

Protect Penn-Trafford

Executive Summary

Community Partner

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Background

Protect Penn-Trafford (PT) is a nonprofit organization focusing on protecting the legal, environmental, and economic interests of residents in Westmoreland and Allegheny counties. Protect PT engages in proactive education and advocacy, particularly against the harmful actions of the oil and gas industry. The organization facilitates this goal with a three-pronged mission. First, Protect PT engages in litigation support, regulatory advocacy, and legal education, ensuring adherence to environmental laws and regulations. Second, Protect PT empowers residents to engage in health, safety, and legal education programs. Third, Protect PT demonstrates its collaborative spirit by engaging with oil and gas companies, participating in legislative meetings, and advocating in public hearings on oil and gas infrastructure projects.

Project Description

Project Opportunity

Protect PT faces significant challenges in managing and accessing large volumes of information efficiently during legislative hearings. The organization currently handles around 300 GB of data manually, which includes extensive legal documents stored on hard drives. This cumbersome process hampers their ability to prepare effectively within legal time constraints. A robust database would greatly benefit Protect PT by automating the extraction and organization of key information, thus reducing manual labor and allowing advocates to focus more on case strategy rather than evidence management. Such a system would enhance the efficacy of cross-examinations and support key personnel, like Jim, in their legal efforts.

Project Vision

Our project is focused on developing a document management system (DMS) to revolutionize how Protect PT manages and accesses extensive legal documents. This system will feature keyword-based search capabilities, allowing legal teams to swiftly locate specific evidence within documents as long as 800 pages. A distinctive aspect of the app is the ability to navigate directly to bookmarked pages, greatly improving access to critical information during legal preparations and hearings. Additionally, while this project initially serves Protect PT, there is potential to expand its utility to environmental firms nationwide, enhancing information sharing across various organizations. This solution not only promises significant

time savings in locating and referencing crucial document sections but also supports more effective legal advocacy and case preparation.

Project Outcomes

Our project successfully transitioned Protect PT's files from physical and Google Drive storage to Zotero, a more efficient digital library, at a cost-effective annual fee. Adobe Acrobat was used for OCR on scanned PDFs, improving searchability and management. We configured the system with restricted access, managed by Protect PT's executive director, and integrated essential documents from key projects. Through targeted training, staff members like Gillian and Jim honed their skills in system management, significantly reducing document retrieval and trial preparation times. While full testing is still pending, the setup already shows promise for major time savings and future enhancements, supported by Zotero's community for sustainability. Further development will focus on integrating more documents and refining the system.

Project Deliverables

In the handoff, we ensured both users of the Zotero Document Management System had fully functioning accounts that were able to access the Protect PT Expert Impeachment Project Library. We also wrote a user manual that ensured the organization would be able to utilize full functionality in the future. Furthermore, we also have a document directed towards future teams detailing the more technical aspects of development for incomplete features.

Recommendations

To ensure the sustainability and effectiveness of the new Zotero and Adobe Acrobat systems at Protect PT, a structured training program led by Jim and Gillian is essential, utilizing the existing user manual as a curriculum base, and involving comprehensive sessions and onboarding materials for new hires. For future student teams, developing features that allow linking related document sections directly within the Zotero PDF reader is recommended to enhance functionality. These improvements should be closely aligned with Protect PT's operational needs and include developing new plugins or integrating with Zotero's notes feature to streamline document management processes.

Student Consulting Team

Daniel Chen led the technical development. He is a third-year student majoring in Information Systems and Computer Science.

Larissa Tyagi was the project manager. She is a fourth-year student majoring in Information Systems and Business Administration.

Vanessa Lin served as the client relationship manager. She is a third-year student majoring in Information Systems with a minor in Computer Science.