Digital Signage Implementation Guide
Implementation Guide

What is Digital Signage?

Digital Signage is the management and delivery of digital video, audio and information through a network to display devices to attract or reach a captive audience.

The Digital Signage Network is made up of 6 major components:

**Content:** Content represents the full motion video, audio, promotions, messaging and information you wish to deliver. It may include pre-recorded information, news feeds, or pricing and merchandising information delivered from the Point of Sale (POS) system.

**Servers:** Servers are the computers where content is stored, managed and distributed to players via a network.

**Content Management Software:** This is specialized software used to schedule the delivery and playing of the content at multiple devices as well as to monitor performance, and track and report on the execution of the scheduled events. Most content management software also includes authoring features and most includes screen formatting and production capability for screen crawlers and other information feeds.

**Distribution Network:** The distribution network provides the delivery and feedback infrastructure to pass information to and from the display locations. The network can take multiple forms, for example, it could be Internet, LAN, WAN or wireless.

**Players:** Players are typically PCs or special purpose media PCs used to store and deliver content to the display devices on the defined timetable.

**Display Devices:** These may be Plasma or LCD displays, projection onto a screen, interactive kiosks or CRT devices. There is no “one size fits all” with Digital Signage. Effectively assembling the components into a working Digital Signage network requires an audio/video and systems integrator who understands the available products and how to design and integrate them to meet your customer’s particular needs.
Implementing a Digital Signage Network

Implementing a Digital Signage network can be a complex undertaking. A major difficulty is that it requires multiple, diverse skills and capabilities. Content providers, who are typically marketing or advertising agencies, don’t normally understand Information Technology (IT), networking and professional Audio/Video (A/V) technologies. IT professionals don’t usually understand content or professional A/V technologies. And professional A/V system integrators don’t usually understand content creation.

These diverse areas of expertise need to be assembled into a working team to achieve success. Partner integration and project management skills are needed to establish the structure and communications necessary for creative, effective and efficient execution of the project. It’s a production and the producer is critical to the success of the project.

Assembling a Digital Signage Project Team

Once the client has decided to install Digital Signage, they must assemble a multi-disciplined team. One entity must assume the role of Project Integrator. This company or individual will be responsible for bringing together the necessary partners and resources at the right time to make the project successful.

The Project Integrator will coordinate initial activities such as defining goals, budgets, needs analysis, bids and contracts, and project milestone schedules. Once the project is underway, the Project Integrator will manage the project and coordinate messaging, content development, IT requirements, software selection and training, selection and procurement of hardware and display devices, system integration and installation.

The CDS Office Technologies Digital Signage Implementation Process

Digital Signage projects go through a phased development process. The major phases are shown in the following diagram and described briefly below. Large implementations will normally be broken down into a pilot test project and then refined prior to a larger scale rollout.
Digital Signage Implementation Process

Phase 1 - Needs Analysis and Consultation

The work done in this phase pays for itself several times over in later phases by avoiding mistakes and miscommunication of desired results. The needs analysis is an evaluation and planning phase. Client needs are identified and documented through an extensive, formal needs analysis. CDS Digital Signage Staff accurately and efficiently define client needs. Goals and objectives are defined at this time and preliminary budgets are developed to ensure that all involved clearly understand the scope and financial investment required to be successful.

The important point is to be sure you work through what your client wants to accomplish before you begin. Here are some possible objectives for a digital signage project.

- Increase sales
- Market to prospects at the point of purchase
- Generate advertising revenue
- Improve employee training
- Improve customer experience
- Communicate with customers
- Improve merchandising
- Introduce products quickly
- Entertain customers
- Educate buyers/prospects
- Improve brand and image
- Improve efficiency by central update and distribution of information
- Reduce costs of updating print signage
- Provide interactive customer experience
- Provide customer self service
It’s important to define the project success metrics so that provisions can be made to capture the necessary performance data during the implementation phase. Site surveys can be conducted to determine traffic patterns, utility connections, internet accessibility, sight lines, site lighting, ambient light and noise conditions, and display locations and types.

**Phase 2 – Design**

The design phase actually is made of two parts:

- **Technical Design** includes the architecture and specification of servers, content management software, distribution network, and display components of the system. Technical design will also include how to accommodate merchandising or real-time features associated with the network.

- **Content Development** includes developing the video and audio messages as well as branding and entertainment or information features. Content is the single most important factor in the success of a digital signage program. You will want to conduct an inventory of your client’s current digital assets from advertising, web site, and product videos to see what they have and what can be repurposed. Factors such as viewer attention span, directed audio, interactive information, and location specific factors all need to be considered. In addition, data from inventory and POS systems may also be used to provide near real time merchandising and promotion.

**Phase 3 - Integration and Implementation**

The integration phase is really when all the work comes together in the commissioning and operation of the Digital Signage Network. System components are integrated and tested and then installed in the field. Work with the client to determine whether or not to contract the content scheduling, content deployment and system operation with a Network Operating Center (NOC) or host it in house. If they host it in house, their staff is trained in content scheduling and system operations. In a large scale system deployment, the initial implementation will be a pilot project in one or more representative locations. The pilot is tightly managed and controlled so that maximum learning can occur and be incorporated as the system is refined and rolled out on a larger scale later. They will be testing both the system and the messaging. As the system is implemented the team is actively collecting information from sources such as sales data by time period and customer surveys regarding impressions and buying habits.

**Phase 4 - Measurement, Evaluation and Rollout**

Each day of operations yields data and new insights that are refined into the rollout strategy and plan. The measurements made during the implementation of the pilot project are used to project the expected impact of the rollout on the organization as a
whole. Measurements in areas such as sales increase by time period, cross sells, operations improvement, customer satisfaction, brand awareness and customer experience can all be measured to evaluate the previously established ROI and justify continued deployment.

While the initial implementation is underway, the planning for the longer term rollout can be initiated. Operations, service, and training plans are developed for the rollout. Finally, as all are prepared, the actual rollout plan is implemented. The same process of needs analysis, design, content development and implementation is continued as the system is continually refined and refreshed.

Conclusion

The potential benefits from a full scale Digital Signage implementation are measurable and significant. The design and implementation of a Digital Signage network is complex and requires the participation of a team of partners with multiple and diverse skill sets. The required commitment is also significant. Having a solid, well thought out plan, with quantifiable objectives and an understanding of how ROI can be obtained and measured is a good starting place.
Digital signage is a network of customizable displays that can be controlled electronically using a computer, allowing content to be changed remotely for the most targeted messaging possible. Digital signage is used for a wide variety of purposes including customer facing and employee facing applications such as advertising, enhancing customer or employee experiences, influencing audience behavior, brand building, entertainment, security, interactive kiosks, creating corporate communities, etc.

Why digital signage?

- **Attention Grabbing** – Getting the attention of your audience is the most important part of any display. With “video-like” digital signage, viewers are not only more likely to notice your dynamic sign but research shows they are more likely to receive the message and act on it.

- **Focused** – Your content dynamically changes to deliver a focused message to your targeted audience at each point of playback (location).

- **Dynamic** – Digital signage can be interactive and dynamically changed to meet the demo graphics of your audience.

- **Cost-Effective** – Eliminating the need to print and distribute static signs each time your message or campaign changes saves on costly printing and distribution fees. Operation can be done in house or outsourced. No heavy logistics. No more hours lost reprinting outdated or erroneous materials.

- **Versatile** – From menu boards, to corporate lobbies, to airports - digital signage offers a versatile solution for you to communicate your message to your audience. Start with one digital sign and later expand to thousands.

- **Centralized** – Control hundreds or thousands of displays around the world from one central location, ensuring quality and consistency, while requiring minimal resources to operate your digital signage network.
Why Scala Digital Signage?

• **Proven** – With field proven scalability and 24/7 reliability and more than 85,000 players deployed world-wide driving hundreds of thousands of screens, Scala software has been proven in all kinds of environments. Scala is used to manage more screens than any other software provider.

• **Cutting-Edge Architecture** – Features including easy upgradeability, broad compatibility, secure database backend, proof of playback reporting, and simplified content delivery – give Scala flexibility, security and ease of use while allowing customization and integration with external devices and/or databases.

• **Fully Customizable/Extensible** – Scala’s script-based infrastructure makes it easy to adapt and connect any / Scala network to any other system without programming. Dynamically control any item within a playlist to react independently to local conditions at each playback location.

• **Complete** – Scala offers built-in rapid authoring, web-based content management, data driven templates, supports both interactive (e.g.: touch screens) and non-interactive displays, and both terrestrial and satellite communications, so you can leverage Scala for a diversity of applications.

• **Easy to Manage** – With state-of-the-art web accessible content management, planning and scheduling tools included in Scala, management and control of your network is simplified - minimizing the resources required to control and maintain your network.

• **Scalable** – Over 85,000 Scala players throughout the world are driving hundreds of thousands of screens in networks ranging from one display to thousands of displays, all with the same software platform and the same rich functionality. Talk about scalability!