

Modernizing Document Management for Health Insurance – Quadient CCM

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Summary

Macrosoft was tasked with modernizing and centralizing a leading Health Insurance customer communication management system. The primary objective was to replace outdated MS Word letter solutions that were no longer adequate for the organization's evolving business needs. The project aimed to streamline the creation, management, and distribution of a wide range of insurance-related documents through a unified system.

Some high-level 'facts and figures' of the project are the following:

- **Style Creation:** Imported the sample PDF into the designer tool to identify and analyze text styles and other formatting elements.
- Created style master with the gathered info
- **Base Template Creation:** Developed a minimal number of Business Templates (BTs) to cover the various Lines of Business (LOBs) and their associated letters.
- **PDF Accessibility:** This involves adding information to the PDF tab properties and configuring the PDF engine to ensure accessibility.
- **Template Categories:** There are two types of templates: primary and secondary. While Express provides primary templates, secondary templates must be created from scratch as they are unavailable from Express.
- **Metadata and Categorization:** We incorporated metadata and categorization into all Lines of Business templates (LOBs).
- We designed a script to update Base template references for all objects within a specified folder. It involved replacing the Business Templates reference of all objects with the new Business Templates we created for blocks, snippets, and templates. The parameters required for this process include:
 1. Folder path
 2. Current Business Templates
 3. New Business Templates to replace the current one.
 4. The workflow Definition (WFD) is reviewed after these changes are applied to ensure the modifications are correctly implemented.
- **Dependency Identification:** We developed a script to identify blocks and snippets without dependencies.
- **Adding Enclosures:** To include enclosures such as PDF documents and images, we created a Business Template (BT) and then developed a template. Once this was complete, we appended the secondary template to the primary one.

Project Profile

The initiative, undertaken by Macrosoft, was launched to revamp the insurance document management system. This initiative aimed at developing a comprehensive set of templates and styles for generating insurance-related documents. Macrosoft's primary objectives included creating a unified document management system, ensuring consistent visual styles across 600+ letters spanning 10+ lines of business, and enhancing PDF accessibility. Key activities encompassed the creation of a Style Master for standardization, developing base templates for foundational document generation, and implementing scripts to automate template management and updates.

The project encountered challenges such as creating secondary templates from scratch and managing a substantial volume of templates and Business Templates references. Macrosoft addressed these issues by leveraging its design expertise, utilizing detailed project specifications, and developing custom scripts to streamline template management. This approach led to significant efficiency improvements, enhanced accessibility compliance, and better document organization through refined metadata and categorization.

Overall, Macrosoft's execution resulted in the successful implementation of a robust document management system tailored to the specific needs of a health insurance provider. By focusing on automation, standardization, and custom solutions, Macrosoft enhanced efficiency, accessibility, and organization, showcasing the effectiveness of strategic planning and innovative solutions in complex document management scenarios.

Accessibility was a crucial component of this project, which aimed to ensure that all PDFs complied with accessibility standards. The team configured PDF tab properties and PDF engine settings to enhance document navigation and readability for users with disabilities.

Tools Used in the Project

1. Designer and Interactive:

Purpose: The Designer tool was essential for analyzing and documenting existing document styles.

Usage: Sample PDFs were imported into the tool, allowing the team to identify and standardize text styles, headings, fonts, and other formatting elements. This standardization was critical in creating a Style Master that ensured visual consistency across all documents. Primary templates were customized from existing templates provided by Express, while secondary templates were made from scratch. These tools ensured all

necessary enclosures (PDFs and images) were properly included and formatted within the primary templates.

2. Script Automation:

Purpose: Automating repetitive tasks such as updating Base Template (BT) references with blocks, snippets, and Templates.

Usage: Custom scripts were developed to streamline replacing outdated Business Templates references with new ones across all templates. These scripts took parameters like folder path, current Business Template, and new Business Template for replacement. Additionally, scripts were created to identify standalone blocks and snippets, which helped in efficient document component management.

3. PDF Engine Settings:

Purpose: Enhancing PDF accessibility to comply with standards.

Usage: Configuration of PDF tab properties and other engine settings ensured that the documents were easily navigable and readable by screen readers and other assistive technologies. This included adding tags to PDFs, setting reading orders, and ensuring that all interactive elements were accessible.

4. Metadata and Categorization Tools:

Purpose: Improving document organization and retrieval.

Usage: Tools were used to add metadata and categorize templates systematically. This made it easier to manage, search, and retrieve specific documents within the system, enhancing overall efficiency and user experience. Primary templates were customized from existing templates provided by Express, while secondary templates were created from scratch. These tools ensured all necessary enclosures (PDFs and images) were properly included and formatted within the primary templates.

These tools collectively facilitated the efficient creation, management, and standardization of a large volume of insurance documents, ensuring the project's success in meeting its objectives of consistency, accessibility, and improved document management.

Development Steps and Explanation for the Project

1. Initial Analysis and Planning

The project commenced with a thorough analysis and planning phase. This involved understanding the current document system and defining project requirements. A comprehensive project plan was created, outlining milestones, deliverables, and timelines to guide the project's execution.

2. Style Creation

The next step focused on establishing a consistent visual style for the documents. Sample PDFs were imported into the Designer tool, and existing styles were analyzed and documented. A standardized Style Master was developed to ensure visual uniformity across all document types.

3. Base Template (BT) Creation

Foundational templates, known as Base Templates, were created. A minimal set of Business Templates was designed to cover all lines of business (LOBs) and their respective letters. Custom scripts were developed to automate the replacement of outdated Business Templates references, ensuring all documents adhered to the latest standards.

4. PDF Accessibility

Ensuring accessibility was a critical component of the project. The team configured PDF tab properties and engine settings to enhance accessibility. This included adding tags, setting reading orders, and testing documents with screen readers and other assistive technologies to ensure compliance with accessibility standards.

5. Template Development and Categorization

The development of templates involved customizing primary templates received from Express and creating secondary templates from scratch as needed. Metadata and categorization were added to all templates to improve document organization and retrieval.

6. Automation and Script Development

Custom scripts were developed to streamline the management of templates and Business Templates references. These scripts automated repetitive tasks such as

updating outdated Business Templates references and managing standalone blocks and snippets.

7. Enclosures Integration

Enclosures containing PDFs and images were integrated into primary templates. A Base Template for enclosures was created, and secondary templates were appended as necessary to ensure that all required enclosures were properly included and formatted.

8. Quality Assurance and Testing

The final steps involved rigorous quality assurance and testing. The new system was tested to validate its functionality, ensuring all templates and documents met the required standards. This phase also included staff training, system monitoring, and ongoing maintenance to ensure continuous improvement and compliance with accessibility standards.

Team Structure

Initially, one team was considered, with four resources (one Team Lead and three Developers). Later, three more members were added to the Team, and one additional Team was added with seven resources per Quadient's request.

Overall experience from this project

A blend of complexity, collaboration, and innovation marked the overall experience. Here's a summary of the key aspects:

1. Complexity and Scope

The project was intricate, involving the management and standardization of 614 documents across 12 lines of business. Handling many templates and ensuring consistency was challenging but ultimately rewarding.

2. Collaboration and Teamwork

Successful execution required close collaboration between various teams, including designers, developers, and business analysts. The project fostered strong communication and coordination, which is crucial in meeting the client's expectations.

3. Innovation and Problem-Solving

The project presented challenges, such as creating secondary templates from scratch and managing numerous Business Templates references. Innovative solutions, like automation scripts and custom templates, addressed these challenges, demonstrating the team's ability to think creatively and implement effective solutions.

4. Client Satisfaction

The client was delighted with the outcomes, particularly the efficiency gains, accessibility improvements, and enhanced document organization. The project met and exceeded the client's requirements, solidifying a relationship and trust.

5. Learning and Growth

The project provided valuable learning opportunities, especially in managing large-scale document systems and ensuring compliance with accessibility standards. The experience gained from this project has equipped the team with enhanced skills and knowledge that can be applied to future projects.

6. Outcome and Impact

The project had a significant positive impact on the client's operations, leading to more efficient document management and a better user experience for both employees and customers. The successful delivery of this project has set a precedent for future endeavors in similar domains.

In summary, the Project was a highly successful and fulfilling experience, characterized by effective collaboration, innovative problem-solving, and a strong focus on meeting the client's needs. The project's success is a testament to the team's expertise and commitment to delivering high-quality solutions in complex scenarios.

Achievements

It achieved several significant milestones, contributing to its overall success. Here are the key achievements:

1. Unified Document Management System

Successfully developed and implemented a comprehensive document management system that handled 600+ letters across 10+ lines of business (LOBs), providing a standardized approach to document generation.

2. Consistent Visual Style

Created a Style Master that standardized text and visual elements across all documents. This achievement ensured uniformity and improved the professional appearance of all insurance-related documents, strengthening brand identity.

3. Template Management

Developed a minimal set of base templates (BTs) that catered to all LOBs. This streamlined the template management process, ensuring that all documents adhered to the latest standards while reducing the complexity of maintaining multiple templates.

4. Enhanced PDF Accessibility

Configured PDF tab properties and engine settings to meet accessibility standards, ensuring all documents were accessible to users with disabilities. This achievement improved compliance and made the documents more user-friendly.

5. Efficient Template Categorization

Successfully added metadata and categorization to all templates, significantly improving document organization and searchability within the system. This achievement made it easier for users to retrieve and manage documents.

6. Automation of Business Templates Reference Updates

Developed and implemented a script to automate updating outdated Business Templates references in existing templates. This achievement saved time, reduced errors, and ensured all documents used the most current templates.

7. Creation of Secondary Templates

Designed and developed secondary templates from scratch to meet specific needs where pre-existing templates were unavailable. This achievement ensured that the project could address all client requirements comprehensively.

8. Integration of Enclosures

Successfully integrated PDFs and images as enclosures into primary templates, ensuring all necessary information was included and correctly formatted in the final documents.

9. Efficient Management of Blocks and Snippets

Created a script to identify and manage standalone blocks and snippets, enabling more efficient document component management and identifying areas for potential updates or deletions.

10. Client Satisfaction and Positive Impact

The project met and exceeded the client's expectations, improving document generation and maintenance efficiency, better compliance with accessibility standards, and enhanced document organization. This contributed to a strong relationship with the client and set a benchmark for future projects.

These achievements collectively underscore the project's success in delivering a robust, efficient, and user-friendly document management system that met all the client's needs and objectives.

Conclusion

This Project was a successful initiative that significantly improved the document management system for Health Insurance clients. By focusing on automation, standardization, and accessibility, the project delivered a streamlined and efficient process for handling various insurance documents. Implementing consistent visual styles, developing base and secondary templates, and enhancing accessibility features ensured that all documents met the highest quality and compliance standards. Additionally, the project's custom solutions, such as automated Business Templates replacements and metadata enhancements, led to better organization and easier retrieval of documents.

Overall, the project met the client's needs and set a new standard for efficiency and effectiveness in document management within the insurance industry. Its success demonstrates the power of strategic planning, innovation, and attention to detail in overcoming complex challenges and delivering robust, long-lasting solutions.

THANK YOU !

**For More details please
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