

Dynamic Digital Signage: Getting Beyond the Pilots

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Dynamic digital signage (DDS) is one of the hottest new retail technologies to emerge in several years. Several industry leading chains, such as Wal*Mart and Best Buy, have successfully installed DDS systems that feature product promotions, brand messages, entertainment content, even third party advertising. However, such early adopting enterprises represent a small fraction of the overall market for retail DDS, currently estimated to reach \$1.7 billion by 2007. While preliminary assessments of these applications have provided support for continued interest for the retail industry as a whole, it has become increasingly apparent that more concrete data are needed to provide the confidence necessary to drive widespread adoption.

While these initial applications have received much attention and many eyes are watching these spaces for progress. A key question, however, still lingers: *Will digital signage systems achieve a far-reaching trend status or recede into the archives of innovative concepts that looked invincible but ultimately failed to gain traction?*

The final answer to the critical question above will depend greatly on the return-on-investment (ROI) models employed to measure the success of various pilot application models. This is especially true as the industry exhausts the early adopter market and jumps into the much larger pool of cynics and skeptics that control the fate of prospective roll-outs for more conservative potential clients.

There is a reason for much of the lingering skepticism and wariness seen in the retail industry today. Not too long ago, before the aforementioned Wal*Mart and Best Buy applications and when digital signage as we know it today was in its infancy, a few national specialty retailers, such as Eddie Bauer, experimented with the concept of targeting video content to customer segments based on when they were most likely to be in the store. (Today, this is commonly known as *day-parting*, believed by many in the industry to be critical to the long-term success of any digital signage, or narrowcasting, system.) These retailers researched the customer populations over time, created targeted marketing content, installed these non-networked systems and flipped the switch.

The resulting impact on customer behavior was immediate and impressive. Marked improvements in store traffic, conversion rates for promoted products, brand awareness, and transaction value were seen across all tested stores. Following the success of those few early pilot projects, major media outlets began carrying the buzz. Articles abounded in sources from industry trade publications to major business news rags touting the success of these first digital signage implementations. With results like these being reported, many of the signs were there, no pun intended, for the retail market at large to catch fire.

However, there was one problem: Most news sources myopically defined the value of digital signage as being comprised solely of flat panel displays and plasma screens placed in storefront windows and other strategic locations in the stores. It was mistakenly assumed in much of the media coverage that the impact was derived from the use of sexy new video display technology. Often lost in the glare from the plasma screens was the value of targeting content to specific customer segments, the narrowcasting.

Following the positive media reports, more retail outfits jumped on the bandwagon and the next wave of implementations hit. This time however, most of the applications were comprised of plasma screens and LCD displays playing generalized content from non-digital sources, including standard VHS tapes. There was no day-parting research, no targeted content delivery to customer segments and, ultimately, none of the traffic and sales boosting impact seen in the earlier pilot programs. It became apparent that the display interface alone was not the critical component of added value seen in the first wave of DDS pilots. Fortunately, this second wave of pilots served as the ideal comparison to make this determination before too many companies made similar implementation errors.

The hindsight is that we can now say, with a good degree of certainty, that the greatest proportion of added value derived from digital signage is in the *digital*, not the signage, per se. It is the presence of a digital content network, capable of delivering specific content to specific customers at specific places and times from a centralized location that is the major enabling factor for DDS performance success. After all, signage interface technologies will most certainly change over the years, perhaps from plasma to ever-

more-sexy video display technologies such as LEPs (light emitting polymers) or OLEDs (Organic Light Emitting Diodes). What will remain are the critical networks that link signage interfaces with centralized delivery of targeted dynamic content, the backbone of the system.

DDS suppliers and systems integration firms have been moderately successful in leveraging general industry success stories, and the unique features of their solutions, to convince retail department managers of DDS value propositions. This is often enough to secure a pilot test at a handful of stores. While this is a good start, these pilots often stall before broader chain-wide rollouts are ever initiated. We call it "pilot-stall" and it usually occurs because the higher levels of senior decision-makers are not provided with clear evidence of the benefits of the application. What has been lacking is a direct quantitative relationship between customers, their experiences with DDS systems and any resulting increase in sales.

As mentioned earlier, this major hurdle to broader-based adoption is fueled further by the uncertainty as to whether DDS is a cost-effective means for directly stimulating purchasing behaviors beyond the short-term impact derived from using leading edge display technologies. By nature, most retail executives show reluctance to rolling out new in-store technologies involving significant capital investments because of worries that they are investing in a "flash-in-the-pan" solution. That is, unless they have clear answers regarding 2 fundamental "need-payoff" questions:

1. *How much will digital signs stimulate purchasing behaviors, increase sales, improve customer satisfaction and employee training efforts? (Top-line benefits)*
2. *Is the lifetime investment in the system justified by any increase in sales or store operations efficiency? (Bottom-line benefits)*

Perhaps the best way to answer the first question, which is required to effectively answer the second, is through the use of observational research in pilot situations. Research that tracks consumer behaviors and yields unbiased, empirical information serves to advance efforts to validate the use of DDS beyond the pilot.

To date, sales tape information has been heavily relied upon as proof of effectiveness, but retail executives know that while this data is important, it is an indirect measure of performance of any individual environmental element, such as DDS. What is needed is a clear ROI model based on directly observed "chains of causality" linking customer experiences with DDS applications to occurrences of relevant purchasing behaviors.

This sort of information is an effective defense to a common objection of potential clients after the pilot is complete: "How can we be sure that the sales lift we saw was really driven by the digital signage system?" Subjecting DDS to this level of scrutiny makes retailers more confident that their decisions are supported by sound financial sense

In addition to proving the effectiveness of a beta test site, research of DDS applications should also be used to optimize the installation in terms of location, viewing angles, demographic focus, content mix and other critical factors.

Contractors and integrators that offer (or refer clients to third party researchers) services to optimize DDS will have a clear and marketable competitive differentiator, in terms of customer relations and support. These studies can also save a pilot by providing early warning of problems and highly targeted solutions.

Another critical challenge is the validation of "advertising charge-back" models, where retailers sell presumably valuable visual real estate to consumer goods manufacturers to promote specific products. As in print media, the success of this model will depend on strong data supporting advertising effectiveness including measurements of customer exposure, awareness, recall, and purchase intentions.

If the next generation of pilot studies provide tangible and direct proof of effectiveness for applications of DDS systems, many resistant enterprises will consider jumping on the bandwagon and investing in the hardware, software, content and maintenance of digital signage systems.

As the DDS industry is still very young, it is incumbent on industry suppliers to prove the business case to their potential clients. At this embryonic state of the digital signage industry, those vendors and integrators that proactively undertake empirical research will become the sought-after thought leaders as DDS seeks broader adoption in retail and other commercial environments.

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