

## The New Breed Of Menuing: Data-Driven Digital Menu Boards

Data-Driven Digital Signage is all around us; from transportation departure-arrival displays to touchscreen hotel lobby displays, and much more. In restaurants and foodservice venues however, data-driven displays are rarely leveraged apart from drive-through or Point-Of-Sale (POS) order confirmation screens. But when it comes to the Digital Menu Board (DMB), the overwhelming majority of displays feature digital versions of printed menus, perhaps with an animation or two thrown in. Why hasn't this seemingly obvious and important point of guest decision been part of the data-driven content model? The most common, and in many cases correct response to this question is the lack of proof (data analytics) that DMBs drive revenue.

So let's make a couple of logical assumptions:

1. Digital Menu Boards should be a critical point of information, influence, and increased sales in many food and beverage environments.
2. In order to prove they can deliver *predictable* ROI, one must test DMBs in a disciplined manner that exclusively determines results are due to the DMB content by eliminating all other influencing factors.

If the first assumption is valid, DMBs represent perhaps the single most important opportunity to inform and influence guest decision-making, improve guest experience, lift revenue, and continually gain insights on guest behavior.

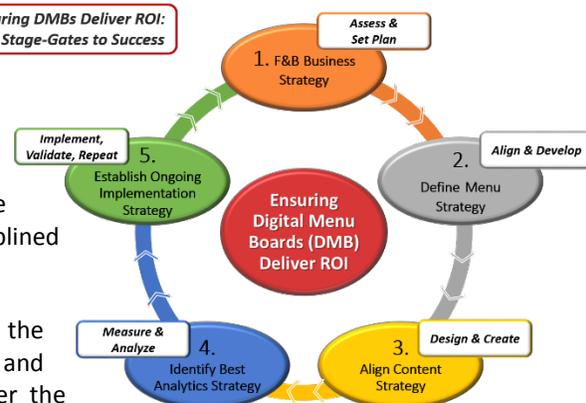
To prove the second assumption is valid, all we have to do is consider the menu testing process every culinary organization employs: thoroughly test ingredients and recipes in order to validate inclusion on the menu. From cuttings and blind tastings to operational and consumer trials, testing is a critical component for success. Given this, why not employ the same type of discipline to ensure DMBs are optimized to drive maximum results?

### Understanding Data-Driven DMBs

The Data-Driven DMB is a name that represents the concept that data and analysis (data analytics) is actively being used to inform all decisions surrounding the initial *and ongoing* content strategy and how it is presented on the menu provided by the culinary organization. This process can be done periodically with data in batches or supplied in real-time, but the important thing to remember is that it should be done as part of a disciplined organizational effort.

This capability exists and is the heart of the new breed of menuing born from the union of DMB Optimization, Analytics & Data Driven Design. If your food and beverage organization is considering implementing DMBs, sooner or later the objective that rises to the top of the list is to increase revenue, better known as Return-On-Investment (ROI). Speaking of ROI, imagine if the decision to invest in DMBs was based on a well-planned, three-point organizational strategy to a) drive results, b) harvest critical guest insights and c) deliver untapped value. Better yet, imagine if this strategy was attached to predictable returns on both CapEx and annual OpEx investment, all while improving guest experience, competitive brand differentiation, and the bottom line. Now let's look at real-world example of the impact and effectiveness of Data-Driven DMBs.

Ensuring DMBs Deliver ROI:  
Five Stage-Gates to Success



### AMC Theatres: The Power of Applying Predictive Analytics to POS Transaction Data

About five years ago, AMC Theatres began deploying DMBs. After initially installing in a few dozen theatre sites, efforts to quantify and qualify performance began, but after three years, definitive results and ROI proved inconclusive – as a result, in late 2013, AMC Theatres engaged the Predictive Analytics Team at corporate digital signage partner, Allure Global Solutions, to develop an analytics testing model with the primary goal of definitively validating whether Data-Driven DMBs would outperform traditional DMBs and printed menu boards.

After careful selection of six Test Sites featuring new optimized DMBs, business and menu strategies were provided to inform development of the testing, data-gathering and analysis model, and the DMB design process began. The optimized DMB design (see “after” DMB image below) developed for the test sites would be evaluated through two test phases with any changes based on analysis of Phase 1 for implementation in Phase 2. These test sites’ results would be compared to a Control Group of print menu sites, and to a Control Group of previously deployed DMB sites; both of which would feature identical content designs (see “before” DMB image below), although the DMB sites would also feature existing animated content.

Key objectives of this analytics test:

1. Definitively determine whether Optimized Data-Driven DMBs outperformed the other two groups in:
  - a. Average transaction value
  - b. Targeted menu item sales
  - c. Per Cap (per capita) spending
2. Determine if resulting performance could be reliably predicted if scaled to the enterprise
3. Determine reliable performance forecasts based on the smallest number of sites and investment.

**BEFORE OPTIMIZATION: AMC 3-Screen DMB & Print Menu Design**



**AFTER OPTIMIZATION: AMC 3-Screen DMB**



As a result of the Optimized Data-Driven DMB analytics testing, the following results were achieved:

- The identified Key Performance Indicators (KPI) of: Average Transactions, Per Cap Spending, and Targeted Item Sales, were all measurably increased and definitively attributable to the data-driven optimization strategy that was tested.
- Spend increased in DMB test sites, with average price and transactions both up. Targeted food categories all saw lift, with targeted menu items experiencing sales increases ranging from single digit percentages to nearly 100% growth in sales for certain items.
- Results projections based on normalized performance to the entire circuit well-surpassed \$10 million in annual impact.
- Test target results were exceeded by 210%.

These analytics test efforts led to approval for enterprise roll-out of the Optimized Data-Driven DMBs, with deployment to-date surpassing 80% of all sites. According to Tonya Mangels, VP Food & Beverage Marketing, AMC Theatres; “The predictive analytics testing process opened our eyes to the importance and value of Data-Driven DMBs. As a result we have green-lighted deployment to our entire circuit and have continued by implementing ongoing annual testing and analysis to maximize revenue performance every year.”

As evidenced by the AMC Theatres experience with predictive menu analytics, the question isn’t whether to invest in DMBs, but rather, can you afford not to invest in this new breed of Data-Driven DMBs and all they can do for your bottom line?

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Originally published 9/28/2015, on [www.signweb.com](http://www.signweb.com)

Article Link: <http://www.signweb.com/content/data-driven-digital-menu-boards#.VwQEzfrLIU>