



SCREENSCAPE: TOTAL COST OF OWNERSHIP

Total Cost of Ownership

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Common Costs Associated with Display Networks

What are the common costs associated with deploying a traditional Digital Display network?

Software Costs

Traditional digital signage software most often comes in two categories: management software, which helps users create and schedule content, and player software, which plays the content on local display hardware.

Management software is used to collect the assets that will be used by the display(s), to arrange and schedule the playback of those assets, and to distribute the playlist content to the on-site hardware. **Player software** is used by the on-site hardware to receive playlist content from the management software, and display the content on the physical screens.

For most legacy digital signage operators, both management and player software are custom built proprietary applications requiring individual licensing agreements and expensive upgrades. Over a three year period, costs for Player software for a single screen average at \$450, and management software averages at \$1500. The favorable economics offered by true Internet-based solution allows ScreenScape to reduce costs and pass on incredible savings in this area. Detailed cost study available on request.

Hardware Costs

Digital signage hardware generally involves a screen, a device to deliver content to the screen (a PC or proprietary player), and a mount to secure the screen in the venue.



Screens used for digital signage range from basic mass market computer monitors, (e.g. a 22" LCD monitor), to purpose built industrial strength commercial screens designed for long-term use in high wear environments (resistant to heat,



dust, humidity, UV, vandalism, etc.). A screen can cost from \$300 to \$2000, or more.
Player



hardware used for digital signage ranges from proprietary devices built by signage operators, to industrial box PCs mounted directly to screens, to generic business PCs rededicated to running display content. Media players can cost from \$500 to \$1500.



Figure 1 - GPC-BX950T1 Series Ultra-Slim 25mm height BOX PC

Displays mounts are used to attach and secure screen hardware to best effect in a particular venue. They come in all shapes and sizes: floor stands, wall



mounts, arm mounts, kiosk boxes, etc. Mounts are chosen to accommodate the needs of a specific physical



space in individual venues. Off-the-shelf wall mounts can cost from \$50 to \$250, while kiosks and custom designs are generally much higher.

For a traditional digital signage hardware deployment at a single venue, costs average at \$2300 per installed screen. By taking advantage

of generic commodity-priced hardware that is easily repurposed ScreenScape reduces both cost and risk. When buying new equipment, ScreenScape-powered hardware costs tend to range from \$1000 to \$2300 per installed screen depending on the size and sophistication of your hardware.



The Hidden Costs of Digital Signage Networks

Low Low Cost

While many legacy vendors claim to have low prices, careful inspection shows that they actually back-end load their fees, making what seemed like a good deal a very expensive endeavour over the long run. As venue operators deploy their initial network or later attempt to add sophistication, they discover the hidden costs. The real world implementation of these “all or nothing” large scale deployments can turn a seemingly attractive paper ROI into an expensive flop, with no exit strategy.

ScreenScape advocates an easy growth model based on open design principles, commodity-priced hardware, flexible deployment options, and flexibility in future extensions. A single screen or an entire network can be connected to the larger community on a linear cost structure. This approach results in a highly predictable TCO for venue operators.

“Internet Based” Solutions

While many legacy digital signage vendors claim to offer an “Internet-based” solution, in reality most offer a web-based console bolted on to standalone products. These consoles are used for the static push of content to display devices, but fail to offer any dynamic distribution, sharing and community options expected with modern Web applications. Vendors often charge additional fees for access to these bolt-ons, adding insult to injury.

Content Creation Pitfalls

“Now that I have a network, what do I put on it?”

In traditional digital signage networks, content creation costs are expensive “after thoughts”. Content creation is the Achilles Heel of most place-based media solutions. The cost and effort to maintain content can be exorbitant. Industry rates for graphic design are generally accepted to be \$250 to \$1000 per static image.

ScreenScape’s Venue Networking approach helps network operators to distribute the cost and effort of content creation across many contributors, from both inside and outside the venue networks they operate. Content options include both venue specific content they create in-house, shared community subscriptions and general (free) subscriptions to the latest Internet creations (viral YouTube videos, Internet news, popular blogs, RSS feeds, etc). ScreenScape venue network operators don’t need to outsource the content function to professional designers, successfully avoiding the bulk of this hidden category.

Deployment

The initial setup of legacy display networks requires a mid-level of expertise. This often involves on-site hardware installation by 1 to 2 people, remote or on-site software deployment and configuration, and on-going hardware maintenance at venue sites. The extent of these costs is determined by the complexity of the overall situation. For setting up the hardware for a traditional proprietary digital signage network, even at a single venue, trained consultants may be required and fees might reach \$1000 or more. By simplifying the deployment and offering more flexibility ScreenScape-powered networks can be setup by anyone with a little bit of PC training - which in turn reduces your costs. Budget between \$300-\$600 in deployment costs for each ScreenScape-powered display.

Project Management

Project management includes the administration effort involved in coordinating the hardware and software deployment of a multi-venue network of screens. Budgets should include roughly \$300 per screen for network administration over a 3 year period. Because ScreenScape’s deployment model is specifically designed to accommodate networked communities, larger networks should experience a 30-50% per screen cost benefit.

Bandwidth

Most networked digital signage systems, including ScreenScape’s venue networking solution, require a consistent Internet connection to distribute content and software updates to player hardware. This results in a basic bandwidth cost for the venue operator at the physical venue location. In most areas Broadband services are available for roughly \$60 per month.

Cost offsets

The costs associated with a screen display network can be offset by cost savings in the area of printing, marketing expense, and lost sales. Furthermore venue operators can sell screen time to 3rd parties utilizing the platform created by the digital sign to generate ad revenue. Venues with large and/or desirable audiences, larger screen sizes, and frequent playback command the highest rates.

ScreenScape - Reduced Total Cost of Ownership

What are the cost benefits associated with ScreenScape's Venue Networking?

ScreenScape's "venue network" approach to digital signage results in a dramatic drop in costs, and a dramatic increase in capabilities. ScreenScape deployments can save venue operators in several major categories: substantially lower software fees, generic hardware requirements and cost offsets from potential ad revenues.

In addition to reduced costs, Venue Networking has distinct advantages which traditional digital signage simply can't match. As a Place-based Social Media service, ScreenScape offers customers networking, collaboration and community tools which place its solution in a new category, distinct from old school "out-of-home digital signage" products.

How does ScreenScape save on software costs?

ScreenScape has dramatically reduced the cost of software licensing. Our "software-as-a-service" design means lower costs for up-front management software license fees.

This SaaS approach gives the advantages of:

- No initial installation
- No upgrade effort (upgrades are automatically and seamlessly delivered)
- No local support or maintenance costs
- Secure access from any Internet connection

ScreenScape's browser based player software is designed to run in any industry standard browser (Internet Explorer, Firefox, Safari, Chrome). There are no additional installation steps on client machines – any Internet enabled computer with a basic browser can act as a player for ScreenScape displays. Cost savings include:

- No installation step
- No license fee
- No custom support or maintenance for specialized player software

The SaaS approach also allows for a pay-as-you-go subscription model. ScreenScape customers are not locked in to the service, and can choose to move on at any time without sacrificing sunk costs.

The simplicity of the ScreenScape management software also allows for dramatically lower ongoing human resource costs. The software is designed so that anyone who can use online email or YouTube can intuitively use the ScreenScape service. Specialized staff members are not required to get content up

and running. This results in:

- Lower training costs
- Command and control costs are reduced - Content management is distributed across the venue network

How does ScreenScape save on hardware costs?

The ScreenScape media player software will automatically adjust to the size and screen ratio of the hardware appliance it is launched on. This means that customers can use any monitor currently in their inventory, or choose freely from any display device on the market.

The ScreenScape media player software is also designed to operate in industry standard browsers that run on any/all PCs on the market (Internet Explorer recommended). This means that virtually any network enabled PC in a customer's inventory is a potential ScreenScape media player. Customers have an open field to find cost savings on devices in the general market.

The low basic requirements for a ScreenScape media player mean that generic business PCs can potentially be repurposed as media players. No specialized hardware knowledge or certifications are required to provide maintenance to standardized machines. This circumvents potentially expensive specialized service calls, avoids bottleneck service delays, and results in lower (generic) hardware support costs.

Are there Marketing Opportunities?

Digital Signage Networks are not all created equally. Unlike proprietary solutions, ScreenScape is not a closed stand-alone electronic billboard system. In addition to its content authoring and display publishing capabilities ScreenScape offers myriad opportunities to form or participate in dynamic marketing networks. These networks may be public or private - pre-established or ad hoc. By syndicating content within the ScreenScape community you are able to reach specific target audiences with your own unique promotional offers.

How does ScreenScape offset costs with ad revenue?

ScreenScape offers a networked community of potential advertisers, and a distribution approach that makes hosting ads a simple process.

Digital displays mounted in public spaces represent potentially valuable advertising real estate. Unfortunately, with most display networks adding new content is a many-layered and complex process. The costs associated with creating and distributing the ad content outweigh the potential profits.

The ScreenScape Venue Networking makes sharing content easy. The sharing concept is built into the model from the ground up. This easy distribution makes adding advertising content to a display a simple and natural process. With Venue Networking, the distribution cost/benefit ratio is turned on its head. This allows venue operators of all sizes the option to use ad revenue to offset the cost of their displays. Screens in venues with demographics attractive to advertisers can leverage their audience to become valuable profit centres.

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How to contact us

Email: sales@screenscape.net

Toll Free: 1 (877) 666.1975

Phone: (902) 368.1975

Fax: (902) 368.3706

ScreenScape Networks

P.O. Box 291

Charlottetown, Prince Edward Island

Canada, C1A 7K4



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