

Developing a Marketing Plan for a Developed AI-powered Text Generation Application with FedWriters

A Professional Readiness Experiential Program (PREP) Project Effort

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Interested in being an Industry Participant and or PREP Sponsor? Please reach out to bngac@gmu.edu, Thanks!

---- Client Testimonial ----

“This market research project focused on the research and development needs for FedWriters’ new Plain Language Pro software, culminating in a comprehensive set of deliverables that significantly bolster the company’s understanding and readiness for launching this innovative tool. The GMU team identified key business challenges and explored similar AI solutions available in the market across a range of variables such as accuracy, availability, security, price, and more. The GMU students demonstrated dedication to understanding and addressing the specific needs of our projected user base and conducted market research, leading to well-founded recommendations that have positioned us to significantly improve Plain Language Pro.”

- Mitchel Cho | President & Chief Executive Officer | FedWriters

Introduction

FedWriters is a US-based corporation that focuses on assisting federal agencies and private clients in creating and managing a variety of material such as “technical reports, policy documents, user manuals, multimedia content, and more.” They defined themselves as a professional firm specializing in “writing, research, and communications” (FedWriters, 2024). Every project that they have taken is guided and followed by the principle of “clear, compelling, compliant.” As a result, the company aims to assist in explaining the complex inner workings of the government by providing the best writing, research, and technology available (“Our Services,” 2024). To improve document clarity and compliance with the Plain Language Act of 2010, FedWriters has created an AI tool that provides the solution for this problem. This tool will check, analyze, and correct documents to ensure they meet the requirements outlined in the Plain Language Act.

Business Challenge

With the creation of a newly developed AI tool, FedWriters faced two main problems for this project: to implement the Alpha Test for the AI tool and to create thorough research on the alternatives on the market.

Activities Done to Address the Business Challenge

Project Goals

After meeting with the client, we clarified the main goals for this project were to:

- Develop comprehensive market research for FedWriters to launch their new product that complies with the Plain Language Act, which includes the market landscape and potential marketing plan.
- Create an Analysis of Alternatives with several criteria to identify and examine existing similar AI tools on the market.
- Provide recommendations for the AI tool based on the Alpha test and the comparison.

Activity Description

With the project requirements and goals, we focused on developing the project with the directions and suggestions from the clients for each stage. In total, 3 major phases need to be worked on: the Alpha test for the developed AI tool, analysis of alternatives, and market research. The client and the team agree to set up a fixed time to have weekly meetings.

At each stage, the client gave us the general tasks and the needed materials to work on and some ideas on how to develop it. However, they also encouraged the team to be creative and gave them ideas actively. Once we finished the task, we presented it to the client, gathered their feedback, updated the requirements if needed, and made changes to specific areas. Before closing the phase and moving to the next one, we clarified the outcomes and sent them the necessary documents for further reference. Moreover, the time for each stage could vary based on the results provided by the team and the requirements of the client.

Alpha Test for the Developed AI Tool

For this stage, we first received the documents about the Plain Language Act and were asked to understand the overall ideas of this rule. Then, the client presented to us the tool's purpose and what they expected to approach and achieve from it. We were given the testing guide with access to the developed AI tool to run the Alpha test.

Lists of Testing Types and Running the Test

Our team raised six main tests for this tool: Functionality, usability, performance, accuracy, compatibility, and security. These were the most important aspects that our team believed should be examined for an AI tool. On each test, we listed specific requirements to have a standard to follow while running the test, for example, if the tool can identify the violated sentences, the speed when analyzing the documents, if the tool changes the original meaning, and if the tool works on multiple browsers. We tested the tool individually and noted the experience when using the tool. Then, we came up with consistent results for each category and gave feedback to the client.

Analysis of Alternatives

In this project, there are some factors that we needed to determine:

- Because FedWriters wants to have many details about the AI tools and users' feedback, we carefully examined and experienced those tools to provide a thorough research and evaluation of each alternative tool.
- We also made suggestions for adding highlight features, updating the current tool's functions, and improving users' experiences.

The analysis's main point was to understand what products are currently in the market, what they are using, and how they are marketing their tool. The overall success of their tool will help in the decision-making process for Fedwriters to see what is currently being used and how. FedWriters can determine what they want to integrate or improve in their tool in order to maintain competitive advantage. Overall, this will create an innovation process that can

The analysis of alternatives has a baseline of acceptance criteria. These specific standards were discussed with FedWriters which are the conditions that a product, service, or deliverable must meet in order to be accepted by stakeholders. These criteria were defined during the early stages of this project, more specifically the requirements-gathering phase.

Research the Alternatives

The purpose was to have a baseline and comprehensive analysis of other similar competitive tools in the market. By identifying options and comparing the performance to determine which ones perform the best. This involved tools that were similar to the tool that FedWriters created that follows the Plain Language Act. The team came up with ten different AI tools that integrate text generation and evaluated each tool with a consistent outline.

Evaluation of the Alternatives

The process involves conducting a thorough analysis of various alternatives and establishing clear acceptance criteria to identify the optimal solution.

- This comprehensive approach ensures that decision-makers carefully evaluate different options.
- By defining specific criteria for acceptance, stakeholders can objectively assess each alternative and select the solution that best aligns with project goals and requirements.
- This method promotes informed decision-making, helping to mitigate biases and uncertainties while maximizing value and minimizing risks.

Comparison of Alternatives

The comparison will have a standard outline to follow, which includes 7 acceptance criteria:

- **Accuracy** was determined by: Grammatical and spelling correctness features; & The information was preserved from the original text.
- **Readability** based on whether or not the tool had the score feature; With the plain language application, if it was easy to understand the document or not.
- **Speed and efficiency** included: How quickly does the tool process the document; Is it real-time processing; Can it be used offline; & Does the tool provide other functions: summary, auto correct, potential problems identification
- For **availability**, we looked at: Any tier options available; Did it limit functions or users; How the tool charred for the services; & Does the tool have a downloadable app
- **Training** went over essentially: How user-friendly the tool was; & Whether or not there was any instruction video for further guidance.
- **Scalability** assessed: What documents does the tool offer and other services; & Whether or not it was able to integrate into Microsoft Word.
- **Security** went over the basics such as: Does the tool require multi-factor authentication; Any information regarding the security of the tool; Was there any use of encryption technology to protect the document; Does it comply with privacy and security laws; & Where is the tool based

After the analysis and comparison, the team concluded the results with a matrix table showing the top three AI tools with the highest scores and their notes: Readable, Jasper, and Legalshell. Even though these tools had the highest scores out of all the tools, they do not have a similar selling point as the tool that FedWriters created.

Results & The Positive Impact

Based on the given information from the client, the developed AI tool met the listed requirements and passed mostly all the listed tests. However, there was still room for improvement. We noticed when creating an account, the password requirements did not list clearly and mention which part needed to be changed. As a result, this would create confusion for the future users. The next thing that could be improved was the visual presented when analyzing and correcting the documents. Because it just showed a simple red underline for multiple correction categories, it was not an effective way for the users to follow and identify

which categories they needed to revise and edit. After having the results ready, we provided our feedback to the client, and they already made some changes based on the suggestions.

Market Landscape

Throughout our research of the market and analysis of alternatives, we gained a better understanding of the current market landscape and potential marketing strategies for our client. Our first observation was that the market for AI tools and text-generation software is oversaturated. It is important that a new tool being introduced into the market has a certain specialty to help it stand out. This is advantageous for our client because they have a specialized product that is designed specifically to have text adhere to the Plain Language Act. There are currently no direct competitors that have tools designed specifically for the Plain Language Act.

The target customer for our client's product will be Federal Civilian Agencies. The focus should be on any government agency that has forward-facing publications. Examples of agencies that have a lot of communication with the general public are agencies such as the IRS or the Department of Transportation. Another target customer for our client will be agencies whose funding is tied directly to stakeholder sentiment, such as the National Science Foundation. These agencies are heavily incentivized to have any information they release to the general public adhere to the Plain Language Act, to increase stakeholder sentiment and maximize federal funding.

Potential Marketing Plans

We have identified two clear potential marketing plans for our clients as they enter the market. The first option is a direct-to-consumer subscription model. This is the model that the vast majority of alternative tools use, typically with a monthly or annual subscription option. This model would generate stable, predictable revenue every month. The revenue would be tied directly to the number of subscriptions sold and the success of the tool would be easily quantifiable. However, this would require a large initial investment for marketing and implementation. It would lead to less personalized products and relationships, as our clients would be selling the same product to different agencies.

The second option that we have identified is a business development strategy. This strategy would involve our client using their new tool as a selling point for business development. This option would have a higher upside of revenue growth because it would lead to building stronger relationships with clients and having the opportunity to do work for clients that they may otherwise not have. This would also involve a smaller initial investment because they would be marketing the tool directly to clients with whom they already have a relationship. The main challenge with this plan is that it would involve less predictable revenue growth and it would be more difficult to tie the additional revenue generated directly to the use of this tool.

Recommended Marketing Plan

The recommended path forward for our client is to implement a business development strategy for the marketing of their tool. Using this tool as a selling point to gain new clients and retain existing clients will lead to stronger client relationships and a greater upside in revenue growth.

Strong client relationships will increase revenue, both in work related to the Plain Language Act and in unrelated work for clients.

Deliverables

Turnover Document

Our main deliverable was a comprehensive turnover document where we compiled all of our research throughout the project. This included a description of the project, how we solved our client's business challenge, and a possible path forward. Another critical part of this turnover document was an Excel sheet where we compared ten different AI tools based on the seven acceptance criteria.

Client Presentation

At the conclusion of the project, we gave a presentation to our client going over the project objectives, our process for completing the project, and a path forward for our client.

PREP Student Reflection

Angelica Martinez-Esparza

Working on this semester-long project has provided me with a deeper insight into how to apply research to real business challenges. This allowed me to truly understand the importance of good research and the outcomes that can yield from it. Working on a team to fulfill a client's needs gave me the opportunity to apply the necessary skills in a professional environment that gave me the space to develop. I am thankful for this experience.

David Hurwitt

This project has given me a better understanding of how the skills I've learned in school can be applied to solving business challenges. It has also given me experience in communicating with a team to meet the requirements of a client. The experience of working on a project for a client, from beginning to end, has given me a better understanding of the different phases of successfully completing a project.

Nhi Hien Phuong Le

After doing this project, I have learned a lot about researching, developing analysis, and improving conceptual and human skills. I have had an opportunity to apply what I have learned so far from my courses such as identifying the business's problems, analyzing the market, developing the marketing plan, and proposing possible solutions. This benefits me because I can visualize and practice the concepts in the real business world. Compared to my previous internship as a Sales Assistant; this experience is dissimilar because both have different focused areas. One focused on marketing and promotion and another focused on business analysis. I have always wanted to work as a Business Analytic after graduating from university, so this opportunity helps me better understand the job I desire.