the business. Current business strategies come short on providing customers with a justified market price for used products depending only on vendor quotation. 	<ul style="list-style-type: none"> Keeping readily available data of the depreciation model of all the products within the database, allowing business to provide the appropriate prices to the customer.
Increasing the customer satisfaction metric with NPS score tracking.	There was no customer satisfaction tracking due to the non-existent customer satisfaction metric.	<ul style="list-style-type: none"> Regular survey from customers after every complete sales order. Tracking the overall customer base satisfaction with the help of NPS score tracking.

3. Project Scope

The project aims to outline the comprehensive scope of our collaboration with Pineapple, aiming to expand its operations in North America within the resold electronic products market. We specialize in enabling seamless Customer Relationship Management (CRM) through Salesforce and enhancing data visualization capabilities using Power BI. This strategic partnership is designed to support Pineapple in achieving its 2023 growth goals and establishing a strong presence in the competitive electronic products reselling sector. Pineapple's decision to expand operations presents an opportune moment for us to leverage our expertise in CRM implementation and data visualizations. By integrating Salesforce, a leading CRM platform, Pineapple can streamline customer interactions, enhance communication, and optimize their sales processes. Additionally, Power BI will empower Pineapple with advanced data visualization tools, enabling deeper insights, informed decision-making, and the creation of impactful dashboards for comprehensive business analysis.

3.1 Customer Relationship Management

Pineapple relies heavily on building relationships with their customers and delivering exceptional customer service. Our CRM implementation plan involves customizing Salesforce to align with their unique business requirements. This includes:

i. *Customer Lifecycle Management*

We created a customer portal using Salesforce's Lightning and Classic, implementing a tailored system to track and manage customer interactions throughout the entire lifecycle. This includes lead management, opportunity tracking, and post-sales feedback to foster enduring customer relationships.

ii. *Sales Process Optimization*

Leveraging Salesforce Sales Cloud, we will tailor the platform to Pineapple's unique sales workflows. This optimization includes automating repetitive tasks, implementing sales forecasting tools, and providing real-time insights into sales performance for increased efficiency and revenue generation.

iii. *Customer Support Enhancement*

By Integrating Salesforce Service Cloud, we aim to centralize and enhance pineapple's customer support processes. This will facilitate efficient order management, timely delivery, and a lightened level of customer satisfaction with customer feedback.

iv. *Data Migration and Integration*

Ensuring an easy and smooth transition, our team will oversee the migration of existing data to Salesforce, implementing data cleansing process and nitrating other tools to create a cohesive and interconnected system.

3.2 Interactive Dashboard Creation

Pineapple has ambitious growth goals for 2023 and is keenly looking forward to increasing profits by streamlining their processes. With the help of interactive dashboards and visualizations they aim to access real-time analytics that would empower them with actionable insights for strategic decision-

making. The Implemented solutions are designed with scalability in mind, so accurate representation of business data is mandatorily provided. The visualizations are emphasized primarily on the key performance indicators (KPIs) relevant to Pineapple's objectives.

4. System Design

Pineapple, with the help of this collaboration, is committed to implementing a robust system that is meticulously designed to streamline their operations, enhance customer interactions, and provide data-driven insights crucial for informed decision-making.

4.1 System Architecture Overview

Salesforce CRM

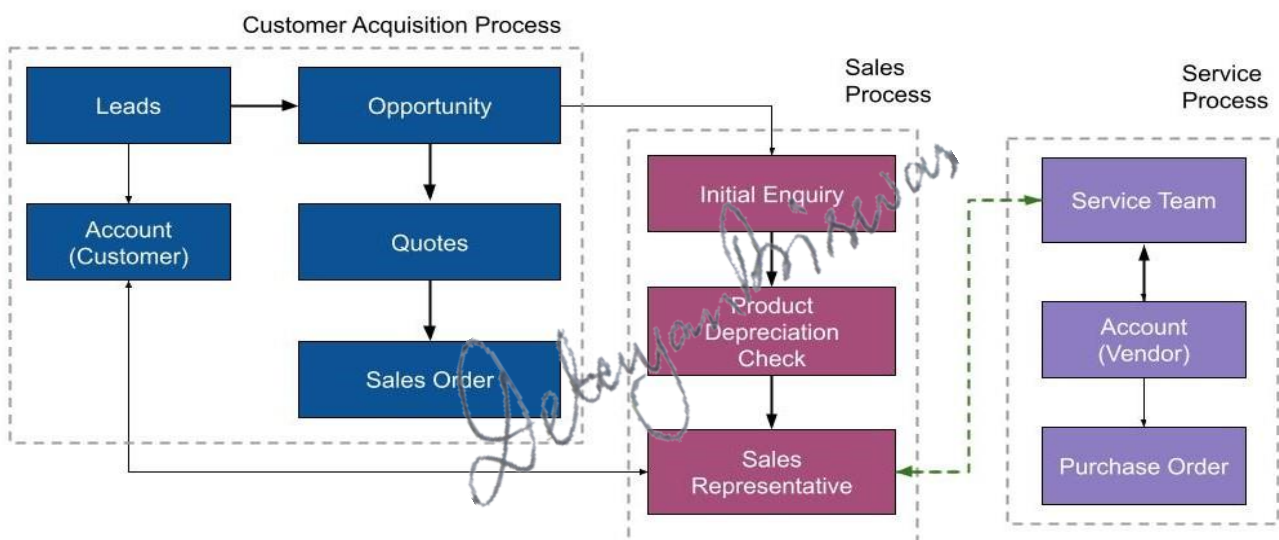


Fig 1. CRM System Design Architecture

4.2 Analytical requirements

The analytical solution for Pineapple encompasses the entire programming infrastructure designed to analyze customer data and present insights to facilitate more informed decision-making in business operations. With the advent of new and quicker methods for engaging with customers, the significance of transforming the data gathered about customers into actionable information has become increasingly vital for businesses.

Customer Account Management: The resolution necessitates overseeing accounts, starting from generating leads and identifying opportunities, all the way through to completing sales.

Profitability analysis and Customer value: Analyzing customer relationship management (CRM) data can offer a perspective on Pineapple's customers who consistently yield the greatest profits. This entails not only evaluating a customer's expenditure but also considering the resources allocated to serve that customer.

Personalization: CRM platform would be effective in documenting and monitoring customer analytics, encompassing purchase records, demographic information, and interactions with customer service. This functionality empowers Pineapple to provide personalized services to both individual customers and specific customer segments via focused advertising efforts, resulting in increased levels of customer satisfaction.

5. Database Design

The Entity Relationship Diagram (ERD) depicted below in Fig. 2 serves as a visual representation that encapsulates the entities existing within Pineapple, their interrelationships, and the attributes associated with each entity. This diagram serves as a valuable tool in comprehending the intricate structure of Pineapple's business system, aiding in the analysis, design, and overall comprehension of the various components and their connections. The ERD is created using Power Bi tools to efficiently show and connect the relationships between each entity.

The central focus of this design revolves around two pivotal tangible entities:

- i. Item
- ii. Customer

The 'Item' entity represents a table embodying the array of products that the electronic reseller company, Pineapple, engages with. In contrast, the other entities portrayed, such as 'Sales Order,' 'Item Depreciation,' 'Vendor,' 'Purchase Order,' and 'Feedback,' are abstract entities. These abstract entities encapsulate crucial aspects of Pineapple's operations, providing a conceptual framework for understanding key processes and interactions within the business.

Item:

The 'Item' entity represents the products list that Pineapple deals with, that helps them generate revenue.

Customer:

The 'Customer' entity represents the Customer base of the company.

Vendor:

The 'Vendor' entity helps the service team to grab the information such as stock, and prices of the products upon enquiry raised by the customers.

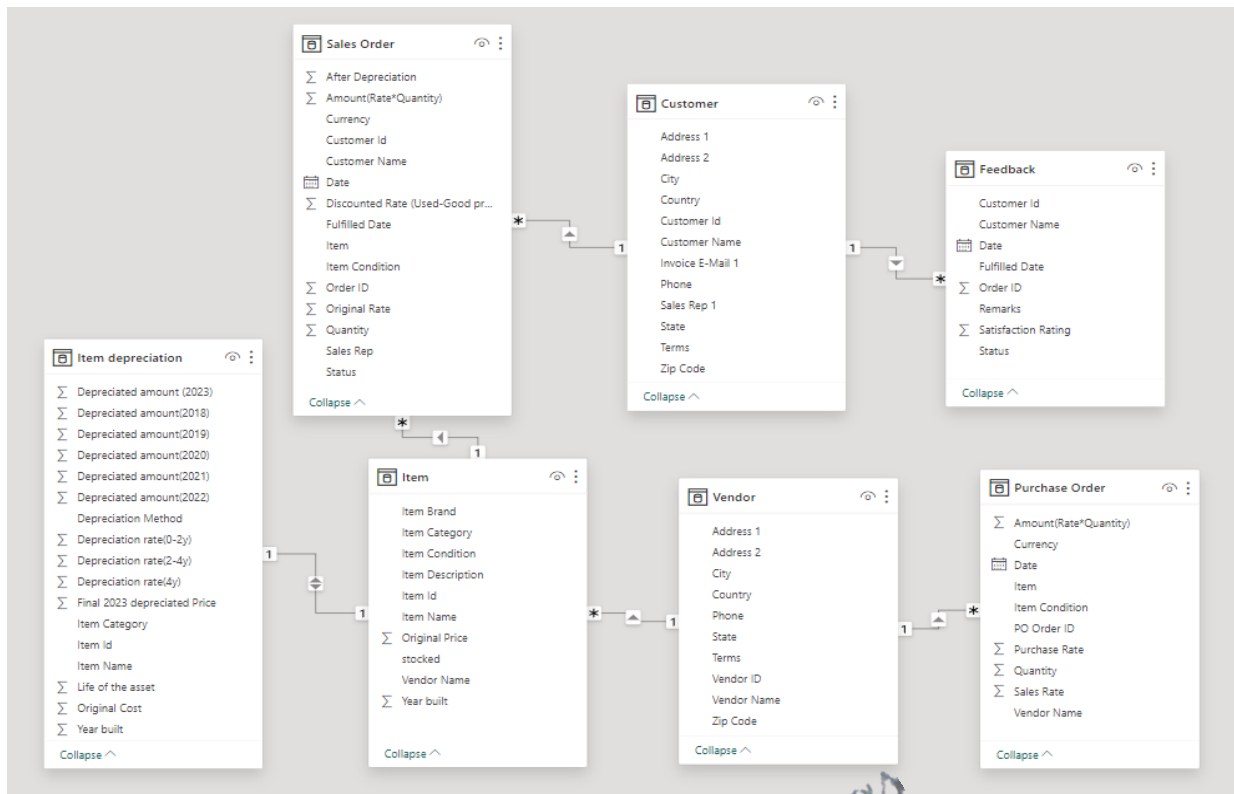


Fig 2. Entity Relationship Diagram of Pineapple

Sales Order:

The 'Sales Order' entity allows to get the information regarding all the sales orders that have been raised by the customer for the year 2023.

Item Depreciation:

The 'Item Depreciation' entity helps to get the calculated depreciated prices for every item in the item list generated as per their age.

Purchase Order:

The 'Purchase Order' entity helps to get the information regarding all the purchases that have been made from the vendors upon confirmed Sales Order.

Feedback:

The 'Feedback' entity helps to grab the information regarding the feedback provided by the customers as well as also helps to calculate the Net Promoter Score (NPS) for Pineapple.

6. Acknowledgement

The completion of this project has been made possible through the support of Professor Giovani Estrada.

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