Example 5: Bioscience & Healthcare

1. Team

The PIs for this project are both residents in the Department of Otolaryngology-Head and Neck Surgery (O-HNS) at Vanderbilt University Medical Center (VUMC) who have developed a virtual platform for O-HNS residency applicants across the country to connect with prospective residency programs.

The PIs seek to engage a Nashville-based technology partner to lead the project, utilizing a team of experts in IT services, software development, and digital solutions.

2. Technology/Innovation Description

The platform provides an opportunity for aspiring residents to display their knowledge and showcase their interests by uploading brief five-minute videos, which can be viewed by participating residency programs across the country.

The project involves crafting a customized website for the platform, which will include the creation of a video library. The library will provide residents the opportunity to view, share, and interact with subject area content.

The tech partner will construct a portal through strategic use of WordPress, a renowned content management system, and thoughtful plugin selection. Applicants will upload pre-recorded videos that include a 30-second biographical introductory speech followed by a presentation on an interesting topic. Content will be password protected and accessible only to residency programs and participants.

3. Predicted Outcome

Anticipated outcomes involve the creation of a website that is both highly functional and engaging. The website will skillfully communicate the objectives of the platform, highlighting a user-friendly interface, smooth content management, and versatile features. A crucial aspect of this endeavor is ensuring its user-friendliness for the extensive community of physicians from numerous institutions across the nation who will use it as a comprehensive library. This necessitates the establishment of a customer feedback loop to gather insights into improvements and incorporating a flexible timeline to accommodate necessary updates.

4. Commercial Targets

The platform is a natural adjunct to the residency application process for two reasons: the first being that it offers a well-rounded and holistic view of students, allowing them to share personalized videos about their interests.

The second aspect is its relevancy in an increasingly virtual world. The platform product offers a framework for students to build relationships with prominent faculty members at residency programs hundreds of miles away, whereas in the past they would have to make long and sometimes costly trips to build connections.

5. Scope of Work

The scope involves plugin validation, timeline and cost confirmation, user experience enhancement, and streamlined content management. The scope is designed collaboratively with VUMC to ensure branding alignment.

Phase 1: Planning, Discovery, Development, & Testing

In the initial phase, the project will be set up by adding all team members to communication tools and creating folders. The first meetings will be planned during this phase. A kickoff meeting will take place to review the web development scope, team members, and timeline. Any necessary adjustments and changes will be discussed and finalized in this meeting, involving both the technology partner and PIs. Furthermore, the choice of the final WordPress theme and the matching of plugins to required features will be confirmed. This phase will also identify any non-plugin tasks that might affect the project's estimated timeline.

This phase will also commence the development process. This will involve setting up the website environments, implementing Cascading Style Sheets (CSS), and creating the foundational pages using the chosen WordPress theme. The developer will work on building out the website templates page by page, and the project manager will facilitate the transfer of these templates to a staging site. The PIs will then begin entering page content into the staging site. Additionally, the necessary WordPress plugins for various features will be configured and integrated into the website. A known plugin to be integrated is Gravity Forms for video uploads. Custom integrations will also be performed, encompassing the integration of plugins as required, along with any necessary custom code, CSS adjustments, and theme modifications. User testing and training will run concurrently as pages are completed. PIs will be trained in content entry and access procedures, and any identified bugs will be reported and addressed.

Phase 2: Deployment, Hosting, Maintenance, & Support

As the project progresses into Phase 2, a comprehensive deployment plan will be formulated. The project manager will bring the team together to establish an agreeable launch date and compile a detailed list of tasks essential for the day of deployment. The site deployment itself will be executed by the project team, encompassing all the tasks listed in the deployment plan. This phase will mark the transition from development to the live version of the website.

The final step involves addressing the hosting, maintenance, and support aspects. The decision regarding hosting is yet to be determined but likely to involve WP Engine, with a possible consideration of upgrading to AWS if necessary. The project manager will conduct a project closure, summarizing the project's outcomes and confirming the subsequent steps for ongoing maintenance. Additionally, live support and consulting will be available as an option, providing support hours as needed to assist with the transition to the live version of the website after its launch.

6. Deliverables

Deliverables include a tailored WordPress website with validated plugins, enriched user experience, effective content management, and adaptable functionality. A summary of the project's outcomes and subsequent steps for ongoing maintenance will also be delivered.

7. Schedule

3-6 months

8. Budget

The budget covers aspects like plugin validation, development, testing, and client collaboration, with Tech Partner's transparency in resource allocation:

Phase 1: $10,800

    Phase 1a: Planning & Discovery

        Estimated Duration: 12 hours

        Estimated Cost: $1,800

    Phase 1b: Development and Testing

        Estimated Duration: 60 hours

        Estimated Cost: $9,000

Phase 2: $4,400

    Phase 2a: Deployment & Hosting

        Estimated Duration: 12 hours

        Estimated Cost: $1,800

    Phase 2b: Maintenance & Support

        Estimated Duration: 20 hours

        Estimated Cost: $2,600

Estimated Total Cost: $15,200

9. Significant Interim Milestones

Milestones are punctuated by the project phases and include plugin validation, initiation of development, UI/UX enhancement, content integration, testing, and iterative client feedback. Successful Phase 1 activities will result in a market-ready platform, leading to Phase 2 activities that will allow select pilots to be launched.

10. Intended Populations of Impact

The primary impact will be on the platform's initiative participants, including a national audience of students, faculty, and the higher ed medical community. Notably, socioeconomically disadvantaged populations are intended to be most impacted due to the platform's removing of expensive travel from the process. If positively received by these audiences, the project has the potential to extend to external stakeholders in other markets as well.

11. Competitive Landscape and Advantage

Based on market research, this product would be the first of its kind. While platforms like LinkedIn and other professional networking sites provide cursory information and connectivity, it lacks the personal engagement that residency programs value as a part of their search criteria. The platform creates a platform for students to build relationships with prominent faculty members at residency programs hundreds of miles away, whereas traditionally they would have to make long and sometimes costly trips to build connections.

Our vision and active community, paired with the technology partner's experience and proficiency in platform and website development provide a competitive advantage. Further, the technology partner's adaptive approach, coupled with WordPress's capabilities, ensures a distinct and effective website.

12. Development Stage vs. Target Stage

The project's current development is in the ideation stage with some customer discovery validation. The target stage upon funding will be a fully functional and engaging custom website ready for pilot launch.

13. Total Funding to Date and Funding Sources

We have received a microgrant of $2,000 to help explore this concept with our stakeholders and conduct customer discovery.

14. Leveraged Internal or External Programming

The PIs have met with the CTTC Licensing team, who connected them with the technology partners. The PIs also met with the CTTC New Ventures team to explore the opportunity of building a startup around this platform.