

## Whitepaper: Feeding the Digital Signage Monster

So you're going ahead with your digital signage network. That's great. Now what?

How do you make sure that you don't go bankrupt in the process? What? I've already financed the hardware. Surely that's the hard part, right? Well that might account for the first 80% of the effort, but what about the "other 80%" of the job.



One of the often-misunderstood areas of digital signage is developing an effective content strategy to get the most out of your network. And although one could "simply make videos" for everything that you want to do, is that going to get you where you want to be, and how much will it cost to produce those videos on a regular basis?

Digital Signage is a new medium. It's not the web, it's not TV, it's not print. It's this new thing. Video production houses think you have a broadcast TV budget. That's just not the case. Retail point of purchase displays are usually quite static, which implies that customers will simply pass it by. The real answer is to have a mix somewhere in the middle – part static, part animation, part video. And the best companies producing content for digital signage today have figured out how to seamlessly integrate all three and re-purpose many of the media assets already available. Unless you fully understand how to do this effectively, you'll end up being yet another postscript in a litany of defunct companies that "just didn't get it".

As a veteran of digital signage for over 18 years now, (of course, we didn't call it Digital Signage back then, just TV sets with dial up modems!), I'd like to share with you some of the best-kept secrets on how to plan your content for a digital signage network.

Let's say you're a "video guy". You're accustomed to making 30 second spots for TV. In many instances, 30-second spots don't work, because the average dwell time (the time customers are viewing the screen) is only a few minutes, if you are lucky. Perhaps in a doctor's waiting room, where your dwell time is a half hour or more, you can plan for a more traditional long form programming with traditional commercials. In a grocery store, however, long dwell times and long form content will simply not work. Perhaps you have two minutes at the deli or customer service counter, or even less on an end cap or in the aisle. So the first step you'll need to do is to figure out the dwell time for the different areas or zones in the store.

Let's assume you're still in the grocery store. Let's think about what's on the screen. Most stores have weekly specials, right? So if your content is refreshed only on a MONTHLY basis, how are you going to be able to target the specific WEEKLY specials? Guess what? It doesn't work. Customers are tuning it out, since it cannot be relevant to what's going on in the store TODAY. So think about how often you need to refresh your content. You'll need to budget for that.



The stated goals of the digital advertising network were to provide a better guest experience, promote the restaurants products and services and generate a revenue stream from brand advertising. It became very clear, very quickly that these goals were attained.

The current deployment of 20 LCD screens covers approximately 80% of the seated guests. The screens provide a video only view of the network with no accommodation for audio; this decision was made to minimize guest interruptions. Is where traditional video production costs just don't scale in a digital signage network. You'll need to choose a platform that will allow you to cost effectively create and manage a targeted message in your stores. We'll give you an example of this later.

As a "video guy", you'll also need to follow the KISS principal if you want your average customer to "get it".

Don't promote everything at the same time. You'll just confuse your customer. What do you want him to do "RIGHT NOW"? That's what your message should be. Have a call to action. Make the customer an offer. (e.g.: Buy me now! Special price today! Only \$9.99) Make it "in your face" and unmistakable. And the closer that message on-screen is to the product on display, the better your chance of "closing the deal" with the customer and getting him to say, "Yes! I'll buy that today!" Mis-positioning the screen (height wise and proximity to the product) is another classic mistake that many people get wrong time and time again. People are still amazed that "sales went up by an additional 10% when we placed the



screens at eye level and near the product”. If you think about it, this is really common sense. Many people still get this wrong today.

OK, Let’s take a real world example and “do the math”. (Those three words strike fear into many traditional media folks that don’t get this new medium.) Let’s say you have a 1000 location department store. Let’s say you sell Levi Jeans in those stores. Do you

actually sell those Levi’s for the same price each week of the year? No. Weekly specials are a fact of retail life. Often times, there are one day or three day specials, or even three hour sales...but let’s keep our example simple. You need to support the weekly sale. Next, do you actually sell those Levi’s for the same price in all markets? No way. Not if you’re a smart retailer. Jeans in Soho cost a lot more than Jeans in Des Moines. So, let’s add it up.

1000 locations x 52 weeks/year = 52,000 MPEGs just to cover the “weekly specials” in each store. Now let’s say that there are ten different zones within your store (e.g.: Health and Beauty, Beer Wines and Spirits, Electronics, Jewelry, Misses, Juniors, Sporting Goods, etc.) And each week let’s assume there are ten featured products per zone. Add it up: We’re talking 5.2 million MPEGs that need to be created, and distributed on your network for the year. No one can afford to produce 5.2 million videos using traditional video editing tools. And I won’t even get into all of the possible permutations of playlists that are necessary to keep track of 5.2 million MPEGs. Thank goodness you only have 1000 stores and only 10 zones per store. That’s only 10,000 playlists. And you thought paying for the screens was your biggest problem! HA!

So what do we do? Fortunately, there is a solution to this problem. Mr. Video guy will have to add a new tool to his tool belt however. By using an authoring tool designed for digital signage, creative designers will be able to create new dynamic templates that contain the best of print, animation and video, and have this dynamically be rendered at playback based on time of the day, day of the week, data from the point of sale system, etc. This can reduce your creative needs dramatically. One smart template could last for three or four months or even the whole year for some products. Ads will come and go automatically. Dynamic prices are displayed on top of a seasonal video automatically. Your production costs drop dramatically along with the number of videos that you need to produce. Your content becomes data driven, but not just for the price, also



for the mix of content. Does Home Depot sell snow blowers in New Orleans in the winter? No. If its snowing out, sell ice scrapers. If it's raining, sell umbrellas. And if it's sunny out, sell sunglasses. And if you DON'T sell one of these items at a particular location, for heaven's sake, DON'T promote something you don't sell. If your system weren't dynamically responding, you wouldn't have these choices. You'd be promoting the same things in every store. Worse yet, to "solve" this problem with video, you decide to eliminate weekly specials on your network. Now what's the ROI on those screens?



So, clearly, traditional television product methods are not the best for digital signage, but you "print guys" are not getting off the hook so easy here either. Just throwing some Photoshop files over the wall to the guys running your digital signage network is not going to cut it either. You had better get your creative director up to speed on what you'll need, so that when raw assets are created, you're not groaning, after receiving "his masterpiece" from your

agency that doesn't take advantage of the new medium. You'll need to have a plan to integrate static graphics as well as video and animation to make this all work.

Here are some things for you "print guys" to think about when creating content for a digital signage network.

- ❑ Digital signage graphics are not 300 dpi. Think pixels, not DPI. Most 42-inch plasma screens are 852x480. Most 40-inch LCD screens are 1280x768. Most 42-inch LCDs and 50-inch and higher plasmas are 1366x768. You need to make your graphics approximately the correct size for those resolutions. I would avoid so called "high definition" 42-inch plasma screens. These screens have a native resolution of 1024x768, but yet have a physical aspect ratio of 16x9. You guessed it, rectangular pixels. When creating graphics for these types of screens, you need to compress your graphics horizontally, so that when the screen displays it, they'll stretch back out, and circles will look like circles again. Videos should be encoded anamorphically, basically squeezing a 16x9 video into a 4x3 ratio, so that when the screen stretches them back to 16x9, your circles will be round,



and faces will look normal. If you want “high def”, don’t let the screen guy sell you a bill of goods at 1024x768. Go for 1366x768. “Real High Def” in my book is 1920x1080. There are only a few LCDs that support this today, and they are very pricey. At the top end of the price range is LED, which work well in outdoor or high ambient light indoor environments (like shopping malls), but these resolutions are generally much lower. The lower resolution is acceptable since your viewing distance to the LED screen is usually much farther than with LCD or Plasma. It is not unusual for a 150-inch diameter indoor LED screen to have a resolution of only 308x220. Again, you’ll need to design your graphical elements accordingly based on pixels, not DPI.

- ❑ Use a tool like ArsMedia Photoshop® to Scala® Script Exporter. <http://www.arsmedia.tv/psdsca.html> You’re probably in Photoshop already designing much of your graphics. This tool makes is very simple to export a fully layered Scala Script where each of the individual elements are PNGs including any alpha channel transparency (such as a drop shadow). Now bring the video elements, overlay the text elements, in Scala Designer and you’re nearly done. 95% of people that try this utility can’t imagine living without it. This is a big time saver.

- ❑ Don’t make things static. Your product needs to jump out of the screen and say, “Pick Me! Pick Me!” This is especially true is your using a plasma screen. No matter what people tell you, plasma can burn, so by providing animations and mixing things up, you’ll prevent burn in. Don’t forget things like “bugs” (logos in the corner of the screen) if they are present on all screens, will burn that corner of the screen. Turn off your screens when not in use. Most software systems allow you to do this remotely and on a predefined schedule. If it’s not possible, at least put up a black JPEG during the “off periods”.



- ❑ Have a call to action. Your message should be “RIGHT NOW”, and not just “THIS MONTH”. Don’t be afraid to call attention to a specific offer or price promotion. Failure to have a call to action will mean that you won’t see an impact on sales. Consumers are not mind readers; they are lemmings. Tell them what to do, and there’s a good chance they’ll do it. At least some of them will. Else your lovely new screen might just as well be expensive wallpaper!
- ❑ In print, you’re normally thinking about monthly or weekly specials. In digital signage, you need to think about day parts. What sorts of people are walking in my store in the mornings? Lunch time? After school? Evenings? Weekends? Tailor your message to target exactly your



audience. You probably have a good sense of this already. Factor that in. Use that knowledge to schedule in advance the content for the different times of the day or days of the week. With a little extra effort, you might consider connecting your digital signage network to your CRM system.

Now the media on display can be even more personal and relevant, whether you're standing at the pump or at the checkout or drive thru. It's a bit like the movie *Minority Report*, as Tom Cruise is walking into *The Gap*. Maybe we don't scan a person's retina as they walk into a store (yet), but you already keep track of your regular shoppers in other ways today (loyalty cards, POS records).


- ❑ Integrate video into your graphics, but don't put text in the video. Overlay the text separately. This will make it easy to change the price or message (or language) without the expense of re-encoding the video. The video doesn't have to be full screen to be effective. In many cases, the videos you will be given will be on BetaSP or other videotape format. These are generally pretty low resolution. When blown up on a big screen, they're going to look fuzzy. By using a picture-in-picture layout, you might solve this problem nicely. The video plays in its smaller natural resolution (which looks sharper), and allows for ancillary information on the side to help make the sale.
- ❑ Make it modular for easy reuse and dynamic templates. Keep your production costs down by making the content modular from the get go. Have a daily sandwich special? Just change out the JPEG or PNG for the sandwich and the text and price to match. That's a 10 second job, not a four-hour job. Have a new DVD released each Tuesday? Want to suggest what other movies or music the person likely to purchase that movie might also want? Go ahead. Make a template that has a placeholder for the new DVD with movie trailer playing in one corner of the screen, with jacket covers for other suggested titles shown off to the side.
- ❑ Digital signage content needs to be entertaining, not just advertising. Of course, it helps if the ads are entertaining as well, but you need a reason for people to look at the screen. Perhaps they need to check if their ticket has been called at the deli. You gotta have a hook. If there is no reason for people to look at the screen, or if the screen is un-naturally mounted high up in the ceiling, people won't look at the screen, and therefore the effectiveness of your network will be minimal.

- ❑ Match the loop time of your content with the dwell time of your audience. A half hour loop located in a place that has a 2-minute dwell is major mismatch. Either pick a better location with longer dwell (maybe NOT at the front entryway to the store), or shorten the loop time, or both.



- ❑ Don't use shovel-ware. In most venues, a standard 30-second TV spot will not work. It needs to be 10 or 15 seconds tops. If you're editing a movie trailer or music video, you'll need to get permission from the studio, since you're messing with their 'art'. Often times there are tricky contract clauses from the artist that must be maintained. This can be costly and painful. Be careful.
- ❑ Your content must be relevant. We're not talking billboards here. You're in a store. A specific store. You're here to buy one thing. Suggest another. Don't advertise laundry detergent at the deli counter. Don't advertise toilet paper while waiting for a burger. These are irrelevant, and everyone knows it. Digital Signage is not a billboard, it's not TV, and it's not the web. If its not relevant to what I'm doing RIGHT NOW, the customer doesn't want to see it.
- ❑ Drive sales lift, absolutely. But also drive frequency. While waiting for your table at a restaurant, suggest the Surf and Turf tonight AND come back next Tuesday for "all you can eat Shrimp night". Getting just one more visit per month out of every customer is a major win.
- ❑ You've got a network. Charge your vendors like its one. Chances are that many of the vendors in your store can't afford national network TV time. Your network can be significantly less expensive and at the same time be a lot more effective. Traditional television advertisers are frustrated with increasing costs to reach an ever more fragmented audience. Your network is their salvation! And if you can prove viewership with affidavits from your digital signage system, you'll be able to charge more money for the time on your network. Link that up to a system to measure real time analytics from your point of sale system, and you'll get everyone's attention. CPMs in the \$5-15 range are not unheard of, but that doesn't have to translate into a big "bar tab" for your vendor. Remember, your network is extremely focused unlike standard TV advertising. For a larger chain, this can add up to real money. Let's say you have a chain with 1000 stores, five zones per store and 10 advertisers per zone. At \$50 per store per week (per advertiser - and remember out of all of the SKUs that you have, only 10 get featured a week - this is a sellers market!), you'll be bringing an extra \$2,500,000 PER WEEK! That's \$130,000,000 per year.

And we haven't even accounted for additions to the bottom line from incremental sales. This is going to pay for a lot of screens! Don't have vendors in your locations? I'll bet you do. How about VISA or MasterCard in a Bank? How about the guy that supplies your "surf and turf"? Wouldn't he like to pay you to feature surf and turf on YOUR menu? You betcha!

-  Be a hero to the CEO. You've got this amazing network of screens. Use it. Let the CEO speak to all of the employees all at the same time. And you don't need a special satellite uplink to do it. You can record your CEO's monthly rah-rah speech ahead time, (editing out any bloopers - just like Jay Leno), and send that out as an MPEG file overnight, which is then scheduled to play before the store opens the next day. You'll get a gold star for that one!

I hope this has given the creative folks in the audience some food for thought in 2006. We're expecting this year to be a breakout year for digital signage (and the number of screens deployed). If you keep these simple principals in mind, you should have a very successful network.

## **ABOUT THE AUTHOR**

Jeff Porter is Executive Vice President of Scala, Inc., the world's leading supplier of software solutions for digital signage networks. Mr. Porter has been employed by Scala in various capacities since 1994. Scala today has over 100,000 Players deployed driving over 300,000 screens worldwide. Mr. Porter also serves on the Board of Directors for POPAI, the global association for marketing at retail. Prior to Scala, Commodore International employed Mr. Porter, where he was responsible for worldwide product development of the Amiga computer, the world's first multimedia computer from 1984 to 1994. He previously worked for AT&T Bell Labs and The Eastman Kodak Company. Mr. Porter holds a Masters degree in Engineering from the University of Illinois and a BSEE from Purdue University. He may be contacted at [jeff.porter@scala.com](mailto:jeff.porter@scala.com) or by phone 610-363-3345.