Digital consumer touchpoints—intelligent systems such as digital signs, kiosks, vending machines and more that can be used to engage a customer, convey information and hopefully create a sale—are transforming the world of retail and playing a major role in industries such as hospitality, transportation, education and financial services.

Using these touchpoints makes it possible for any business to create more interactive, information-rich environments.

• **In retail,** they are helping to reinvent the traditional bricks and mortar store to become more competitive with e-commerce.

• **For quick-service restaurants,** these solutions—including digital menu boards and self-ordering point-of-sale systems—are the way to better handle peak periods and create the kind of environment that keeps patrons coming back for more.

• **In hotels and resorts,** the effective use of digital signs and other touchpoints are a cost-effective way to promote services on a large property.

Essentially, any device that can be connected and equipped with a flat-panel display screen becomes a touchpoint. Even a small store can have a dozen or more touchpoints and a large retail chain can have tens of thousands.

But the key to the success of a network of touchpoints lies not only in getting the right screens and processors, but also in getting the right content. It’s critically important to ensure that the right information appears on the right screen at the right time. That’s the job of content management software.

**What Is Content Management Software (CMS)**

Content management software organizes and directs what content will play, when and where. It makes it possible to choose a video, photo, animated (e.g., Flash) graphic or some other item from a library of digital content and have it appear on a specific screen at a specific time in a specific location. While some content management needs are quite simple (play the same content over and over on a set schedule) other situations can be far more complex and call for playing live feeds from the Web, TV or enterprise software and varying content based not just on a fixed time schedule but in response to real-time conditions like user input, the weather or changes in location metrics (e.g., foot traffic.)

**What Goes Into a CMS Solution**

CMS software packages vary widely, but typically include:

• Organizational capabilities for keeping track of the wide range of content and making it easily available

• Playlist creation capabilities for establishing what content will play in what order
Intel® Retail Client Manager (Intel® RCM)
Market Segment Overview: Content Management Software

• Scheduling features to establish start and stop times for content or create more involved scheduling that varies based on real-time conditions or user input
• Filtering capabilities to make it possible to identify screens and locations where content should appear
• System management and security capabilities for controlling who can get access to the CMS

Beyond Content
While the primary function of a CMS solution is to manage content, as digital signage and other intelligent systems evolve, other capabilities such as remote management/maintenance and the ability to gather audience measurement are growing in importance:

• Remote management: Being able to undertake remote repair (eliminating the need for expensive onsite maintenance), assure that the devices can be turned on and off (for energy efficiency) and are actually displaying content (critical when they are carrying paid, third-party advertising)—these and other remote capabilities are increasingly critical and need to be considered in conjunction with the CMS.

• Audience metrics: Knowing how many people viewed content, for how long, at what time of day, their gender and age, etc., are important in evaluating the ROI of these solutions, particularly when they are used to carry advertising. Because audience metrics can determine the content that is shown, integration with the CMS is becoming a requirement.

Growth Drivers
The market for CMS solutions, like the overall market for digital signage and other intelligent touchpoints, is in a growth phase:

• Retailers, the largest single market for these solutions, are increasing their investments in response to threats from ecommerce and to meet rising consumer expectations.
• Prices for LCD screens, servers, networking, connectivity and more have all dropped steadily in recent years, expanding the market for digital signs and other touchpoints.
• Advances in graphics, animation, HD video and more continue to transform the content that is possible.

As a result, while the market for touchpoints has been largely technology-driven, it is now becoming more business-driven, according to Frost & Sullivan.

How Big Is the CMS Market
Frost & Sullivan estimates the current global market for CMS software at $244.4 million and that it will grow at 13.3 percent a year through 2017. The North American market represents the largest single share at 40 percent and is growing at 15.3 percent; followed EMEA which represents 38.5 percent of the market and is growing at a rate of 13.8 percent; and Asia Pacific and Latin America (combined) with a growth rate of 12.3 percent.

Vendor Fragmentation
Currently the market for CMS solutions is highly fragmented: seven software providers account for about two-thirds of overall sales, led by Cisco and followed by Scala, ComQi, BroadSign International, STRATACACHE, NetKey and C-nario. Altogether, there are hundreds of companies providing software solutions. Many are focused on narrow market niches.

Vertical Markets
Based on overall spending on digital signs, the major vertical markets for CMS software are retail, transportation, hospitality, education, corporate and government.

Others include healthcare, entertainment, sports venues, etc.

Retail alone accounts for approximately a third of all revenue from digital signage networks globally. Transportation and hospitality, while smaller in market size, are the fastest growing sectors.

For more information on content management solutions from Intel, visit intel.com/rcm.