Mini mock scenario – Packt Medical Equipment

This scenario is part of the book *Becoming a Salesforce Certified Technical Architect*. The scenario, its proposed solution, artifacts, and several elements of the presentation pitch can be found in the book. You can get your copy from Amazon at `https://www.amazon.com/Becoming-Salesforce-Certified-Technical-Architect/dp/1800568754/ref=sr_1_1?crid=D5L23IKSKZ6M&dchild=1&keywords=becoming+a+salesforce+certified+technical+architect&qid=1624804105&sprefix=becoming+a+salesforce%2Caps%2C217&sr=8-1`.

Timing

The following list contains the suggested timing for this scenario:

- **Preparation**: 75 minutes
- **Presentation**: 20 minutes
- **QA**: 20 minutes

You can increase or reduce the suggested timing to place yourself under looser or stricter exam conditions as required.

The scenario

Packt Medical Equipment (**PME**) has been selling medical equipment to health providers worldwide for the past 75 years. PME currently sells more than 20K different device models from various brands. PME has experienced massive growth in recent years. They sold nearly 5 million devices last year, and they expect their sales to grow by 10% year on year.

Current situation

PME operates in multiple locations. Each has a variety of CRM solutions tailored to work with distributors. PME would like to replace all the existing CRM solutions with a Salesforce-based solution. However, they would like to retain two existing systems as they believe they are offering a valuable set of tailored services:

- A centralized, browser-based **Enterprise Resource Platform** (**ERP**) system, used by the PME account managers to view the financial details of distributors they own the relationship with. The system is only accessible from within the company's intranet.

- A centralized inventory management system that holds data about the devices available at each location. It includes updated information about the arrival date and time of devices in transit to distributors. Moreover, the system allows information to be obtained in relation to the devices at distributor locations.

Data is currently entered manually into the inventory management system. The system is not integrated with other systems and does not have any exposed APIs. The system utilizes an MS SQL database to store the data.

The ERP system is also not integrated with other systems. However, it has a rich set of SOAP and REST APIs.

Users are required to authenticate to each of these systems before they can use them. Authentication is currently done separately as each of these systems stores its own user credentials. At the same time, PME is using an LDAP-compatible directory to store all internal and external identities.

The ordering process consisted of three stages: negotiation, confirmation, and shipping. Orders are placed quarterly.

PME is looking to modernize its landscape and offer more standardized processes worldwide. Moreover, they are looking to increase productivity for their users by avoiding double data entry as much as possible.

Requirements

PME shared the following requirements:

- The PME security team has mandated the use of single sign-on across all the systems used as part of the new solution, including the ERP and the inventory management system.
- Device orders should be originated in Salesforce.
- Before the negotiation phase, PME sets a maximum and minimum allocation for each distributor's device type.
- During the negotiation phase, the distributor should be able to place an order, which contains a list of the device models and quantity.
- If each model's requested quantity falls within the defined allocation per model, the order is automatically *confirmed*.

- If each model's requested quantity falls outside the defined allocation per model, the order should be sent to the account manager for approval. The system should automatically retrieve the four values indicating the financial status of the distributor from the ERP.
- The account manager should utilize the financial health indicator values, in addition to the historical orders for this distributor, to determine the correct course of action.
- When the order is about to be shipped, the inventory management system may create multiple shipments. For each shipment, a list of the devices and their unique manufacturer IDs are created. The shipments and their line items should be visible to the distributor's fleet managers in Salesforce. The status of each line item should be *in transit*.
- When the shipment is delivered, the distributor's fleet managers are given 3 days to confirm the shipment's receipt. They should confirm the status of every device identified by its unique manufacturer ID. The status of each line item should be *available in stock*.
- The account manager should be notified if more than three days has passed without receiving a confirmation.
- The distributor's fleet managers regularly update each device's inventory status, identified by its manufacturer ID. They should indicate whether the device has been sold, returned, damaged, or is still available in stock. This information should also be updated in the inventory system.

PME is looking for your help to design a scalable integrated solution that meets their requirements and ambitious roadmap.

This concludes the hypothetical scenario. Ensure that you have gone through all the pages and requirements of your actual hypothetical scenario before proceeding further.