Project Description: User Empowerment with Power Platform Integration

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Introduction

The User Empowerment with Power Platform Integration project introduces a streamlined quotation tool designed to simplify the generation of Bills of Quantities (BoQs) for sales managers and account managers. Unlike the existing configurator tool, which requires extensive technical inputs and expertise from Specialist Solution Managers (SSMs) or Subject Matter Experts (SMEs), this new tool empowers non-technical personnel to create high-level quotations quickly and efficiently. By integrating Microsoft Power Platform components, it bridges the gap between initial customer discussions and detailed technical configurations, enhancing both speed and accessibility in the quotation process.

Project Overview

The existing configurator tool, while robust, demands 30-35 technical inputs, making it reliant on SSMs/SMEs for BoQ generation. This project addresses the need to enable sales managers and account managers—non-technical users—to produce primary quotes for customer discussions. The tool requires only 8 basic inputs, with remaining parameters assigned default values, clearly outlined in an assumptions section of the BoQ. This high-level quotation serves as a starting point, with fine-tuning and customizations deferred to SSMs/SMEs using the existing configurator tool as needed. Session details are preserved across both tools, ensuring seamless collaboration and continuity.

System Architecture

The tool leverages the Microsoft Power Platform and integrates with the existing configurator to deliver a cohesive solution:

Frontend: PowerApps

- Provides an intuitive UI for sales managers and account managers to input 8 basic parameters, making it accessible to non-technical users.

Automation: Power Automate

- Acts as the intermediary, adding default values to user inputs and facilitating communication with the existing configurator tool.
- Uses HTTP actions to send JSON requests via API calls and process responses.

Backend Integration: Existing Configurator Tool

- Receives enriched inputs from Power Automate, generates the BoQ in real time, and returns the result.

Data Storage: SharePoint

- Stores session details, user selections, and generated BoQs in lists and libraries for record-keeping and future reference.

Workflow

The quotation process follows a streamlined flow:

PowerApps UI:

- Sales managers/account managers enter 8 basic inputs.

Power Automate:

- Enriches the inputs with default values based on user selections.
- Sends a JSON request to the existing configurator tool via HTTP action.

Existing Configurator Tool:

- Generates the BoQ in real time and responds with the result.

Power Automate (Post-Processing):

- Emails the BoQ to the end user.
- Stores a copy of the BoQ, JSON request, and JSON response in a SharePoint library.
- Logs user selections, session details, and user information in a SharePoint list.

Key Features

The tool introduces several features to enhance usability and efficiency:

Simplified Input Process

- Reduces the input burden from 30-35 technical fields to 8 basic ones, tailored for non-technical users.

Real-Time BoQ Generation

- Produces a draft BoQ instantly, enabling sales managers to present offers during customer discussions.

Default Assumptions

- Automatically applies default values to unprovided inputs, documented in the BoQ's assumptions section for transparency.

Session Continuity

- Maintains session details across both the new tool and the existing configurator, allowing SSMs/SMEs to refine the same BoQ later.

Security Measures

Security is integral to the tool's design, ensuring safe and controlled interactions:

Azure App Registration

- An app is registered in Azure, and its secret is shared securely with the existing configurator tool to authenticate API communications.

Data Protection

- All user inputs, session details, and generated BoQs are stored securely in SharePoint, accessible only to authorized personnel.

Benefits

This tool delivers significant advantages, particularly for sales managers and account managers:

Faster Quote Generation

- Enables draft offers to be created in minutes, accelerating customer engagement.

Improved Accuracy

- Default values and integration with the existing configurator ensure consistency and reduce errors in initial quotations.

Empowerment of Non-Technical Users

- Allows sales teams to independently generate high-level quotes without relying on SSMs/SMEs for every step.

Flexibility for Customization

- Supports later-stage refinements by technical experts, maintaining flexibility for complex customer requirements.

Conclusion

The User Empowerment with Power Platform Integration project transforms the quotation process by making it accessible to non-technical sales personnel while preserving the precision of the existing configurator tool. Through the seamless integration of PowerApps, Power Automate, and SharePoint, it empowers sales managers and account managers to engage customers effectively with rapid, accurate draft offers. This solution not only enhances operational efficiency but also fosters collaboration between sales and technical teams, driving better outcomes for both the organization and its customers.