

Project Profile: Computer-based Call Center Performance Simulation, or... "I Sold Voicemail!"

By Peter R. Hybert

Intro

This business situation may sound familiar. The client had a call center employing a large number of agents. These agents were often entry-level employees in the organization and were working to move off the floor as soon as possible. This, along with the difficulty of learning the job (including both the interpersonal and systems skills) meant a significant ongoing training requirement for the enterprise.

Of course, any performance-based training approach would need to make significant use of role-plays because, short of letting the learners take actual calls and work on real customer accounts, that is about the only way to practice the integration of the decision-making, data-entry, and communication behaviors of the job.

Role plays are far from perfect, however. Using the instructor to play the customer is good but inefficient—you can only train one person at a time. Having two learners role play results in other problems, specifically, people are too nice (or the opposite) and are often unable to give appropriate answers/feedback. So learning can happen inefficiently, wrong...or sometimes not at all.

Technology offered a potential solution—a computer could be programmed to use voice recognition to allow students to talk to the computer. Then the right rules and responses could be programmed into the computer (which would be as good or better than having the instructor role play with each student) but allow multiple learners to complete the role play calls in parallel—actually, twice as quickly as doing “student on student” role plays (because they wouldn’t have to take turns playing the customer role).

Allen Interactions was the technology development firm that came up with the idea/design to simulate via computer but an ISD/training perspective brought an understanding performance, training, and simulation in general. We have developed several team-based simulations and one-on-one role plays for target audiences spanning from product managers to union labor managers. We have built simulations of performances ranging from leading a development team meeting to conducting a progressive discipline discussion. Simulating customer calls is, in many ways, easier than simulating some of the less structured management performances, though call centers do present their share of challenges.

Over the last two years we have had the opportunity to work with call centers in the telecommunications and financial service industries to design and develop scenarios for complete customer calls and for specific enabling skill exercises. Even more interesting, we have had the

opportunity to work with Allen Interactions¹ on two projects in which a computer-based simulation engine using voice recognition and system emulation served as the instructional vehicle to create a realistic call environment.

The learner experience

The call simulation engine, now marketed by Allen Interactions as DialogCoach™ serves as both a “knowledge container” and as a simulation delivery platform. As a simulation delivery platform, the computer plays the role of the customer. The learner talks to the computer and, if the computer hears the agent saying the right things, it provides the next segment of dialog. If not, it provides feedback and/or hints and allows the agent another attempt. At certain points in the call, the computer may also wait for the agent to make software commands or enter specific data onto selected screens.

A more subtle role of the delivery platform is as a knowledge container. The library of scenarios and specific enabling skill/knowledge exercises provides examples of how specific situations should be handled. The various hints, suggestions, and even sample responses serve as “just in time” prompts that reflect current best practice but provided in the context of a call, rather than in an abstract setting (e.g., a lecture). In the course of building a library of 100 call scenarios, it is amazing the amount of very specific content that can be delivered.

The experience proved to be very engaging and self-reinforcing. During the first pilot, one of the participants high-fived his neighbor and exclaimed, “I sold voice mail!” (even though, in that scenario, *everybody* was going to sell voicemail—he just got there first). We have seen learners try and retry scenarios until they passed because they wanted to “turn the indicator lights green”—almost the same way a kid will play a video game over and over until they get to the end.

DialogCoach is a great learning tool. It will effectively teach whatever you put into it.

The performance

If business results are your goal, the place to begin with any intervention is not the technology—it is the performance. Secondary to the performance, are learning goals. And, if you want learning to happen, you need to define, develop, and reinforce behavior patterns.

The core of the call center agents’ performance is the call flow. This is the structure that allows agents to navigate different calls consistently and efficiency. And it provides the framework and context for enabling knowledge/skills, such as telephone etiquette, company policies, systems, etc.

Also core to agent performance are the types of calls and “types” of customers they will encounter. Types of calls could include inquiries, complaints, and specific transactions where the types of customers can range in personality from pleasant to angry to confused and their account can vary as

¹ We have worked on two projects with this particular simulation engine. On the first project, Allen Interactions developed the core application while several other e-learning/web development companies developed other components of the system, such as the editors, scoring/results tracking, and database components.

well. In the auto industry, they could have a lease account or a loan. They could have a cosigner or not. They could almost be finished paying for the car or just started. You get the idea—the learner has to be able to handle any combination (and we haven't even mentioned that some transactions can be processed on more than one system or that often different states have different laws that must be followed).

The learning

Since the call flow provides the primary structure for all calls, it is the primary pattern that you want to reinforce. You certainly shouldn't attempt to teach agents to memorize specific scenarios—there are too many possible variations. You can, though, teach agents to try to navigate different situations using the general structure of a call flow.

In addition, you can teach agents to complete steps, that is, to achieve a goal within a given exchange with a customer, you can teach them to complete individual “micro-objectives.” Consider a typical greeting you might hear calling any company—“thank you for calling <Insert Company Name>, my name is <Insert Agent Name>, may I have your account number please?” There might be variations on how that statement can be worded but it is required that the company and agent name be stated, and the account number requested. Most dialogs within a call are similar, consider descriptions of product features/functionality, pricing, explanations of how interest on the account is calculated, or what to say when the customer asks for a manager.

Developing the program

It was certainly interesting learning a little about computer-based simulation. Much of the development process (and attendant issues) was all too familiar though—many of the issues are exactly the same as any new product development effort. It can be a moving target as troubleshooting problems and taking advantage of new ideas for functionality decimated the schedule.

One thing the experience did solidify was our conviction that a sound design process works as effectively for designing and developing elearning as it does for other types of training or knowledge management interventions. It still comes down to defining the performance and key enabling knowledge/skills and then designing instructional activities to “install” them into the learner. Good ISD is delivery platform neutral.

Another key learning is that there are levels of performance patterns. The call flow is one level, steps within common dialogs are another. Even below that, there are certain wording patterns that can be trained. We looked for opportunities to refine and reuse these patterns at all levels to take advantage of both development efficiencies and training efficiencies. By reusing patterns, even down to sample wording, we reduced training cycle time and reinforced the best current practice. It is amazing how, having several master performers reviewing dialog scripts will find ways to cut out words, steps, or even complete dialog segments to both improve the call and reduce its length.

The results

Learners definitely enjoyed learning through simulations via DialogCoach. It has five user “modes” that allow the learner to progress from where they are given a great deal of cues and the computer demos much of the call (e.g., software data entry) to where the learner gradually takes on more of the call and is given fewer prompts and cues. They occasionally chuckle or get angry at the customer audio clips and experience the training as being very close to the real job.

We believe the learning is effective, based on pilot observations and post-training feedback. Center managers told us that they don’t know how long it normally took to get someone “up to speed” using traditional training because they have never done it! Instead they depend on post-training coaching to make up the gap. With the simulation approach via DialogCoach, they expected an initial level of performance closer to job requirements.

And according to one client, who used their internal finance organization to measure ROI, business results are there as well. Based on results from two of four call centers in which the system will be implemented, the finance people calculated a projected return of \$2.4 million over two years—that is *after* paying back the original investment!

Lessons learned

No matter who you are or in which industry you work, new product development is a challenge. It is really difficult to manage content development and delivery engine development in parallel. On the content development side, our approach was to create a database that we used off-line to create, review, and edit initial content. This database allowed us easy access to our data (remember, we were trying to keep a library of 100 scenarios consistent with best practice and with each other). But, once we had the content ready and ported it over to the DialogCoach database, we had to convert our data maintenance approach. And, since technical improvements were happening while we were refining content, we had to do some shuffling to get our content fields to line up with those in DialogCoach when it was time to transfer the data library.

But, in general, even in a technology project, the “watch-out-fors” aren’t really that mysterious. The biggest client problems were freeing up top-performing agents to work with us to develop content. Another issue is getting agreement on the desired performance. In one case, the client discovered that the master performers were doing a number of things that were just wrong—but nobody knew it until they reviewed the scripts!

On the technical side, a simple but recurring problem was the lack of computers with sound cards—something we knew from day one of both projects. And, while we were all working on our content and application development, the client’s IT departments were changing systems/screens that were in the process of being input for emulation—another moving target!

Conclusion

Using simulated work for training addresses performance in a number of ways. It provides a context for skills training. It provides models of desired performance. It provides practice in a setting similar

to the job, promoting transfer. It builds and reinforces patterns that are applicable to the most common and critical work situations.

Delivering simulated work using a computer-based application, such as DialogCoach, reduces reliance on inefficient and often ineffective student role plays. It provides consistency in feedback. It frees up the coach for other teaching. It allows sufficient practice opportunity to develop fluency. And the simulations can be used for refresher training for existing performers.

PRH Consulting sees a great deal of opportunity for elearning in the future. We hope that the focus on exciting technology doesn't result in neglect of clear performance targets and effective learning processes and content. With both content and technology in alignment, the results live up to the potential!