Digital Signage Systems Market - Key Takeaways

- As brands and advertisers realize the inherent shortcomings of traditional media, they are investing in newer marketing vehicles such as digital signage due to its ability to reach huge audiences and play engaging and targeted messages at the point of sale or a point of transit.

- Marketers are keen on creating unique and sophisticated customer experiences in-store. This has led to significant interest in digital signage as an effective medium for both advertising and superior shopper engagement. When executed properly, digital signage can communicate the call-to-action clearly and accomplish the desired objectives of the network.

- Although the digital signage ecosystem is quite complex—including display vendors, software companies, media player manufacturers, ad agencies, audio/visual (AV) integrators, and tech support services—the emergence of affordable turnkey bundled solutions, as well as integrators who take charge of the entire deployment from concept to ongoing maintenance, has driven growth across all segments of the market.

Source: Frost & Sullivan
Digital Signage Systems Market - Key Takeaways

- Key technology trends in this market include the traction for 1080 pixel (p) and 4K displays, video walls built on displays with super narrow bezels, the use of HTML5 in content creation, touchscreens and touch-based interactivity, mobile-based proximity marketing, cloud-based software delivery, and the use of predictive analytics to modify content based on audience demographics.

- Challenges include the lack of critical mass in emerging markets, lack of bandwidth and high-speed connectivity in many regions, privacy concerns, and AV integrators’ lack of experience in running ad-based networks.

- Overall, the market for digital signage systems was estimated at over $1.5 billion in 2014, and is set to grow to over $3.2 billion by 2020.

- North America and Western Europe are the biggest and most-advanced markets while the bulk of the growth is expected to come from under-penetrated countries in Asia-Pacific and Latin America over the forecast period.

Source: Frost & Sullivan
## Digital Signage Systems Market - Business Models

<table>
<thead>
<tr>
<th>Key Components</th>
<th>Merchandising</th>
<th>Advertising (Network Operator/Client Funded)</th>
<th>Informational/Entertainment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td>Single brand content, information and entertainment</td>
<td>Multi-brand content, information and entertainment</td>
<td>Information and entertainment</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Branded retail stores and banks</td>
<td>Big-box retail stores, theatres, subway stations</td>
<td>Hospitality venues, university campuses</td>
</tr>
<tr>
<td><strong>Ownership</strong></td>
<td>Brands (Nike, Coca-Cola, Virgin)</td>
<td>Stores (Target, Tesco) and network operators (IZON Media, Adspace Networks, Captivate Networks)</td>
<td>Hotels, universities, banks</td>
</tr>
<tr>
<td><strong>ROI Impact</strong></td>
<td>Increase in sales, brand awareness</td>
<td>Advertising revenue</td>
<td>Enhanced customer experience</td>
</tr>
<tr>
<td><strong>Sales Cycle</strong></td>
<td>Short with retail; potentially high with other verticals</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>

Source: Frost & Sullivan
The technology employed in a digital signage network is highly complex and comprises several devices.

- Displays, which are the most visible aspect of the network, range from small-sized screens (10 to 20 inches) to 75-inch HDTVs and huge electronic billboards. The screens could be based on LCD, LED, or plasma technology.
- Media players, which are used to ingest and store video, audio, rich media, and text assets, distribute the content to the displays according to a pre-defined schedule and list. They can power single or multiple displays, depending on the configuration.
- Software includes two different components: media player software that helps serve content to the screens, and content management software that drives the creation, scheduling, and distribution of content to the media players. There are multiple distribution architectures that connect the media players to the central server.

The market topology for the digital signage systems market includes:

- Display manufacturers
- Digital signage software providers
- Content providers
- Media player manufacturers
- AV integrators and Internet connectivity providers
- Advertising agencies/consulting firms

Source: Frost & Sullivan
Digital Signage Systems Market - Value Chain and Structure

Source: Frost & Sullivan
Digital Signage Systems Market - Pricing Overview

- A number of components must be taken into consideration while budgeting for a new network:
  - Display screens and mounts
  - Media players
  - Content and media player management software
  - Initial installation costs
  - Content development
  - Maintenance, service or technical support, updates

- The total cost of ownership (TCO) for a network, regardless of the business model, is determined by considering the initial purchase costs and all subsequent expenses (listed below) over the lifetime of the network.
  - The initial investments in displays, media networks running 24/7, media players, software
  - Scalability, which cuts on costs down the line while expanding the network
  - Energy consumption costs over the long term
  - Ongoing maintenance costs and tech support expenses

- The costs can range from a few thousands to millions of dollars, and vary dramatically based on the size of the network. Certain components, such as displays and media players, are straightforward in terms of planning and budgeting. Other elements such as content creation and network maintenance costs are more nebulous and harder to estimate in the planning stages.

Source: Frost & Sullivan
### Digital Signage Systems Market - Key Market Drivers and Restraints

<table>
<thead>
<tr>
<th>Market Drivers</th>
<th>1–2 years</th>
<th>3–4 years</th>
<th>5–6 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>The convergence of in-store technologies, proximity-based mobile marketing, touch interactivity, and digital signage</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Emphasis on content creation and ongoing content strategy critical for success for new networks</td>
<td>H</td>
<td>H</td>
<td>H</td>
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<tr>
<td>The development of standardized audience measurement metrics and predictive analytics</td>
<td>H</td>
<td>H</td>
<td>H</td>
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<tr>
<td>Genuine turnkey solutions drive investments from SMBs in digital signage</td>
<td>H</td>
<td>H</td>
<td>M</td>
</tr>
<tr>
<td>Digital signage a more attractive medium following steady decline in technology costs</td>
<td>M-H</td>
<td>H</td>
<td>H</td>
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</tbody>
</table>

<table>
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<tr>
<td>Purely ad-supported networks under pressure due to AV integrators' lack of ad selling experience</td>
<td>H</td>
<td>H</td>
<td>M-H</td>
</tr>
<tr>
<td>Lack of bandwidth and high-speed connectivity to deliver truly engaging and interactive applications</td>
<td>H</td>
<td>H</td>
<td>M-H</td>
</tr>
<tr>
<td>Perception of signage networks as an IT-based tech initiative instead of a media campaign driven by marketing</td>
<td>H</td>
<td>H-M</td>
<td>M</td>
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<tr>
<td>Concerns over invasion of customer privacy and the use/loss of sensitive data</td>
<td>H</td>
<td>M-H</td>
<td>M</td>
</tr>
</tbody>
</table>

Impact: H High, M Medium, L Low

Note: Drivers and restraints are ranked in order of impact. Source: Frost & Sullivan
Following the global recession of 2008/2009, a whole host of software vendors went out of business or were acquired by larger participants with greater financial clout. In this intensely competitive climate marked by consolidation, participants are partnering with vendors offering complimentary solutions as well as providing ongoing consultation and tech support/maintenance services to differentiate themselves. Overall, the digital signage software market has over 100 vendors.

The competitive structure of the market is as follows:

**Tier I Companies:** The Tier I companies include software vendors with a global presence and a large capital base. The revenue of these companies far exceed that of Tier II and Tier III companies. BroadSign, Scala, Real Digital Media, ComQi, Stratecache, and Signagelive fall under the Tier I category.

**Tier II Companies:** Tier II comprises entities that have a strong local presence and are looking to extend their reach to new global markets.

**Tier III Companies:** Tier III consists of local companies that are not likely to compete with the major manufacturers.

Source: Frost & Sullivan
Since launching its platform in 2004, BroadSign has established itself as the leader in digital signage software solutions through a combination of organic growth, product innovation, synergistic partnerships, and its continuing efforts for global expansion.

The company has consistently grown faster than the market in recent years, driving the largest aggregate digital signage network across an abundance of vertical markets.

Over the last three years, BroadSign has garnered almost 16 percent of a highly fragmented market and is the clear market leader in cloud-based platforms. Verticals served by BroadSign include transit, healthcare, entertainment venues and cinema, retail, hospitality, vending, corporate and financial institutions, and restaurants.

BroadSign's cloud-based solution, consisting of BroadSign Administrator, BroadSign Player, BroadSign Cloud and BroadSign Edge Server, is among the most unique in the digital signage space in terms of functionality and affordability.

Source: Frost & Sullivan
BroadSign Profile - Key Performance Drivers

• It allows customers to create and refresh content as often as necessary to keep it relevant, engaging, and informative for the intended audience. The solution is compatible with a variety of media types and displays high-definition content at multiple aspect ratios.

• Other key product lines from the company include:
  1. BroadSign Creator: A web-based content creation tool powered by templates
  2. BroadSign Open: API that allows third-party integrations and add-ons
  3. BroadSign Xpress and BroadSign Xpress Pro: Smart Media Players based on Android/ARM and Windows/Intel configurations

• BroadSign is selected by premium, enterprise networks due to its global presence and ability to provide services and support for customers in a wide range of verticals. Given its cloud-based model, initial investments are much lower than upfront costs required by on-premise solutions.

• The company has struck the right balance between networks running on the merchandising/informational/entertainment business models and those that are ad-supported. That said, it is regarded by its customers and the industry as the preeminent choice for ad-based networks.

Source: Frost & Sullivan
BroadSign Profile - Key Performance Drivers

- BroadSign's automated cloud-based solution includes content scheduling, distribution and creation capabilities. Its mature and robust platform allows participants to scale with ease at a reasonable cost of ownership.

- As a result of strong working relationships with customers and partners worldwide, BroadSign has a global perspective in understanding the unique requirements of network operators in a multitude of geographic regions.

- BroadSign has recently added a host of key partners to its ecosystem, including a Quividi integration for automated audience measurement, BlueFox and TMTFactory arrangements for content offerings, Blue Bite to drive cross-channel engagement between digital signs and mobile smart phones, and NEC for professional displays.

Source: Frost & Sullivan
Digital Signage Software - Competitive Landscape

Digital Signage Systems Market: Competitive Landscape for Software Vendors, Global, 2014

Product Line and Competitive Strategy for Digital Signage Software Market

Market Penetration

Source: Frost & Sullivan
Digital Signage Software - Competitive Factors and Assessment

- The competitive landscape exhibit reflects companies’ performance relative to each other with an integration of quantitative and qualitative metrics.

- For the x-axis, which corresponds to market penetration, the primary criterion is revenue garnered in the base year (2014). For the y-axis, the following qualitative criteria were used to benchmark vendors’ performance against key competitors:
  - Uniqueness of product line/size and breadth of customer base
  - M&A activities, geo-expansion, funding, and so on
  - Competitive strategy to combat recessionary conditions
  - Customer value addition

- The competitive landscape reinforces Frost & Sullivan’s assessment that BroadSign is the leader in this highly fragmented market segment. It is followed by Scala, Stratecache, and Real Digital Media - who have all demonstrated their ability to keep growing year-on-year even under challenging market conditions.

Source: Frost & Sullivan