Mobile Work Force Mobile Work Force

by Ken Macro, California Polytechnic State University

As global consolidations and competition continue to occur, workforces are becoming larger and more difficult to maintain. Therefore, disseminating information and knowledge presents many challenges to knowledge and learning management initiatives within progressive corporations. Fortunately, with the evolution of cellular and wireless technology, organizations are tapping into this vast market to keep their workforce up to date with realtime applicable business data and knowledge that gives them the advantage when working with current and prospective customers. Providing concentrated, real-time, applicable, and customized knowledge to the workforce when it is requested and needed is the key to any knowledge-related management initiative. This study provides a brief analysis of this technology as a means for disseminating knowledge and facilitating training.

It's a Very Graphic Problem

A sales representative for Verizon Yellow Pages arrives for a pre-scheduled appointment with a client. The sales representative carries boxes in the trunk of her car containing ad specification sheets from the clients in her territory from the past two years. She takes ten minutes prior to the call to find the client's individual specification sheets and then takes a moment to review the layout, the financial information, the logistics associated with ad placement, and applicable headings. When greeting the client, the client responds that they were not happy with the ad placed in the phone directory the previos year because artwork was inadvertently left out of the advertisement. The sales representative riffles through the client's folder to locate the artwork and is unsuccessful. The client—obviously disturbed—walks over to a cabinet, pulls out a hand-drawn board containing the artwork, makes a photocopy, and hands it to the sales representative. During the sales call, prior to signing the contract, the client asks to see what other class headings his competitor has selected to place their advertisements. The sales representative, who is unfamiliar with the competitor, graciously smiles and tells the client that she will get back to him after she returns to the office and talks to her colleague who handles that account. The customer, again disturbed, signs the contract with unspoken remorse.

This scenario exhibits a normal sales call in the life of a yellow pages ad representative performing a sales campaign in a specific two-week geographical canvas. Having important and pertinent information that is easily accessible and obtainable is paramount to the success of a sales campaign, and—as their competitors (independent yellow page directory publishers) canvas the areas before them—customers become concerned with turn-around, costs, and accuracy of their ads placed in a the myriad of telephone directories now barraging the very communities where they do business. This is precisely why integrating mobile technology with sales solutions, training, and linking it all with corporate financial databases and content archives can make a sales call more efficient, informative, direct, and most-importantly, empower the sales representative to handle questions, concerns, and problems immediately with amicable results.

Gayle Barnhart, President of Adsource, Inc., a marketing consultant in the area of yellow page planning headquartered in Peninsula, Ohio (2005) says,

Integrated wireless technology is the future of yellow page sales programs. Having the ability to punch up a client on my PDA, view a PDF of the ad that was placed in last year's directory, review the headings, and the applicable contract fees, and, at the same time pull up important marketing statistics associated with header placement, and competitor profiles, allows me to be in control of the call appeasing the customer on any problems that he or she may have during the process. (G. Barnhart, Personal Communication, June 22, 2005).

From a graphical perspective, Barnhart also envisions that the technology will be able to scan artwork, automatically paginate the ad in the appropriate location, and produce a printed proof (known in the industry as a showproof) immediately from a local printer for final review and approval (Barnhart, 2005). Additionally, Barnhart (2005) adds, "Having the ability to pull up sales training video and materials would be a major benefit for newer sales representatives who are inexperienced in the industry." Such immediate access would provide applicable information to the sales representative prior to the call making for a fresh, controlled, and amiable selling transaction.

Technology Without the Strings Attached

New technology—most specifically, integrated wireless and cellular technology—will become a primary venue for delivering information and training to a globally expanding workforce. The traditional models of classroom-based learning and collaborative learning will be supplemented with mobile training models that will provide highly individualized and pertinent information to the employee at the precise time of need in order to assist in successfully transacting a task and/or duty associated with that employee's job requirements. As Chris von Koschembahr posits,

Just as PDAs and laptops have allowed professionals to communicate while they are working "mobile" or on the road, these tools also enhance the benefits of e-learning by making vital learning material, once available only from the desktop, accessible while learners are in a cab on the way to an important sales meeting or waiting to board an airplane, for example. Just a few minutes of "dead time," which are often wasted, can be transformed into incremental ongoing learning opportunities. (von Koschembahr, 2005, p.1).

When assessing the vastness of efficiencies associated with mobile technology and knowledge acquisition and dissemination, Jonathan Levy (2005) writes, "The power of the new technologies lies in their ability to leverage the knowledge of knowledge workers both individually and collectively. Powerful solutions are driven from the bottom up, not from the top down. Top-down classes don't leverage the knowledge value of a knowledge workforce; just-in-time, personalized solutions, aggregated in real time around the learner, by the learner, do" (p. 2). Providing instantaneous knowledge that is specific in nature to the employee and solicited by the employee (or learner) is the unconditional benefit to mobile technology and a coveted successful knowledge-related management initiative.

United States Gypsum Corporation (USG) manufacturers and distributes building materials worldwide. Because USG's workforce, comprised of over 13,500 employees placed all over the world, is so vast and decentralized, it is imperative that the Web be used as a venue in which to disseminate knowledge and facilitate training (Summerfield, 2005). In addition to the execution of an expansive knowledge portal, which consists of customizable fields that

exhibit real-time information pertaining to sales, production, and distribution, there also exist venues for accessing training materials that are applicable to personnel in many different departments.

Web conferencing has also become a core venue for disseminating USG information. Summerfield (2005) writes, quoting Mike Garber, USG's director of training and development, "We are increasingly using Web conferencing to develop an understanding of new processes and procedures within the organization, as opposed to having everyone come together for a meeting involving training around a new process" (p. 50). According to Garber, they use webcasting to roll out changes that affect everyone throughout the corporation. This type of venue for disseminating knowledge is quick, efficient, thorough, and provides additional links for employees to peruse when in need of additional information or knowledge pertaining to the matter.

Webcasting can be facilitated on hand-held cellular devices such as PDAs, pocket PCs, and cell phones. Such technology provides instantaneous synchronous participation of the entire workforce when the webcasting takes place. Summerfied (2005) quotes Mike Garber, "The way we see it, the organization that has the ability to learn and to apply this learning faster is going to be the winner in the marketplace" (p. 50).

According to On-Stat/MDR, a marketing research corporation specializing in communications industry, there will be over 94 million mobile workers using mobile technology in 2005, which is 40% of all U.S. employment (Edwards, 2005). With the evolution of the cell phone, PDAs, Pocket PCs, iPods, Blackberries, Mp3s, tablet PCs, Wi-Fi-enabled labtops, and the expansion of affordable wireless broadband service, mobile communication has exploded providing learning organizations with an opportunity to disseminate real-time information, knowledge, and training. Ron Edwards (2005) writes, "A workforce that is on the move and working in different locations poses a challenge, but keeping these employees informed and engaged enables faster detection of opportunities and problems, and working together can help to further develop collaborative solutions" (p. 51). Collaboration assures that the information is received, decoded, and engaged, thus engaging the employee in the content and affirming-transparently-that some form of learning has taken place.

The iPodification of e-Learning

Instant messaging, discussion boards, and document sharing venues currently provide for an open means to post knowledge and information at any time or anywhere. Thus, on-line communities have formed. These communities engage and empower customers and supply-chain vendors to contribute to applicable dialog and to access the vast pool of knowledge that grows from each transaction. As a result, customer retention is increased, consumer awareness is incited, and better business analysis leads to a more informed group. Aside from instant messaging-which is synchronous in nature—posting to discussion boards, drop boxes, and e-mails can be made at the convenience of the participants. This asynchronous model is referred to as "blogging," short for web-logging (Edwards, 2005). This form of knowledge dissemination allows employees the opportunity to publish information to a Web site using a cell phone, PDA, or laptop at a time that is convenient to them. Using mobile technology has generated the new term, "moblogging" short for mobile "blogging" (Edwards, 2005, p. 52).

Another related approach to mobile knowledge dissemination is that known as "podcasting." According to Edwards (2005), podcasting (a combination of the words "iPod and broadcasting") assists in the creation of content that is pertinent to corporate communication or learning teams (p. 52). Edwards (2005) writes, "Content could include audio from business leaders, leadership programs, cultural change content and so on, and it would be available whether the employee is at home, in the car listening to a CD, on the move with an mp3 player, or using a cell phone that is a mp3-enabled" (p. 52). iPods have gained significant market share and have increased in popularity. Because they are affordable and, undoubtedly, powerful, there are organizations in the UK that are considering distributing iPods to workshop participants that contain preloaded audio-based lectures and discussions (Edwards, 2005).

Mobile technology has sparked a new learning movement referred to as location-based learning. This model relies on mobile technology to both transmit and receive applicable knowledge and information. Edwards (2005) posits, "The system automatically delivers just-in-time content to a handset based on the worker's location in the manufacturing facility and checks so see if they have the right equipment and qualification" (p. 53). Currently being betatested through Symbol, MIT, and a top learning and technology firm, this form of learning milieu is anticipated to grow as location-based detection-enabled cell phone technology (for the 911 initiative) develops.

How an organization delivers knowledge, disseminates information, or facilitates learning is the impending dilemma facing growing organizations across the globe today. Without a doubt, however, technology will play a major role in organizational sustainability. Regardless, all learning strategies will have to be identified, analyzed, and re-invented in order to codify, organize, archive, and distribute knowledge to a fast-paced, globally-competitive, highly-mobile workforce of the future. "Whether the subject matter is a new body of regulations, an evolving product line or emerging strategic priorities," writes Hemant Minocha (2005), "organizations must find ways to efficiently and effectively keep their workforce educated to keep pace in a corporate environment with greater time and constraints that ever before" (p. 20). Perhaps integrating mobile technology is the key.

Peter Drucker (2001) wrote, "Technology is not nature, but humanity. It is not about tools; it is about how people work. It is equally about how they live and how they think" (p. 343). As cellular telephones continue to gain placement in markets across the world and are placed in the majority of pockets of the citizens who inhabit these markets, the terms such as podcasting and moblogging will morph into the linguistic patterns of a culture essentially weaned on this wireless instantaneous technology. Learning and knowledge managers alike will also be forced to understand and integrate this technology into their schemes of facilitation and distribution. For this technology—embedded in the culture—will appropriately supplement the core competencies of how people work, how they think, and how they live.

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