
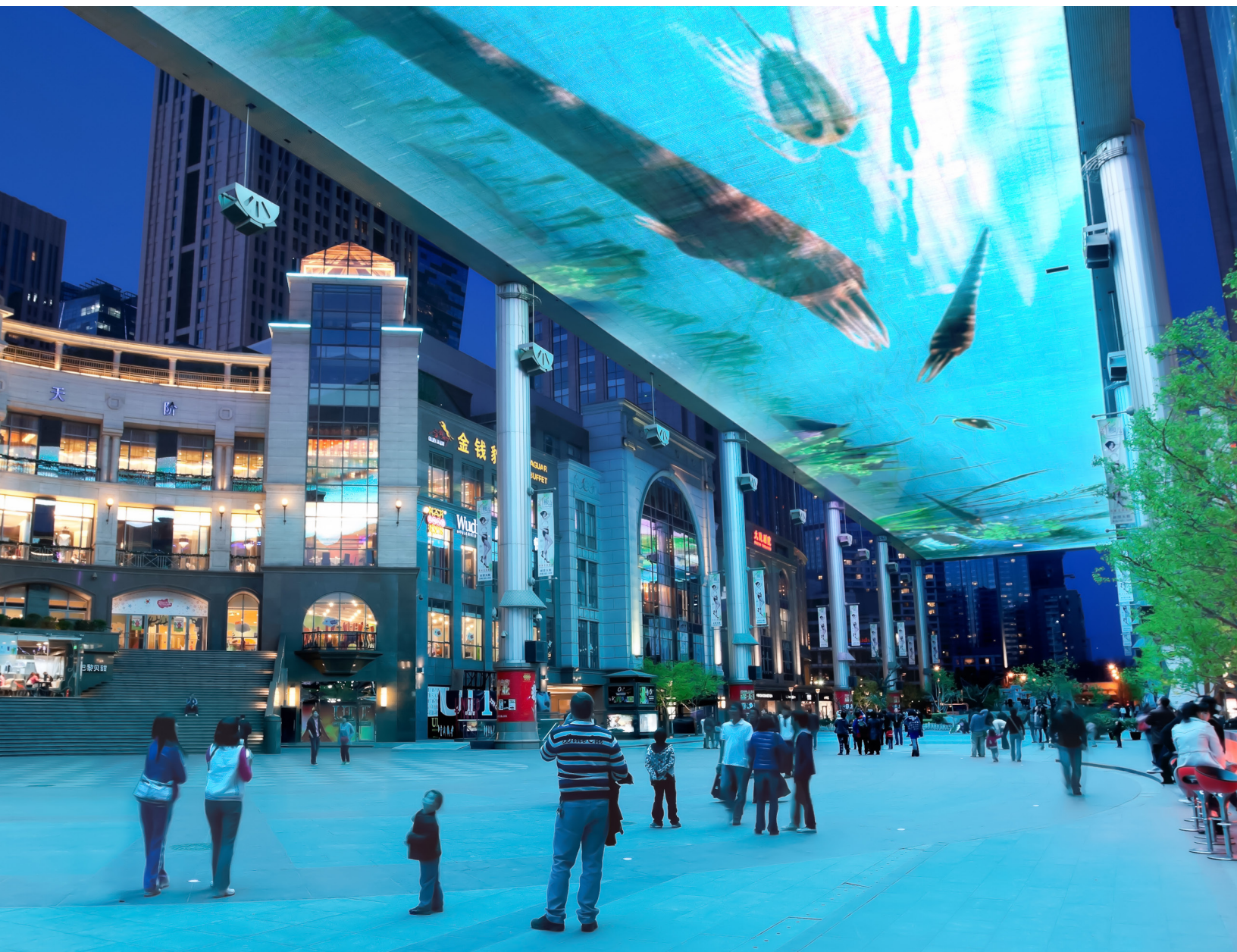
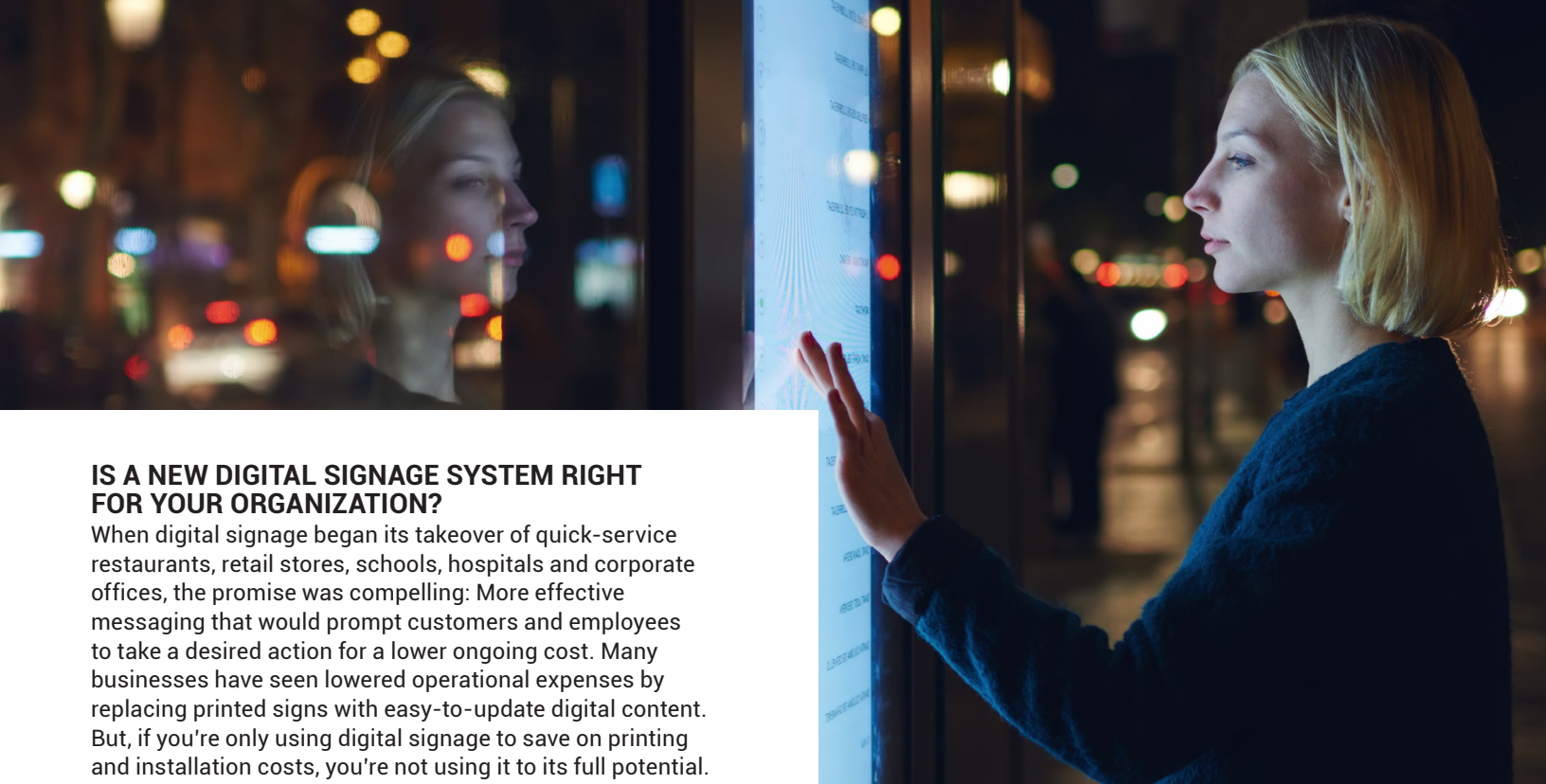


Everything You Need to Ask When Planning and Evaluating Digital Signage

The creation of this whitepaper was a partnership with:  **DSEG**
Digital Signage Experts Group





IS A NEW DIGITAL SIGNAGE SYSTEM RIGHT FOR YOUR ORGANIZATION?

When digital signage began its takeover of quick-service restaurants, retail stores, schools, hospitals and corporate offices, the promise was compelling: More effective messaging that would prompt customers and employees to take a desired action for a lower ongoing cost. Many businesses have seen lowered operational expenses by replacing printed signs with easy-to-update digital content. But, if you're only using digital signage to save on printing and installation costs, you're not using it to its full potential.

An effective digital signage system lets you capitalize on the promise of any type of digital communication to deliver the right message to the right audience at the right time. Whether you're still evaluating whether a digital signage system is right for your organization or seeking to get more value from your current system, it's important to consider the following questions.

1. Are you spending money printing posters, flyers, and other paper-based signage that have to be updated or changed on a periodic (weekly, monthly, yearly) basis?
2. Do you have to distribute marketing and communications materials to multiple departments, offices, or stores on a regular basis—and are you often unsure if these materials are being promptly displayed or distributed?
3. Do you feel you're missing opportunities to educate visitors and passive audiences (e.g., those in your lobby, reception areas, or other areas where they wait) about what you have to offer?
4. Do you often feel your target audience (internal or external) is ignoring existing methods of communications (traditional signage, static retail PoS/PoP or trade show displays, loudspeaker announcements, and even e-mail and other forms of electronic notification)?
5. Do you feel your existing channels for emergency notification are lacking and if a critical situation arises, warnings will be ignored or drowned out by the noise of competing media?
6. Do you feel all of these deficiencies will only worsen over time and that by not embracing newer forms of communications, you'll be perceived as being out of touch with customer needs?

You may have already entertained these questions and decided to move forward with a plan to implement digital signage. You may even be shopping for the system at this time. If you are like the majority of IT administrators, marketing managers and business owners considering digital signage, you have discovered that the marketplace is filled with vendors touting their technologies and software as the latest and greatest solution. Evaluating competing systems can be a daunting task. With no clear way to compare all that's out there and how all the available solutions relate to your objectives, long-term budget, and requirements, you may experience decision paralysis.

If this is not complex enough, you also have to determine whether a given supplier will meet your specific needs not only in products but also selection, availability, price, and service after the sale. Are these vendors who they say they are? Are they partners you trust in the long term? Remember that it is not if but when problems arise and how a supplier/partner takes care of these issues that determines the success or failure of that relationship.

Sort It Out

To help navigate through this often complex evaluation process, we've put together this white paper, which is partially based on "The 7 Key Elements of Digital Signage" from the Digital Signage Experts Group (DSEG) certification program and some of the most important questions to ask yourself, your team, your customers, and prospective supplier partners. In it, we explore the numerous considerations you will face as you begin to evaluate the various systems and vendors. We focus not only on what you need to evaluate in terms of system capabilities, but also how a particular system will help you ensure digital signage success.



Understand Objectives

The entire concept of digital signage revolves around delivering a message more effectively than possibly by using a traditional static sign. Understanding and articulating the specific objectives that you are trying to achieve with the signage system is critical. And you need to do so before you begin the actual design, select hardware and software, and start creating the content to be displayed on-screen.

It is not only imperative to understand what you want the digital signage system to accomplish but also how it will be evaluated. Once the objective has been set, the second most important question revolves around what we call the criteria for judgment. How will the success or failure of the system be judged and by whom? What metrics of judgment will be used: ROI, ROO, or other qualifiers? How much time do you have to succeed and what are the repercussions if you do or do not meet your objectives? Will you have time to regroup and try again? If you are wildly successful, are you prepared to go from 5 screens to 50 or even 500 in a large deployment?

Do not proceed without answering these critical questions.

"THE 7 KEY ELEMENTS OF DIGITAL SIGNAGE"

Once the objectives and the criteria that will determine success or failure of the digital signage system are fully understood and a cursory needs analysis is completed, we turn our attention to the disparate parts of a digital signage project.

The parts can become a tangled web of technologies if not understood as standalone elements and then as a whole as they will exist in a digital signage system. Each element converges with one another and understanding the interaction between the parts is mandatory. "The 7 Key Elements of Digital Signage" provides clarity and a way to connect the dots on any and all digital signage projects. Keep in mind that every digital signage system contains all of the 7 Key Elements in one form or another and any elements ignored can become the weak link.

THE NEEDS ANALYSIS

No matter what size system you may have in mind, efficient and effective design is of great importance, and it begins with the needs analysis and asking questions critical to the eventual design. Even screens with bright, colorful graphics and 4K resolution cannot help a system reach its potential if it was not designed through a careful needs analysis. It will end up costing more than it should.

Several factors need to be considered when performing a needs analysis on a potential digital signage project, and they follow a deceptively simple process. Understanding what the needs analysis tells us, and applying the information to the hardware and software selection is a key to eventual success. The ultimate design criterion is for the end user to realize and receive true return on investment or return on objectives.

The following questions are broken down into "The 7 Key Elements of Digital Signage." By answering each one, you increase your knowledge about the requirements of a project and your probability of success.

1. DESIGN

What is the objective or purpose of this installation?

- To call to action
- To sell a product or service
- To inform the viewer
- To entertain

Who is the intended audience/viewer?

- Customers
- Employees
- Visitors
- Passersby

What information do you want to communicate?

- Product advertising
- News
- Personalized messages
- Instructions or directions

How many displays will be required?

Are you looking to deploy the signage in more than one location?

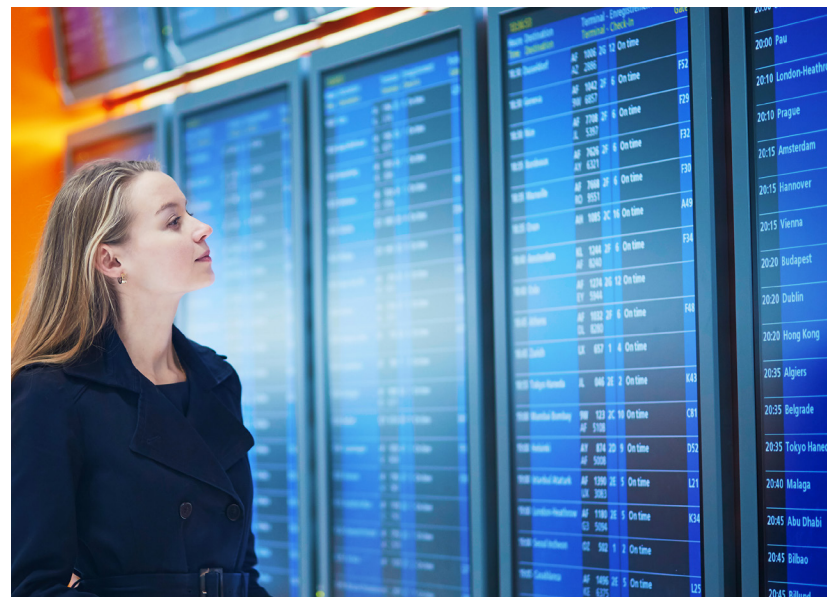
Do you intend to deploy your digital signage internationally?

Do you have buy-in from all offices and departments?

Are you planning an incremental roll-out?

- Can the platform you're considering be scaled easily to support an expanded system or will you have to upgrade and sign a contract for more advanced technical support?

Do you have a lead person designated to evaluate and test the system?



2. CONTENT

Are there existing content resources to draw from?

- Who will provide this information?

Who will be responsible for ensuring the content on the screen matches your organization's branding?

Do you have graphic designers on staff or the services of a design firm?

Can suppliers, vendors, or partners of yours help supply content?

Do you need any special approvals, permissions, or waivers?

What mix of content will make your signage attention-getting and memorable?

- To be truly engaging, combine marketing content with informative, even entertaining, content.

Will you need to add audio with your content?

- Is audio permissible in the environment that you have chosen for the digital signage system?
- Have you planned for the control of audio in the limited area of the display so as not to disturb others not viewing the screen?

Are you prepared for the investment of time and money required to keep the content fresh and relevant?

3. CONNECTIVITY

What is the network configuration?

Are there any bandwidth limitations?

Will you be sharing a network with other applications outside digital signage?

Do you have special security concerns?

Do you need to integrate your digital signage with in-store or company-centric databases?

Who will be responsible for installing the equipment and connecting it to the network?

Where will primary servers reside? Centrally or remotely?

What are the distances between the displays and your players?

For screens located far from a source, what kind of signal distribution are you considering?

Are you looking to integrate video from another source into your content feed?

Will you be locating signage in an island kiosk or aisle end caps? Will wiring this equipment present any special challenges for cabling?

How do you plan to distribute audio as well as serial control signals?

- Will these signals travel over their own wiring or use the same cabling used for the video distribution? Does your cabling support these multiple channels?

4. OPERATIONS

Will you have a single administrator or will multiple people require passwords and permissions for any specific content?

Who ultimately will be responsible for the information?

- Will it be HR, corporate marketing, MIS, a web content/design team, product marketing/sales, or your AV department?

Is IT involved in the project, and who is the primary contact for IT issues?

Will any ad agencies or multimedia production companies be involved?

Who will be responsible for content sourcing and the actual uploads?

- What are their skill sets? Who are their backups? Are they technically skilled?

Will you need to update content frequently so it's relevant and timely?

Is input from remote sites required to allow local users to update content on individual displays?

Will you need to integrate additional building operations, such as paging, security, or fire alarms into the digital signage?

Who will be notified if a display or player goes off-line?

Will you have someone on staff to troubleshoot issues and be dispatched to get a screen or player up and running?

Will you have to perform real-time status checks and log reporting of content?

Does the system support troubleshooting from a remote location or will it require an on-site service call from someone who's hundreds of miles away, resulting in lengthy system downtime?

Are there provisions for proper system backup for operation and storage of content?

Have you properly estimated the amount of time it takes not to just implement a system, but also manage it and update it with fresh, relevant content later, after the novelty wears off?

What are your service and support requirements?

Will your service provider support the entire system?



5. SOFTWARE

Are you considering a hosted or software as a service (SaaS) solution or a single-purchase, licensed software solution?

Will you need to reformat your existing content for the display?

Will you be displaying multiple media streams and files simultaneously?

- Does the software interface support this (and will your player have enough CPU processing and memory to prevent lag)?

Do you plan to send HTML content and XML feeds to your digital signage?

Do you want to display information crawls or RSS news feeds?

Does the player software support these formats? Is it a standard feature or an add-on?

If you're considering a system that uses preloaded templates and layouts, have you test driven the system for ease of use and to explore its creative potential?

Is the system capable of generating automated e-mail alerts in case of system and/or screen failure?

Does the system perform status checks of connected devices and log content play out for reporting purposes?

Does the software support image rotation for portrait and landscape layout orientation?

Thinking of stretching an image across multiple screens in a video wall? Does the software support video wall processing?

Will touch screens be used in your application, and will the software support them?

6. HARDWARE

Will the media player reside on a PC, thin client, or dedicated device?

Will the players be mounted in or behind the displays, or in a data closet?

Does the system need to interface with external hardware, such as a PoS system?

What screen size(s) and resolution(s) will be used?

Do you plan to orient displays in both portrait and landscape configurations?

- Does the player solution you have in mind support the rotation of images?

How exactly will the displays and appliances be mounted? On the ceiling, floor, or wall?

Do aesthetics play a major part in how you mount screens?

- What is your wall or floor made from? Can you wire the hardware in an inconspicuous way?

How many hours a day will the screens be in use?

Do you have round-the-clock access to the equipment or do you have to wait until non-business hours to service equipment?

Based on display locations, will you have potential security issues?

Do you want to remotely control the display(s)?

Are there safety considerations with the signage and/or player installation?

Are there space and heat dissipation issues?

Will you need to protect screens and equipment from dust, debris, and the elements, as well extremes in temperature or moisture?

Are there power outlets near your screen(s) and player(s)?

- What electrical codes apply? Do you have any power consumption limits?

Will you have to contend with images being seen in brightly lit or sunlit areas?

Will your digital signage installation meet all local and federal codes and requirements?



7. BUSINESS

What are the objectives of the digital signage project?

How will the project be judged in terms of a failure or success and by whom?

What is the timeline for judgment and what are the repercussions for failure or success?

Is the digital signage system based on revenue generation (ROI) and if so, what is the business plan for revenue generation?

Is the digital signage system based on attainment of objectives (ROO) and if so, what is the business plan and strategy?

Are there participating partners in the project? If so, what is the division of responsibilities? What are the metrics of task completion?

Have specific vendor/partners been chosen and properly vetted?

Have you asked the following questions to potential digital signage system suppliers?

- What does the price include? What are the options?
- Is technical support extra, and who provides that support?
- What are the shipping terms, return policies, and warranties?
- Is training available at no charge, and how good is it?
- How are customer service and complaints handled?

FINAL RECOMMENDATIONS

Answering these questions can help to put you in a position to achieve a successful digital signage implementation. Your application may include unique circumstances not covered here, but these questions should get you thinking about how to approach other considerations.

"The 7 Key Elements of Digital Signage" are inherent in each digital signage system, but some of the questions and answers may not pertain to your current system. Keep these best practices in mind as you plan your digital signage project:

- Understand and articulate the objective.
- Begin with a thorough needs analysis.
- Take into consideration the criteria for measuring success.
- One size does not fit all. You must customize for a good fit.
- Understand what the system can and cannot do and whether it is upgradeable at a reasonable cost.
- There is a huge difference between price and cost.
- Consider recurring costs upfront.
- Concentrate on true value with metrics and measurable ROI and/or ROO.
- Form meaningful alliances and partnerships for products and solutions.



ABOUT THE DIGITAL SIGNAGE EXPERTS GROUP (DSEG)

The Digital Signage Experts Group is an impartial, agnostic, and vendor neutral organization providing professional industry certifications and recognition for participants at all levels in the digital signage industry. DSEG is served by a Board of Advisors made up of leading members of the digital signage community including writers, consultants, trade associations, and end users. DSEG Certification programs are embraced and adopted by trade associations and major distributors and manufacturers.

For more information, please visit us on the Web at www.digitalsignageexperts.org.

Industry growth, through professional certifications

- Industry certifications provide professional credentials and a method of recognizing achievements and knowledge level.
- Certifications improve job performance through increased knowledge and pride in working to an industry recognized standard.
- DSEG creates strategic partnerships between companies enabling key alliances, bringing new capabilities and sales opportunities.
- Ultimately, a certification program can increase company differentiation from competitors.

In today's competitive workplace, there are numerous benefits to industry certifications. Certifications have taken on a life of their own in medical, legal, architectural, audio visual, and IT industries. It has become an essential part of job skills training, personal development, and advancement.

The Digital Signage Federation, the Digital Signage Expo, and numerous manufacturers, distributors, resellers, and end users have partnered with the Digital Signage Experts Group (DSEG) to bring a comprehensive set of certification programs to the digital signage industry. These courses are designed to bring an individual the education they need, from a fundamental level to in depth technical training in critical areas of digital signage.



DIGITAL SIGNAGE CERTIFICATIONS FROM DSEG

Digital Signage Certified Experts

This course is designed to quickly bring AV, IT, advertising, marketing, and content professionals up to speed in the booming digital signage market. It will allow you to master the formulas for successful design, hardware and software selection, deployment, content, and ROI/ROO for digital signage rollouts. The course delves deeply into the digital signage market/industry, and closely examines the 7 Key Elements of Digital Signage.

Digital Signage Display Experts

This course recognizes that displays never perform at their peak out of the box, and simple adjustments are not enough. Each display type has its own "personality" and responds to inputs and environments differently. Understanding each technology and how to calibrate them to provide the "perfect picture" is a requirement. The bottom line is that one size does not fit all!

Digital Signage Network Experts

This course delves into the complete fundamentals of networks and connecting devices together. It provides a path of discovery into the mysteries of network and Internet protocols and reveals the secrets of ports, throttling, and bandwidth, along with network security and policies.

Digital Signage Sales Professional

This course provides the information and skills necessary to translate tangible value and ROI to the digital signage customer. Experts agree we must gain an understanding of what digital signage entails and communicate this clearly to the customer in a risk adjusted value proposition with benefits that are relevant. It is the process of translating the "value" message to the customer where the sales process often breaks down. The DSSP program is designed to provide a foundation to overcome the obstacles of translation.

ABOUT BLACK BOX

Black Box is an industry-leading digital signage and multimedia solutions provider, Black Box serves 175,000 clients in 150 countries with 200 offices throughout the world. Black Box offers complete digital signage solutions, including integrated hardware/software platforms for affordable, easy implementation; on-screen content creation services; LCD screens; AV extenders, splitters, switches, and converters; as well as cabinets, racks, cables, and other AV and data infrastructure products. No one is better suited to help you design, implement, and maintain your ideal digital signage system than Black Box.

No one is better suited to bring you the total digital signage solution than Black Box. We can help you select and configure your digital signage system, regardless of:

- Where you are in the deployment cycle.
- What your level of technical or creative expertise is.
- The size of your business or organization – and your budget.

iCOMPEL® Digital Signage Solution

iCOMPEL is a user-friendly, secure, feature-rich digital signage solution – scalable from a single screen to an enterprise system with thousands of endpoints – that enables your organization to create, manage, distribute and monitor the exact digital signage content that delivers ROI for your particular application.



The award-winning iCOMPEL:

- Includes free professionally designed screen layouts and free software updates for low cost of ownership.
- Uses a robust web-based content management system that balances ease of use for novices with access to more powerful features for experts.
- Features drag-and-drop design and scheduling tools.
- Supports many media formats – scrolling text, photos, video, live streaming, Flash, HTML, HTML5, XML, RSS tickers, and more.
- Enables you to set up multizone layouts with each zone playing different media from its own playlists.
- Is scalable from one to 10,000+ screens.
- Works as a standalone or networked device.
- Is available as a System-on-Chip that can be installed directly onto a Samsung or LG screen, eliminating the need for physical players.

For more information, including video demos and case studies, visit <https://www.blackbox.com/en-us/solutions/digital-signage>.

