A Smartsite Whitepaper

A Smart Solution to the Process of Content Management

Putting your content to work
“Content management, or CM, is the set of processes and technologies that support the collection, managing, and publishing of information in any form or medium. In recent times this information is typically referred to as content or, to be precise, digital content. Digital content may take the form of text, such as documents, multimedia files, such as audio or video files, or any other file type which follows a content lifecycle which requires management.”

From: http://en.wikipedia.org
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Introduction

In many organizations, information is one of the most important resources for excellence in business performance. Marketing information, customer relation information, financial figures and knowledge within the organization are just a few examples of the range of content resources requiring careful management. As Forrester has stated before, the primarily noticeable difference between a company and its competition from the customer’s perspective is often discerning, compelling content. Content management focuses on optimizing the unstructured content that may be used to create a difference: in the maintenance of quality, in marketing, in efficiency.

Accurate use of information not only depends on the quality of the content but also on appropriate delivery of the information concerned to relevant users. For that reason more and more organizations use Content Management to support quality and process control of their business information. Content Management Systems (CMS) facilitate in creating, managing and publishing up-to-date and functional information. They provide an accurate supply of information aimed at different stakeholders, such as employees, management, customers and suppliers.

Corporate Content Management strategies involve not just web oriented information. A Content Management System can manage many different types of content. Whether information is meant for the internet, mobile devices, print or any other publication channel, the content can be managed using Content Management strategies. Ideally, much of the information is suitable for multiple channels, thus allowing for maximum re-use. Cross-department approaches to Content Management are required to create maximum benefits to the organization.

Because no two organizations are alike, requirements set for a suitable Content Management solution will differ. For that reason Smartsite iXperion provides scalable and flexible solutions to fulfill any specific demand. In addition Smartsite guarantees low cost of ownership, for instance because of the fact that maintenance and adjustments of the Content Management process can be executed by the staff of the organization itself.

This document presents the Smartsite iXperion perspective on the process of Content Management and the solutions Smartsite offers.
Why Smartsite?

Smartsite iXperion is the latest release of the Smartsite content management system. It combines over fifteen years of web and content management experience with the latest technology to bring you the optimal solution for your corporate or departmental content management challenges. Over 1,000 sites have meanwhile been powered by Smartsite!

Smartsite provides excellent solutions for:

- Content Management
- Site Management
- Data Connectivity
- Web Application Development.

Content Management

Smartsite iXperion distinguishes itself as a very efficient web based tool to create, edit and manage online content. It enables editors to quickly create content and to add meta data, while respecting authentication and authorization. Versioning and workflow support the cooperation between different roles in the content management process.

Site management

Content is created for a purpose: publication. Publication channels, such as web sites, intranets, project sites et cetera can be completely created and managed from within Smartsite. Advanced security features, monitoring tools and optimization instruments are available to warrant the maximum impact of the web site.

Data Connectivity

Managed content is not the only information in the organization. Other systems may be able to provide relevant data as well. Smartsite iXperion can publish information from third party systems such as databases, ERP and HRM systems, collaboration platforms and more. This enables the organization to provide its users with a bird’s eye overview of all relevant information in a single web page.

Application Development

Smartsite iXperion provides a unique platform for web application development. An extensive API brings powerful features to the hands of web site developers, using state of the art, rich and durable technology to enhance web sites into true conversion environments. Generally speaking, applications developed on this platform using the SXML API will migrate automatically to new releases.
Best of Breed
No IT landscape consists of a single system from a single vendor. It is therefore mandatory that a content management solution can interoperate in a best-of-breed context with other applications. Smartsite iXperion uses Oracle or Microsoft databases for its content repository and has a track record of integration with Navision, SAP, Siebel, Autonomy and other leading systems.

Extensive partner network
Smartsite is implemented by a broad range of specialized business partners in Western Europe and the United States of America. In several situations, Smartsite is implemented by the organization’s own IT department. In order to enable parties to implement Smartsite, a broad range of documentation and extensive training options are available.

Seneca’s commitment to its partners is demonstrated in the extensive partner community web site (http://ixperion.smartsite.nl). This community offers a wealth of information and also contains a market place. Please contact us if you would like to gain access to this large resource of documentation, best practices and user feedback.

Commitment to the future
Seneca is committed to continue its ongoing investment in the product development of Smartsite iXperion. With our commitment to compatibility of web sites and web applications built on the Smartsite iXperion architecture, we protect our clients’ investments. We are continuously researching trends, developing strategy and investing in leading edge technology to provide end users with the best possible platform for their online presence.
Content is an Asset

More and more companies realize that information (or content) is a major asset of the organization. The content created and published by private and public organizations is crucial to their primary processes and their success. Especially publishing companies depend on the quality of the information they offer. Flaws in news articles or official publications can result in loss of reputation. For commercial organizations business-to-consumer and business-to-business marketing rely on excellent content as well. These organizations need to meet expectations created by their marketing communication. As for governmental organizations, content is needed to fulfill their legal obligation to inform citizens on all kinds of issues. In health care, information regarding services offered, such as medical procedures, may be considered crucial content.

Besides content targeted at external target groups, content intended for internal purposes must be considered an asset as well. This content generally consists of knowledge, experience and skills of employees and process information within the organization. For example, engineering and production companies depend on this information for their design or production process. A health care organization may feed the call agents in the customer call center with specific information in order to answer customer calls more satisfactorily.

In the examples mentioned above it becomes clear that information is used in different ways. According to research organization Gartner, four content management segments can be defined. These segments are based on the business domain in which, or for which, an enterprise creates and uses the content. The four segments are:

- Enterprise internal content
- Website content
- E-business transactional content
- Shared content.

Considering content an asset, companies start looking for ways to manage their valuable content and reduce the impact a loss of content can have on their business processes. The Seneca’s solutions based on Smartsite iXperion are designed to meet this need for information management; many companies have implemented their content management based on Smartsite iXperion.
Defining Content

Let’s take a closer look at what is meant by content. In the wider context, content is
defined as unstructured or structured information, intended for one or more target
groups in every possible way of appearance. Examples of content are: texts, images,
audio streams, video streams etc.

As for Enterprise Content Management, content can be defined as: any type or 'unit' of
digital information that is likely to be managed in an electronic format. It can be text,
images, graphics, video, sound, documents, records etc.

In this whitepaper, for the sake of simplicity, we will narrow the definition of content
down to texts, marked-up texts and images. Examples of this type of content are press
releases, product descriptions, user manuals, corporate procedures, etc.

Most organizations will be able to distinguish many different types of content. Some of
them even count hundreds of different content types. Some content types may contain
‘formal’ information, requiring formal approval procedures and therefore these content
types should be submitted to a rigid approval workflow. Examples of such formal
information are official press communiqués or business news articles. Other content
types may be targeted toward the organization itself and need less strict approval
procedures or none at all. Within the content management process content types carry
characteristics (or meta data), for instance an indicator on which different channels this
particular content type may be published. Preliminary studies may only be published on
the intranet, however the finalized study can be made public on the corporate web site.

Some of these publication channels may require authorization or authentication before
access to these content items is allowed. This holds true both for viewing the content
but obviously applies even more to the creating, editing, modification or deletion of
content.

The process that establishes the required range of content types within an organization
or an organizational unit is often called ‘content analysis’. This content analysis is an
expertise in itself. It requires a thorough inventory of current and expected future
content, and the ability to distinguish essential current and future requirements from
both the communication and the business perspective.

Smartsite iXperion defines content types as a set of distinct and specific sub elements,
together forming one content item. For example, a press release can be divided into
different elements such as; a title, a summary, the main part or body and some other
data, like contact information, date of initial publication etc. The main part or body
generally consists of a number of text paragraphs, possibly enriched with one or more
images. The combination of these (independent) elements determines the definition of a content type. Some of these elements require specific data entries, such as a date or a number. Other elements are free of data format and can be used in a ‘free-style editor’. Elements may be optional or mandatory.

**The essence of Content Management**

Content Management targets the structured management of content. Besides content however, a publication consists of other elements as well. A web page, for instance, is composed of content, style, layout and navigation. All these elements need to be managed in order to reach effective communication.

Traditional web editing tools offer access to each of these elements of the web page, usually requiring a high level of expertise (HTML or otherwise). Moreover, these tools offer content editors access to corporate image aspects in the presentation, which generally is not desirable. Next to access to the corporate image, the editors can reach technical elements as well. Since this technical information may be related to navigation and performance of the website, unqualified use may be downright dangerous and detrimental to the performance and the stability of the website. As a result, traditional web editing tools will not satisfy the organization’s need to involve many employees in the creation and maintenance of content.

Professional Content Management Systems such as Smartsite iXperion focus on separation of responsibilities of web editors, site managers, designers and developers. In that way an editor, responsible for a web site, can concentrate on creating or managing certain content without the need for web-related technical expertise (such as HTML expertise), or, on the other hand, the risk of affecting aspects such as navigation or stability of the web site.

**Content Management Roles in the Organization**

Many different people in the organization may in one way or another be involved in the content management process. A number of typical roles in organizations may be distinguished. Note that the definition of roles is completely free in Smartsite iXperion.

- **Content contributors**
  A content contributor adds content to the Content Management System or updates content. Content created by a contributor generally requires approval before it is published.
- **Content editors**
  A content editor may add content, just like a content contributor. Additionally the content editor may correct, approve or disapprove the content submitted for publication by the content contributors. In some cases, content editors are responsible for the creation of textual summaries, selection of appropriate keywords, etc.
- **Section Editors**
  A section editor supervises the work of content contributors and content editors for a certain section of the publication (which, in many cases, will be a web site, a project site, a product site or an intranet). The supervision may involve content specific tasks such as content approval, content scheduling, or the ranking of content.

- **Chief Editor**
  The Chief Editor is ultimately responsible for all content contributed to the system. He or she supervises the progress among other methods by inspecting workflow status information and will see to the consistent use of meta information.

- **Channel Publisher** (often called **Web Manager**)
  The Channel Publisher is responsible for the final publication in which not only content but also style and navigation are involved.

- **Webmaster**
  The Webmaster is responsible for the more technical maintenance of the web site publication, such as performance issues, user, group and role administration and other related tasks. Search engine optimization may be a specific task executed by the Webmaster.

- **Developer**
  Occasionally, a developer may be required to add new navigation strategies, interaction components (such as polls or discussion forums) or other functionality. Often, this role is not fulfilled by someone inside the organization but by external specialists who may be hired temporarily to accomplish these tasks.

- **Designer**
  The graphical and interaction design is developed by skilled designers, who take into account not only corporate identity and interaction design, but also aspects such as usability and accessibility.

The precise division between roles and tasks may differ between organizations. In small companies one person may be responsible for editing, management and maintenance. In more complex organizations these different tasks may be divided into layers within the organization. By using Content Management it is possible to create different groups of users. To each group selected sets of possible activities are assigned in order to prevent members of the group carrying out actions beyond their responsibility. In that way a content editor will only be able to create and edit items. Removing items or making technical adjustments will be out of his reach.

**Multi-channel Publication and Content Re-use**

As discussed before content, navigation and lay-out are separated to make sure different users of the system can focus on their specific tasks. There is another important reason however, why management of content, navigation and layout should be separated. If content is to be used more then once or through different publication
channels (which we will call content re-use from this moment on) it should be managed as ‘neutrally’ as possible. In other words, the content should be independent of the publication it is intended for. Only then will future re-use be truly facilitated.

A common situation in organizations is that much useful content is available, but its use in a particular publication is limited because it was designed for specific media only and therefore excluded for any future re-use in other channels. To avoid this problem content should preferably be created as a ‘media neutral’ item so re-use will be possible.

Content re-use can be recognized at different levels. At the first level the same content is published simultaneously or at different points in time to different target groups using the same media. A press release may appear simultaneously on both the internet site and the intranet site of the company.

At the second level content is published on different channels, for example when a news article is published to a website, to mobile devices and to an e-mail news letter. Content analysis should determine which kind of content re-use is relevant to the organization and which different publication channels are to be used. This will result in specific demands on the “media neutrality” of the content.

Publication of content from one source to multiple channels greatly enhances the benefit of content management. Smartsite facilitates channel neutral storage as well as content storage with channel specific mark-up. An example of channel specific information is a reference to another content item (represented by a ‘click here for more information’ hyperlink on the web, or a ‘see page 84’ in print) or the representation of a physical address of a company.

Smartsite iXperion provides the so-called Repository Model for media-neutral content storage. Different publications can simply subscribe to content in this Repository and display it in the context of the publication. Workflow procedures are available to deal with content updates.

**Acceptance of Content Management within the organization**

Successful use of Content Management in an organization can only be reached if broad support, both among management and staff, exists. In order for the organization’s staff to accept and embrace a content management system, it needs to be user-friendly, fool-proof, flexible and effective. Smartsite provides content editors with the user interface, functionality and look-and-feel similar to well-known word processors such as Microsoft Word™. Content editors will be able to use Smartsite iXperion immediately and almost intuitively. Additionally, site managers have access to power tools in order to monitor and optimize their web sites. Again these tools are easy to use and no technical knowledge of the functionality is needed.
In order to facilitate the creation and management of content, appropriate editing tools are required. Smartsite provides a set of tools to simplify the creation and management of content and allows for the integration of third party tools as well. Among these are:

- **Smartsite Manager**: a web based customizable interface providing rich content editing features.
- **Smartsite Office Integrator**: a Microsoft Word™ add-on that allows users to manage corporate content without leaving their word processing environment they are familiar with.
- **In-line editing**: a tool which allows editors to edit texts in the content item itself. Although in-line editing is in contradiction with the idea of predefined lay-out and, in view of multi channel content management, not desirable, this tool is still a popular requirement.
- **Automated content import**: a tool to import data from different sources and formats. Among these sources are: RSS feeds, e-mail, HTML or XML pages from other websites and other forms of content syndication.
- **Collaboration**: because of the web based character of Smartsite iXperion, content can be contributed from different locations; therefore Smartsite allows collaboration both in the management of content as well as in the use, sharing or publication of content.

The Smartsite Manager with user interface, functionality and look-and-feel similar to well-known word processors such as Microsoft Word™.
The Content Life Cycle

Press releases, news articles, description of work process, all different content items pass various numbers of steps before they are published. Obviously, all items start with the editor’s initiative to create a piece of information. In many cases the information needs fine-tuning and improvement, until it is ready to be submitted for approval and to be published. After some time, it might be necessary to update the information, thus a new version of the same content item needs to be created. Some time in the future it may be decided that the publication will be archived and in a number of years the item may even be deleted if it is not deemed to be useful any more and all legal requirements with regards to archiving have expired. The life cycle of different content types can be partitioned even further if this is appropriate for the organization under discussion.

Content Management supports the process of creation, maintenance, approval, publication and archiving of content items. In that process Content Management keeps track of the versions which are created during the content life cycle. Versioning is a very important aspect of quality control. It allows content managers to monitor the changes in a publication or even perform a so-called roll-back of content items.

The content management process separated into two sub processes: creation and management of content in the left circle, and the publication of content in the right circle (source: Rob Aaldijk, Hans van der Zalm, Informatie 01/01).
Content creation, management and workflow

In some organizations all activities related to the creation and the management of content may be performed by one and the same person for a particular type of content. In other organizations there may be a strict division of responsibilities. In the latter case, the content life cycle is strongly linked to workflow and collaboration aspects.

Workflow is a crucial element of enterprise content management systems. Contrary to popular belief, workflows should not be specified by the editors as they create content and would like to send it along a certain path of approval; rather, workflows are organizational safeguards for quality. The specification of appropriate workflows should be an outcome of the content analysis process.

Smartsite iXperion provides a very flexible yet powerful workflow engine to guide content items through the process of creation, management, validation, approval and publication. Site managers can define their own workflows and link them to specific content types. Several standards for the definition of workflow processes exist. For the content management process, Smartsite has adopted a subset of the XPDL standard, as defined by the Workflow Management Coalition (www.wmfc.org).

Many organizations are in the process of reviewing their content management processes because of new or extended legal requirements such as the ‘Sarbanes-Oxley’ compliance set. Whereas statements in letters and brochures already had a certain legal status, information published on the web often had no defined legal status. This legal aspect may also be a part of the content analysis process.

The Sarbanes-Oxley Act of 2002 protected investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws. Sarbanes-Oxley requires a new level of corporate governance and accountability. Companies must institute log monitoring and vulnerability assessments as a critical part of their IT internal control systems (www.network-intelligence.com).

Generally speaking, the level of workflow required depends on the type of content. A formal statement by the CEO of the company will go through a thorough review process, while an internal reminder regarding the company’s upcoming Christmas party may not get reviewed at all.

As content is created, an initial version of a document comes into existence. Every change may theoretically lead to a new version of this document. Built-in version management tools are required in content management systems in order to be able to trace the history of a content item or roll back a certain publication.
The legal context for corporate governance may differ from country to country. Thanks to Smartsite’s versioning and workflow features it is possible to create so-called audit trails that will offer compliance with these legal requirements.

**Video Content**

Alongside the text-based or image-based content mentioned previously, video content has become more and more important. We see an increase in the use of video material especially in the domains of marketing, education and knowledge transfer.

Smartsite iXperion tightly integrates with video media platforms, such as Quadia’s. Editors can simply select a video stream from the library and embed it into a web page. Thanks to custom players, interaction with the user occurs within the player area itself. Of course, Quadia takes care of converting video to the most effective type of streaming media, depending on the visitor’s device, bandwidth and other aspects.

Public videos may also be automatically uploaded to YouTube.

**The Publication Process**

Creating, maintaining and approving content usually serves one purpose only: publication. When published, the information will become available to its intended target groups. Using Smartsite iXperion, publication and management can be performed from one and the same web server. However, using multiple servers for management (within the LAN) and internet publication (in the DMZ) is common configuration of Smartsite iXperion. The use of different servers depends on the requirements of reliability (fail-over), performance and security. Complex infrastructures with multiple CMS servers and multiple load balanced publication servers can be configured using Smartsite’s extensive outscaling features.

In some complex organizations, a strict division is may be introduced between the content management process on the one hand and content publication process on the other. In that case, the Content Management System will make a content item available in a content repository that may be accessed by a separated publication environment.

In order to connect these two processes, good interaction is obviously required. Content editors should know which information is required and content publishers should be aware which information is currently available. A content editor might want to inform
the publisher that new content is available. From the publisher’s perspective, this is a ‘push’ mechanism. On the other hand, the publisher might query the CMS repository about available content regarding a specific topic. This is a ‘pull’ mechanism. Before the CMS repository is deployed, procedures on division of management and publication need to be determined.

Smartsite provides extensive Repository features. These can be fine-tuned to the needs of the organization. The Smartsite workflow engine plays an important part in providing synchronization between newer versions of content items in the repository with publication items.

Social Media

Social media has rapidly become one of the most effective communication channels. It is imperative that organizations include social media in their communication strategy if they want to be taken seriously by the markets they serve.

Social media and content management are closely related and may be tightly integrated. Social media, such as Facebook, Twitter and FourSquare, offer unique opportunities to listen to the market and to interact with individuals - all the while being monitored by the network.

Smartsite iXperion tightly integrates with social media. Obviously, social media updates may be issued from the Smartsite Manager context; and live feeds from Twitter and other media may be integrated into web site or intranet.

An important aspect of social media is that it calls for constant monitoring. The Online Reputation Dashboard will provide you with sufficient feedback from social media to monitor your online ambition.
The Importance of Meta Data

A content item based on a simple content type may consist of a few elements such as a title, a text body, and a short summary. In most situations, it is desirable to extend content types with a number of additional elements. These elements may be useful either for the content management process or the publication process.

Examples of additional fields are the publication date of a content item, its expiration date, name of the author, last date of modification, keywords, category information, etc. These additional fields are called meta fields, containing information about the actual content. Some of these fields may be filled by the Content Management System (name of the author, date of modification), others will have to be completed by the author or other content specialists or classification specialists.

This meta data may be used, for example, to create alternative navigational aids. A standard Smartsite feature is a set of hyperlinks to related content items, based on coinciding keywords. This will help the web site visitor to navigate the site more quickly. Another navigational aid that may be created this way is a set of hyperlinks to other articles by the same author. An index of keywords with the web pages containing these keywords is another way of presenting complex sets of information.

Other meta information can be related to the content management process, like the workflow process. All items carry information about the status in the workflow process and with that information, the chief editor can compose a list with items being approved. In that way process control becomes much easier.

**Smartsite provides extensive tooling to assist organizations with the classification of their content with meta data. A rich suite of tools is available to define and manage thesauri and taxonomies. Smartsite Content Intelligence may be deployed to add automatic content classification.**
**Personalization**

Large quantities of content are being offered to the individual user. For visitors, it may become harder and harder to find relevant information. Personalization can offer significant improvement of the usability of the web site; personalization matches the visitor’s interest with the appropriate content. This requires information about the visitor’s profile, containing his or her preferences, interests and behavior.

Smartsite provides a Personalization Framework that provides both implicit and explicit personalization. Explicit personalization assumes the user will explicitly maintain his or her profile stored in the system. Implicit personalization leaves maintaining this profile to the system itself. In that case the system will try to identify personal preferences by analyzing the user’s click path and behavior concerning information consumption. This is called “behavioral targeting” in marketing terms.

By combining well-classified content with the user context, as described above, an effective, dynamic user experience can be created. This, according to Forrester Research, is the only effective way to develop effective content-centric applications.

**SmartPeople**

SmartPeople is the working title for a new concept in working together, be it in the context of a company or otherwise: SmartPeople stands for an intranet, powered by Smartsite iXperion, unifying social media information, linking employees together based on common interests and encouraging them to share their knowledge with their co-workers. SmartPeople empowers organizations by unleashing the potential of employee-based knowledge and experience.
Enterprise Information Portals

Many organizations migrate from a standard content management solution to a more complex environment as their ambitions grow. Standard solutions are sufficient when information process is not that complex. Some organizations however, need interaction between different targets groups and even desire complex functionality using different sites and sources.

Ambitious organizations may consider building an Enterprise Information Portal, through which employees, management, customers and suppliers may get access to relevant information, processes and applications. Seneca defines a Portal as an environment that offers personalized and integrated access to relevant applications, processes and information. The success of Portals in general and Enterprise Information Portals in particular, is largely determined by a good balance of personalized information, interaction and transaction. An Enterprise Information Portal offers employees access to content which is related to particular cases or accounts, process information (e.g. an order status), collaboration elements (work groups, document sharing, content subscription) and integrated search features. Obviously, content management plays a crucial role in the performance and effectiveness of an Enterprise Information Portal. The appropriate use of meta data will provide a solid basis for the cross-linking of related information. Smartsite may be used to develop an Enterprise Information Portal. Smartsite Business Connectors offer access to applications and corporate data. With these connectors different applications and data can be presented in the Portal. On the other hand, Smartsite will smoothly integrate with third party portal tools, such as Oracle Portal or Microsoft SharePoint.

Standards compliance and Accessibility

Although the complete Smartsite System offers content management and Enterprise Portal tools without the required use of other systems, in many cases integration with other environments is desired. Content may be imported or exported using XML or other open standards. Database information may be published in Smartsite using ODBC links. Applications can be approached by COM, .NET, Java bridges, or Web services. Smartsite Business Connectors enable organizations to integrate other sources such as document management systems. Additionally, many organizations have defined workflows or thesauri in systems using de facto industry standards. XML and XSL transformations provide an easy way to access many of these standards. Smartsite iXperion offers a clear strategy to benefit from those established and developing standards.

It goes without saying that web sites, powered by Smartsite iXperion, comply with the strictest accessibility guidelines and regulations.
Smartsite iXperion modules

A number of modules and solutions extend the Smartsite features. Among these are:

- **Web 2.0 Toolkit**
  This module contains a large number of typical Web 2.0 features. Polls, forums, ratings, item comments and more are included.

- **Search Engine Optimization Toolkit**
  Indispensible for public web sites, this toolkit helps improve search results using search engines such as Google, Yahoo! Or Bing.

- **Smartsite Management Information**
  This module reports on web site activity, content management activity and much more. In order to improve the effectiveness of a web site, you need to know what your visitors are doing on your web site. Management Information will tell you.

- **Faceted Search**
  An elegant and extremely effective way to find your way in large content sets by drilling down using facets (selection filters, such as publication date, author, theme, context and more).

- **SmartInstant**
  A preconfigured web site template on the basis of Smartsite iXperion, the Search Engine Optimization Toolkit, the Web 2.0 Toolkit and Faceted Search. Comes with a five day deployment plan and some great highly customizable designs.

- **Payment Provider**
  Online shops can use the payment services embedded in this module, offering a host of payment methods.

During the summer of 2011, Seneca expects to release a very powerful forms engine, based on the W3C XForms standard.

The Smartlet Marketplace, a section within the Smartsite iXperion Community site, offers a range of free self-contained and pluggable Smartlets, such as Twitter, Flickr, Google Maps, Google Friend Connect, AddThis, Create Account, Annotation, Tag Sphere, EnrichText, Chat, TopX and many more.
Smartsite applications

You will find Smartsite iXperion in many types of organizations. Generally speaking, Smartsite is predominant in knowledge-driven organizations. Some examples:

- Local government
  Smartsite is often used for local government web sites (Rotterdam, Antwerp) serving several target groups and often containing many sub sites (for tourism, industry, citizen participation and more).

- Health care
  Hospitals, care centers, health services providers and others use Smartsite to power their web sites, but maybe more importantly to also power their intranets. This is where true knowledge management comes into play. Some institutions use Smartsite for the extensive description of their procedures, be it administrative, medical, technical or otherwise. Smartsite supports organizations to meet relevant quality assurance standards in health care.
• Industry
Companies providing their markets with product specifications and maybe even with web shops may use Smartsite for the dynamic publication of these data, to handle online orders and to integrate with ERP systems in the back end. Companies operating internationally (Fabory, Imtech, Stork, TenCate) benefit from the multi-site, multi-language capabilities of Smartsite.

• Special projects
Smartsite is used by many more organizations in both profit and nonprofit environments. Some typical uses of Smartsite iXperion are:
  o Call centers
    Smartsite iXperion may serve as a knowledge repository for the call agents in a call center. This same knowledge repository may serve to feed the web site with frequently asked questions and answers (DaimlerChrysler, now Mercedes, and ANWB, the Dutch equivalent of AAA use Smartsite to power international call centers serving Western, Central and Southern Europe).
  o Intranets
    To many companies, the corporate intranet is their true source of information; in addition it will provide employees with guidelines, learning materials and quality and compliancy documents. Intranets like these will be found in local government (Rotterdam), in the financial sector (Bank Nederlandse Gemeenten – Dutch public sector banking agency), health care institutions, museums et cetera.
  o Narrowcasting
    A publication channel that is often overseen is the host of smart screens in the public areas of offices, hospital waiting areas or education centers. Narrowcasting feeds from Smartsite iXperion to these screens can be a very effective way of communication given the known location and time of day.
The Smartsite Architecture and Technology

Smartsite is based on an open and extendible architecture that allows scaling in different directions. Some of the essential elements of Smartsite are represented in the schema below.

Architecture of Smartsite iXperion

Smartsite is built on a multi-tiered architecture. Smartsite was developed using several core technologies, all Microsoft-based. The Smartsite iXperion publication engine is a very modular application, consisting of several .NET components. The primary programming language used for the development of the product is C#. Seneca uses the Microsoft Visual Studio Team System environment extensively for development, quality assurance, documentation and work item management. With a perspective on compatibility, Smartsite is strongly built on XML technology and Web services.

Developing a web site in Smartsite will generally not require the use of programming tools thanks to the extensive out-of-the-box features for site development. Site developers will be able to use their favorite environments to develop design and interaction and to develop extensions to the features of Smartsite. A suite of training labs has been developed to make content editors, site managers, site builders and developers quickly proficient with Smartsite. SXML with the custom <se:foo> namespace provides many built-in features, including macros, vipers and in-line C# code.