Award-Winning Performance & Consulting

An Interview With Burt Huber

by Gary Dickelman

Burt Huber and his team from Ariel Performance Centered Systems won a performance support design award at last year's Online Learning Conference for their innovative system at Payless Shoes (see Figure 1). Among the judging criteria were statements of business value that underscore how the performance support elements achieve *business performance through human performance*.

Such systems are much more than just pretty interfaces. They are created through a combination of experience, design methodology, and customer service, and an understanding of how to break down barriers. As many performance support practitioners know, there are economic barriers, corporate-cultural barriers, and philosophical barriers to achieving the performance support vision. It is not only a question of breaking them down, but also of knowing which is which, as they tend to switch roles.

I asked Burt to share not only some of the details of his organization's designs, but also how he approaches a client, how he assesses organizational readiness for performance support, the role of knowledge management in his practice, and how he measures a solution's effectiveness. Burt generously shared these details during a conversation in February.

Gary: How do you approach a potential client? Do you use terms "performance support" or "knowledge management" initially?

Burt: We approach our potential customers as business partners that have a specific perspective on software design, performance support, knowledge management (KM), and the integration of these elements. We have found that performance support and knowledge management are either not well aligned or applied to different needs, and therefore their implementations have taken on different forms. For example, almost any vendor that deals with learning and performance issues will define their solution as performance support or KM. It therefore appears that anything from instructor-led training to artificial intelligence could be called performance support or KM. This range of interpretations or definitions has created a lot of confusion. Our approach is to provide focus, offer methodologies and structure, and thus to add value in terms of improved business performance.

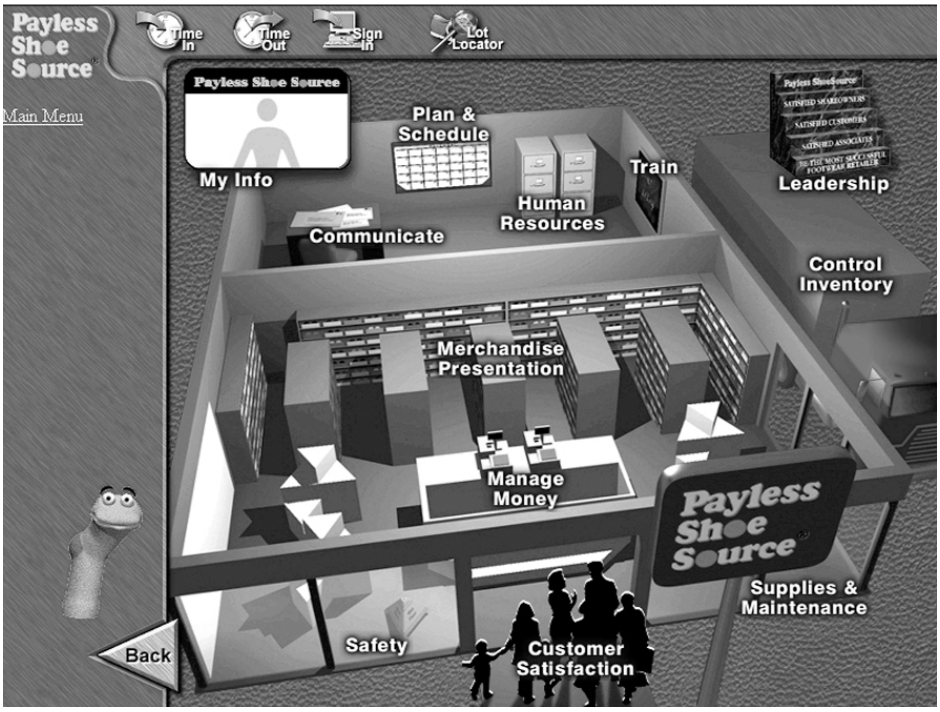

Figure 1. The Payless Performance Support System (©2000 Payless ShoeSource "Retail Performance Support System," "RPSS," "SeeMore," and the SeeMore sock puppet are all trademarks or service marks of Payless ShoeSource. Patents pending).

Gary: All of the panelists who participated in last year's roundtable discussion agreed that such mislabeling is confounding responsible and value-added applications of performance support. What are some specific examples of how the KM label has been misapplied?

Burt: Many view KM as a capture and distribution problem. The result is that we are finding larger and larger repositories of information or *explicit* knowledge together with better search engines instead of dealing with *implicit* or *tacit* knowledge, which is the root of knowledge. Ariel's approach is to look for opportunities to fold knowledge directly into the work that people do. It is not just an activity of capturing the "tribal knowledge" or bringing people to a minimal level so that they can perform effectively. Nor is it a question of "dumbing down" the work to the lowest common denominator. Instead, it is about creating an environment in which the organizational learning and experience that enable performance are part of the organization's infrastructure.

Gary: As you pointed out, KM is being confused with information processing. Organizations miss the fact that knowledge is an attribute of *people* manifested in how they use information to solve problems and achieve business results. Knowledge is not an attribute of information. So applying information processing to KM is flawed. In your practice, how do you approach potential clients that think KM means bigger repositories and better search engines?

Burt: Today, KM is a goal more than anything else. Integrating experiences, supporting performance, and promoting or pushing expertise and expert advice at the moment that somebody needs it are all implementations. It is keeping the knowledge fresh and dynamic that is the real challenge, because our implementation worlds change. How I typically try to present KM and performance support to people is to focus on the *business* impact that each implementation could have. In this context, I try to focus on common themes. For example, we hear how traditional training has become largely ineffective because it's too late, that there's too much employee turnover, too many new rules and regulations—generally too many new business requirements that force people to look at things differently. I help organizations identify how their current systems and processes do not support their business. I show the value of an integrated learning organization and provide a way through KM and performance support for them to get there…

Gary: …in the context of the compelling business need and the decisionmaking process.

Burt: Yes. Our work must be in the service of business and business performance. If we aren't serving the business need(s), then we've missed something.

Gary: You have done some breakthrough work with Payless ShoeSource (http://www.epssinfosite.com/pcd2000/payless/index.htm). How did you apply those principles and make the distinctions with Payless, for example, or other clients?

Burt: Many companies—including Payless—are looking to do business differently because the status quo cannot produce their required business results. They cannot see how they can achieve the business objectives with traditional training tools or what has been labeled performance support. They may have tried moving learning events online and found that this only solves a distribution or delivery problem but does not address performance or the acquisition of knowledge. Payless is well known for its operational excellence. The company has created an organization that is reputable and profitable. It has figured out the operational aspects, but has been focusing on individual performance and with the challenges of hiring and retaining the best people. So a very important aspect of what we were doing with Payless was understanding that

need and determining how to integrate the learning into the doing—and totally blurring that line between the two.

Gary: So you first articulated the need to put both information and knowledge into the task context.

Burt: Yes. We spend an enormous amount of time trying to understand what became known as Kfärgen, an internal name for the concept of a "knowledge garden." The Kfärgen was the outcome of several design sessions where the team defined the *knowledge space* for retail people at Payless. We were trying to dissect the Kfärgen into the right pieces that enable business success so that we could then integrate those pieces back into their daily tasks. Incidentally, the actual term grew out of sloppy handwriting during a design session, but became a great tool for the project team.

When we are able to influence the design of the actual system, we know that we can use technology and techniques strategically to provide knowledge at the time of need.

Gary: What are the indicators that a potential client is ready to have you tackle a problem from this unique perspective?

Burt: One indicator is that the champion or sponsor understands that there is nothing to lose and everything to gain in terms of business performance. They know that they have to do *something different*. They understand that they have been treating symptoms but not getting to the root cause of the problem. The champion convinces the organization to adopt this point of view. At Payless, Tamara Jarrow was very effective at getting the support and sponsorship from upper management. The organizations start to realize that they must influence performance further up the "food chain" by influencing the design of the information systems instead of adding afterthoughts—like conventional training and bolted on performance support (help systems and the like). When we are able to influence the design of the actual system, we know that we can use technology and techniques strategically to provide *knowledge* at the time of need—because the performance-centered application becomes the business enabler. Eventually, the true indicator that a company is "ready" for this perspective is willingness at the highest levels of the organization to embody it and make it part of all appropriate initiatives and eventually part of the corporate culture.

Gary: So at Payless did you have the luxury of applying performance-centered design and KM principles to the interface of the business application?

Burt: Yes. Payless provided the opportunity to truly support business with best practices and integrated learning at the moment of need. For its more than 4,000 stores and all of the employees, the support in the retail store application had to be closely tied to the work. This provides better consistency and has enabled best practices.

Gary: So a champion who "gets it" is key to successfully implementing performance support and knowledge management. How do you develop that champion?

Burt: By showing the risks of sending another 6,000 people through training—like cattle—where there would be little return on that investment. At Payless, Tamara could see clearly that a conventional training program would not increase sales, which was the main business driver. We worked with them to realize several percentage points of increased sales from store to store—which translates to hundreds of millions of dollars. When you look at the realities of high turnover in the retail industry and demonstrate that performance support and KM mean embedding competence into the infrastructure of the organization—so that it can weather such turnover—you supply a potential champion with a powerful argument, with ammunition and confidence to sell the idea to the organization. You are helping the potential champion mitigate his or her own organizational risk. You are supplying a business case that boils down to dollars and cents.

Gary: So focusing on the attrition realities and tying that to increased sales potential gave you the leverage you needed.

Burt: Yes, in that case. But Payless also had aggressive growth objectives. Payless was concerned about achieving its sales growth while expanding internationally. A system had to be put in place that supported business consistently, while incorporating culture and language differences. The architecture had to support multiple languages and currency while supporting a general model of business success. It had to support standards for inventory control from distribution centers to the retail outlets.

Gary: So the requirement was worldwide support manifested in a blueprint for the technology infrastructure that could increase sales.

Burt: Yes—by supporting the desired behaviors and performance, one employee at a time.

Gary: Payless has rolled out the system you designed. Have you measured sales results? And are there plans for modifications to improve or further improve performance?

Burt: When the system's vision was developed, there were between 10 and 12 "killer apps" identified. These were very strategic and competitive and would address barriers to achieving business results in ways that were new and innovative to the retail industry. For example, employees spend a lot of time on the phone checking nearby stores for shoes in colors or sizes when customers can't find them in one store. One such "killer app" would locate the shoes and either get them to the right location or have them delivered directly to the customer.

Gary: So these "killer apps" had already been identified. Payless has implemented some of them in the initial rollout and will continue to add others. But as companies proceed with development, do you find that there is a best way to achieve performance support and KM? For example, there are the notions of external, extrinsic, and intrinsic performance support (meaning outside of the system, on top of the system, or embedded into the fabric of the system).

Burt: We have found that support is most effective when it is implemented on a continuum, even though intrinsic support—embedded in the interface—is the most effective means of achieving business results. We might start, for example, with embedded agents that push information to a worker when he or she is performing a particular task. But then we will add extrinsic interventions (such as coaches, cue cards, or pop-up explanations) and external support (such as learning topics or lessons, help content) to further enhance business results after making initial observations and measurements.

Gary: Please elaborate on those aspects of performance support and KM that you have applied successfully.

Burt: Some of the most effective elements are accomplished very simply. For example, an interface should be comprised of common worker language and intuitive metaphors that reflect the way workers think of their work or tasks. These metaphors alone can add a tremendous amount of performance support and best practices. To successfully design and implement this type of support, you must involve the performers. Otherwise the interface will be in the voice of the designer and reflect the mental models of the information technology (IT) professional who builds the system. The goal is to build a system for performers that fits like a glove, not a mitten. This can only happen when the system is designed from the actual user's perspective.

Gary: What about technologies? What are the technology trends that lend themselves to creating more effective performance support and KM?

Burt: Web technologies have forced everybody to accommodate the most diverse group of performers. That alone doesn't create performance support, but it forces it to be developed. When anyone can access a website, more attention has to be paid to usability, particularly when commerce is involved. So designers of websites have been forced to look at what we call the "three actuals rule": actual performers doing actual work in their actual environment. This is resulting in many powerful, off-the-shelf products for the web that are very good at supporting performance. But again, I think it is the business needs here that are driving the better design you're seeing on the web.

Gary: Are you referring to things like reusable learning and performance objects and the software that support them?

Burt: Yes. The evolving standards and techniques for reusable learning objects, where content is chunked and architected in a manner that it can be reused in a variety of contexts, are being applied effectively to performance support interventions.

Gary: What barriers remain during that very first meeting with a potential client, or when you're conducting a system evaluation for performance?

Burt: The good news is that performance support and KM are terms with which people are now familiar. The bad news is that the terms are misapplied and confused, generally used as labels for the project du jour. So the most significant barrier is developing a common understanding of the terms. Furthermore, you have to align the organization's vision and strategy with meaningful expectations of performance support and KM. Another barrier is getting the IT community to be an integral part of the performance support and KM conversations. Finally, you have to agree that you are all trying to solve the same business problems. The barriers are still very real and strong, but generally everybody will agree on what is right for the organization.

Gary: Does antagonism still exist between the IT (systems) people and performance support professionals—and is it deliberate?

Burt: I don't think there is any deliberate antagonism, and the forward-thinking companies have found ways to make this work. Historically there were different sets of goals, and I think that was the problem. IT's goal was to produce very reliable and predictable systems that automated complex tasks. Instructional designers and learning technologists had to deal more with the individual and cognitive issues related to individual performance and business success. Ultimately these worlds could not stay apart, and today many businesses are thriving because these worlds have come together for them.

Gary: You seem to be saying that building a system is an engineering problem, the result of which must be reliable and consistent. If you add supporting performance and

achieving business objectives as additional goals, then you have a formula for success.

Burt: It used to confuse me when I described my vision of performance support and KM to learning people, technology people, and usability people. They all said, independently, "That's exactly what we do." Yet the goal wasn't being achieved. It is not until these groups are working together with a common understanding of the goal that we achieve success. That is what my organization is all about.

Gary: So in the context of the Payless example, this "coming together" has resulted in measurable increases in sales. How are you measuring these results, and what are the benchmarks?

Burt: Payless has a retail operations group that tracks many metrics, such as store-for-store sales. After factoring out the new stores, or stores that are being renovated, they can compare store revenues. This metric is the ultimate test of their business results and is a pretty common measure in the retail industry. Payless saw tremendous results in this area for their stores with the new application.

They also look at employee retention, employee ability to perform specific things, associate/employee satisfaction and how it relates to customer satisfaction, and many other metrics. They do a lot of polling and test marketing as followup; thus, they have been able to obtain good before and after pictures to find out what the performance support/KM system has done for them. In addition to building an application that is easy for the employees to use and that automates certain functions, we've paid particular attention to the skills content. For example, we are supporting a performer through situations such as dealing with an unhappy customer or seizing opportunities to cross sell or up sell.

Gary: So these are examples of performance support and KM built into the system?

Burt: Yes—right in the work context.

Gary: It appears that you have already addressed some of the "killer apps" mentioned earlier.

Burt: Yes. The development process involves a great deal of prioritizing content and functionality from the business perspective. The idea is not to spend two years creating the whole solution, but to incrementally supply "killer apps" with high business payoff and projected impact. To move forward, you have to base your choices on the expected results from among the critical metrics. The "killer apps" can do that by reinventing how the business operates, identifying new efficiencies, providing additional capabilities, and creating new business opportunities.

Gary: It sounds like good systems design—and perhaps one of the first successful implementations where there is total focus on business outcomes and where the stakeholders all have a common vision and goal. Moving beyond Payless, do you see the potential for transferring this success—the techniques of development, measurement protocol, and architecture—to other clients?

Burt: Yes, but mostly in terms of leveraging common architecture. We have seen common elements for reuse from all our client engagements. I'm talking about applying these technologies or component architectures to other industries, like financial services and manufacturing. It's fun to work with Fidelity Investments one week, then support Fisher Price the next. We've also worked with the large service providers, such as PricewaterhouseCoopers and Deloitte & Touche. You don't get the opportunity to work with companies like that unless you have something that generates measurable business results. Another opportunity is working with the technology and software companies that recognize the need for this type of design for their business success. We have demonstrated that performance support and KM are not just buzz words, but proven approaches that achieve results.

Gary: What would you recommend to a performance support/KM solution provider in terms of approaching a new client with the goal of getting your foot in the door and keeping it there?

Burt: The first thing is to obtain sponsorship with a conviction. This may sound trite, but unless you have solid, top management sponsorship, you won't get very far with performance support and KM—because these initiatives always sound like good ideas on the face, but represent strategic changes to business practices, and so you have to gain the conviction amongst those who own business strategy. You have to be effective at getting a lot of folks from many different parts of the organization to play on the same team at the same level—and that's not an easy task. There are, for example, corporate and cultural issues. What is the incentive for an individual to share all his or her experience and knowledge that he or she has worked hard to accrue? These are not insignificant changes. So my suggestion is to start small, with a manageable piece that has a high probability of being both visible and successful. Another piece of advice is to be sure that you find out what the performers are actually doing. If there is disagreement on design decisions, my rule is "Let the performers decide." Finally, take the time to establish benchmarks that are tied to business results, and measure frequently. Don't be afraid to borrow what you know works. There are plenty of good examples out there.

Gary: Indeed. The literature, like this journal, contains gems, because successes such as Payless have the attention of many authors today.

Burt: You can find many good books on KM today. You will find both gems of wisdom and a few diamonds in the rough. But take the time to find out what the big picture looks like and what the steps are to get there.

Gary: And you believe that by taking those small steps you can eventually change the world of business performance through performance support and KM.

Burt: That is correct—one performer at a time.

Burton A. Huber is President and CEO of Ariel Performance Centered Systems, Inc. He recently shared his perspectives on KM and the solutions Ariel designs "with humans in mind" on Northwest Airlines' Business and Technology Report. In addressing the critical elements of performance support and KM solutions, Burt identifies integration as an essential part of such systems. Huber specializes in designing systems that interface well with the people who use them and ensures that a company's expertise, best practices, and knowledge—their key differentiators—are embedded in the designs.

Burt focuses on creating new thinking in software design. Creating designs with humans in mind, Burt and Ariel have created value for dozens of clients including many Fortune 100 companies. Ariel specializes in designing business applications with integrated performance support and KM. Burt may be reached at bhuber@arielpcs.com.

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