Continuing Medical Education Provider Determines Feasibility of New Learning System

A major health care system's continuing medical education (CME) division needed to determine whether it could successfully build a spaced repetition learning system for physicians in order to more efficiently track learning retention, differentiate itself from other CME providers.

Problem to Solve

While "spaced repetition" sounds like it could be an assembly line manufacturing process, it's actually a powerful reinforcement-based learning technique that's been researched and successfully used for many years in a variety of contexts.

A major health care system's continuing medical education (CME) division needed to determine whether it could successfully build a spaced repetition learning system for physicians based on its existing Salesforce platform. This capability would enable this group to more efficiently and cost-effectively track learning retention for its educational offerings, differentiate itself from other CME providers, and most importantly, help its physician clients improve their learning.

If you have used flashcards to help learn and retain information, you have used a form of spaced repetition. It takes advantage of how our brains preferentially store information that we encounter regularly and frequently over intervals, which our brains therefore, deem important and worthy of long-term storage. Spaced repetition is an

ideal learning technique within many professions. It is especially helpful for medical providers who must retain vast amounts of information to effectively function as professional experts.

The health care system retained Freed Associates (Freed) to help define the viability of its planned spaced repetition learning system.

Strategy & Goals

Because of the CME division's business needs, Freed was tasked with completing this work within three months. Fortunately, the client had already identified and hired an experienced medical writer to create the spaced repetition learning content. First, the client needed to determine if this idea was feasible.

Based on a rigorous round of data-gathering and analysis, the client and Freed prioritized the client's goals into a three-phased approach:

Phase 1 – Proof of Concept:

- **Collect input from key CME experts –** gain learning insights from knowledgeable national and regional CME experts
- **Determine clinician learning flow** – research and test how physicians most effectively learn in a spaced repetition learning system
- **Establish a clinician management system –** set up a way for physicians to be entered into the Salesforce-based system and provide user feedback
- **Establish a reporting management system –** set up a means for basic system reporting

Phase 2 – User Testing:

- **Designate a set of appropriate testers** – identify physicians representing multiple specialties, using a variety of technology platforms
- **Test and provide a feedback loop –** determine how and how effectively and accurately the testers answered each prototype question, and provide them with a means for delivering effective feedback

Phase 3 – Define Organizational Benefits:

- **Establish business goals** – based on client input and external resources, determine the ultimate measurable business goals of this system
- **Determine technical capabilities** – determine the technical capabilities to build and test during the system pilot, including developing a mobile-optimized version; additionally, develop a batch upload function to add users and assign questions

- **Determine operational activities** – define how participants enter the system and get their questions assigned; determine a process for submitting new questions and for overseeing the quality control of questions

Results

The client and Freed jointly developed a proof of concept based on the phases and criteria noted above. After gaining buy-in and support for the proof of concept from all key client stakeholders, it was tested with 15 clinicians. Their feedback and input proved invaluable for updating and refining the proof of concept into final form.

Based on the finalized proof of concept, the team was able to help the client determine that its Salesforce platform could be used as a viable tool for providing a high-quality spaced repetition CME learning program. This initiative also revealed several organizational and program-area levels of focus that the client would need to address before formally introducing this program to the market.

Freed recommended that the client further define the expected organizational benefits of spaced repetition CME, as well as create a pilot program for validation. Additionally, Freed suggested developing a strategy and plan for content production, product roll-out and marketing, and product support, all coordinated to a national level.

Conclusion

Based on creating a proof of concept for a spaced repetition CME offering, successfully testing it with likely users and defining the organizational benefits of this system, the health care system determined the national market potential of its planned spaced repetition learning system.