



# Training period report

July – September 2006

**Subject:** web site design

**Company:** K Maintenance Services Ltd

1 Varey Road  
Eaton Bank Trading Estate  
Congleton CW12 1UW  
England (Cheshire)

**Attachment:** a CD

Student engineer:      **SIBILLEAU** Michaël

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In compliance with the Agreement signed in January 2006, I did a training period in a UK company from July 10<sup>th</sup> to September 15<sup>th</sup> 2006 within its operations office established in Congleton (Cheshire).

The training period consisted of a full restructuring of the company's web site the result of which is available either on the CD (KMS\_New\_WebSite directory) or in line (<http://kms-group.co.uk>) with perhaps some updates added by the administrator.

To create the web site, I decided to follow a **two-part process**:

- First, I gathered the main key managers in order to analyse their needs and define a plan of action (*part I*),
- Then, I created a specification document (*part II*) to detail my intentions, explain my choices and also the technologies I used.

- - -

“ In architecture as in other operative arts, the end must direct the operation. The end is to build well. Well building hath three conditions. Commodity, firmness, and delight.”

Sir Henry Wotton, *The Elements of Architecture*

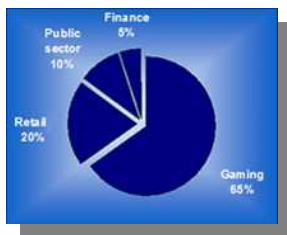
# **PART 1 : Terms and conditions**

## I. General information on the company

### 11. Company summary.

K Maintenance Services (KMS) was formed in 2002 and has been trading since the 1<sup>st</sup> of January 2003. The business provides specialised support for computer kiosks, Automated Teller Machines (ATMs), Fixes Odd Betting Terminals (FOBTs), Plasma screen and PC based devices by offering the following:

- monitoring services,
- hardware maintenance,
- installation on site,
- configuration.



KMS is mainly involved in four markets: gaming, retail, government and transport sectors.

Turning over 500,000 pounds in its first year, this company's sales now turnover 2M pounds per year with a robust repeat business representing over 40% of this figure. Gross profit is currently running at 76%, and PBIT is showing a very healthy 19.4%

KMS has managed to receive European orders to support kiosk installations across nine countries. During July 2006, the company was in negotiation to obtain a new market in Mexico which would enlarge its cover.

### 12. Human resources.

KMS currently has 30 members of staff including 2 directors, 5 key managers and 23 engineers (of which, 17 are full-time).

Jean-Marc NIEZNANSKI, who signed the agreement for overseas placement, is one of KMS founding partners. He is a French national and has been UK resident for the past 10 years. He has been commercially involved in the electronic public display sector for 6 years, the retail and leisure sector for 10 years. He has a B.A. honors in Business and Marketing from Leeds University and a MBA in International marketing and business management from Normandy Business School.

### 13. The market.

The kiosk marketplace is experiencing rapid growth and, whilst still relatively immature, has a number of serious and committed players who manufacture the units. The worldwide market was estimated at 403,000 deployments in 2003 rising to 557,000 units last year. These data show that a total of 1,429,000 units have been deployed in a three year period.

All analysis shows the kiosk market is growing dramatically and many client groups have specific needs. KMS was founded to meet these needs by providing complete specialist service including: maintenance, installation, certification, site survey, hardware and software.

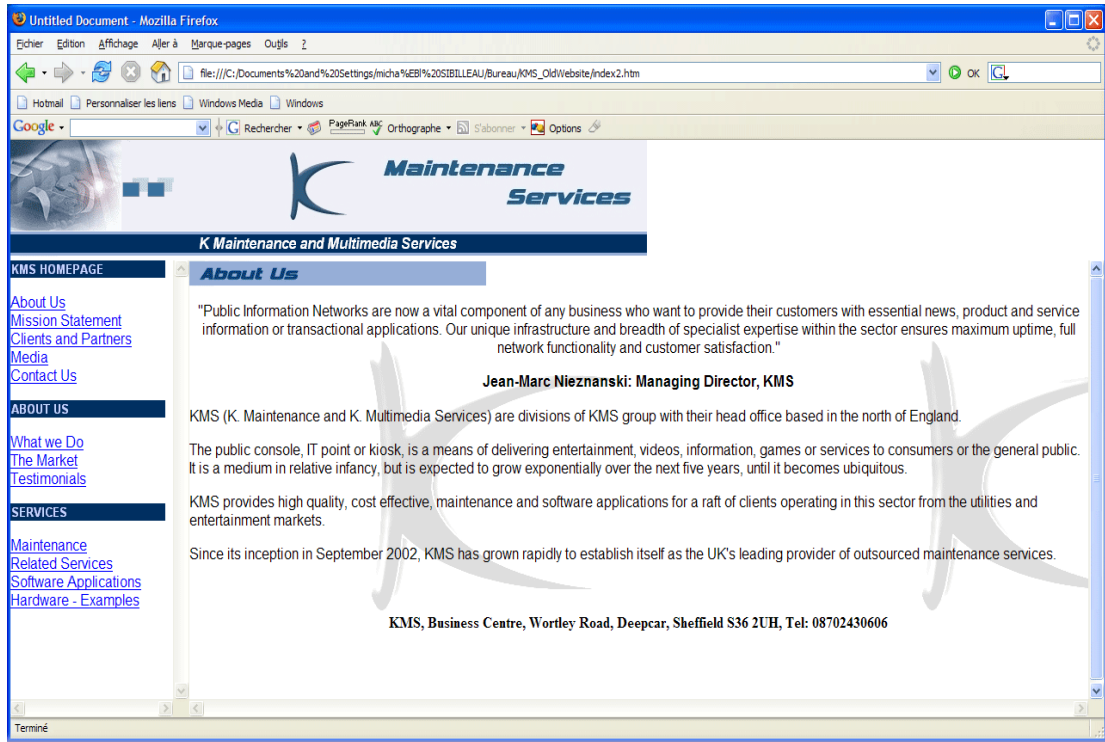
## II. Needs analysis.

### 21. What already existed.

KMS had a previous web site which is available on the CD (see KMS\_OldWebsite directory). However, I realized that most of the main design rules were not respected, among the following:

- no site development process was done before creation,
- poor accessibility (no alternates & fallbacks, no style sheets and no W3C accessibility),
- no clear navigation aids,
- no hierarchy of information,
- poor visual design & low editorial standard,

Moreover, the previous web site used a cover which could be considered as an additional and annoying mouse click between the reader and the home page. Then, the reader saw the page below:



*Previous KMS's web site*

Analysis showed that the layout grid was centred, line length was too long, scroll bar sliders were useless and an animated gif image focused the reader's attention to the top left corner.

## 22. Goals and strategies.

Due to a meeting with the key managers in the second week of my training period, several questions were asked in order to identify the main goals, the answers to which are included in the table below:

<b><i>Questions I asked them</i></b>	<b><i>Answers</i></b>
<b>What is the mission of the company?</b>	KMS specialises in the provision of: computer kiosk maintenance; installation; commissioning and configuration and remote performance monitoring.
<b>How will creating a web site support your mission?</b>	The Web site is an integral part of all marketing campaigns and corporate communication programs. As Jean-Marc NIEZNANSKI, Managing Director said:  "Public Information Networks are now a vital component of any business that wants to provide its customers with essential news, product and service information or transactional applications"

<i>Questions I asked them</i>	<i>Answers</i>
<b>What are your two or three most important goals for the site?</b>	- provide a professional, modern and dynamic image of KMS, - inform our (potential) customers about our products and activity - increase our European cover, especially in France.
<b>Who is the primary audience for the web site?</b>	Our customers and potential customers throughout Europe.
<b>What do you want the audience to think or do after having visited your site?</b>	We want the readers to trust us and to become one of our customers. We would like them to contact us after visiting our web site.
<b>What web-related strategies will you use to achieve those goals?</b>	We will increase our communication campaign and send invitations (letters, e mail, etc.) to visit our web site
<b>How will you measure the success of the site?</b>	Statistics provided by the host.
<b>How will you adequately maintain the finished site?</b>	Anthony Hunt - who is responsible for all KMS's software applications and development - will have responsibility for the upkeep of the KMS website.

### III. Production issues.

Once goals were identified, the next phase consisted in the generation of a site production check list. Thus, a strategy with clear objectives was defined.

#### 31. Production.

##### *311. Production team:*

I was the only resource working on the web site design, although I had some contact with Anthony Hunt – Head of the software engineering. Consequently, I was the writer, the information architect, the graphic designer, and the content and technical expert. These responsibilities drove me to define a concise project plan in order to finish the web site within two months.

##### *312. Technology:*

- ☞ considering the readers' features requirements (customers), the web site should support all the main operating systems (Windows, Linux, Macintosh) and browsers, (IE, Mozilla, Netscape, Opera, Swift and Safari).

- ☞ Dynamic HTML or not? The Managing Director wanted the web site to have a cover with an animation. Because of basic ergonomic rules (see § 62), I disagreed and suggested putting the animation within a chapter ("What we do") and adding an alternate version (whether the browser needed a plug-in to open such a file).

To provide a dynamic image of KMS, I decided to create a JavaScript Menu which was tested on all the OS and browsers. However, to avoid having accessibility problems, I added a content link into the banner.

- ☞ All the html and css files should be W3C valid.
- ☞ Database support or audiovisual content was not required.

##### *313. Others:*

Unique domain name required, disk space under 20 Mo, no budgeting (Ongoing personnel, server and technical support should be the same as before).

### 32. Information architecture.

This stage consisted in the building of a detailed contents list and in the organization of the web site. To achieve this goal, I had to inventory all existing content, describe what new content was required and define the organization structure of the site.

☞ The new content is available in the [activity tree](#).

### 33. Site design.

This represented the greatest challenge. Although technical conception was easy to do, I was unfamiliar with the ergonomic and aesthetics required within the design process.

The decisions taken were about:

- Interface design and master page grid,
- Graphic design specification for all the page types (Header and footer graphics, logos, buttons, background, etc.),
- JavaScript and Flash animations,
- Illustrations,
- Photography.

### 34. Site construction.

This comprised the longest time spent within the training period. I was required to:

- do .html, .css, .js and .swf files for all Web pages,
- finish navigational link structure,
- all put in place (text, pictures, animations and illustrations) and linked to pages, ready for beta testing,
- do a final proofreading of all site content.

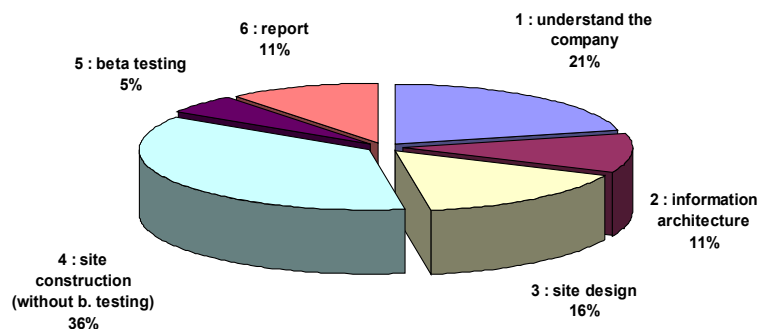
Obviously, this stage included beta testing done primarily by KMS's staff. I also asked for non KMS staff opinions (principally from students or Web surfers).

In addition, I had to write a maintainable code in order to facilitate KMS support staff in the day-to-day maintenance and with content updates. This required adopting W3C recommendations, using Cascading Style Sheets and adding support commentaries for each section of code.

*Tips:*

- The decision to adopt transitional Doctype (DTD) is controversial, but I used it to facilitate the menu conception and to be sure that old browsers recognize the web site.
- Considering KMS has an important market in Europe, especially in France, I offered to translate the site into French (so I had to create a French version for each page).

### 35. Work timetable

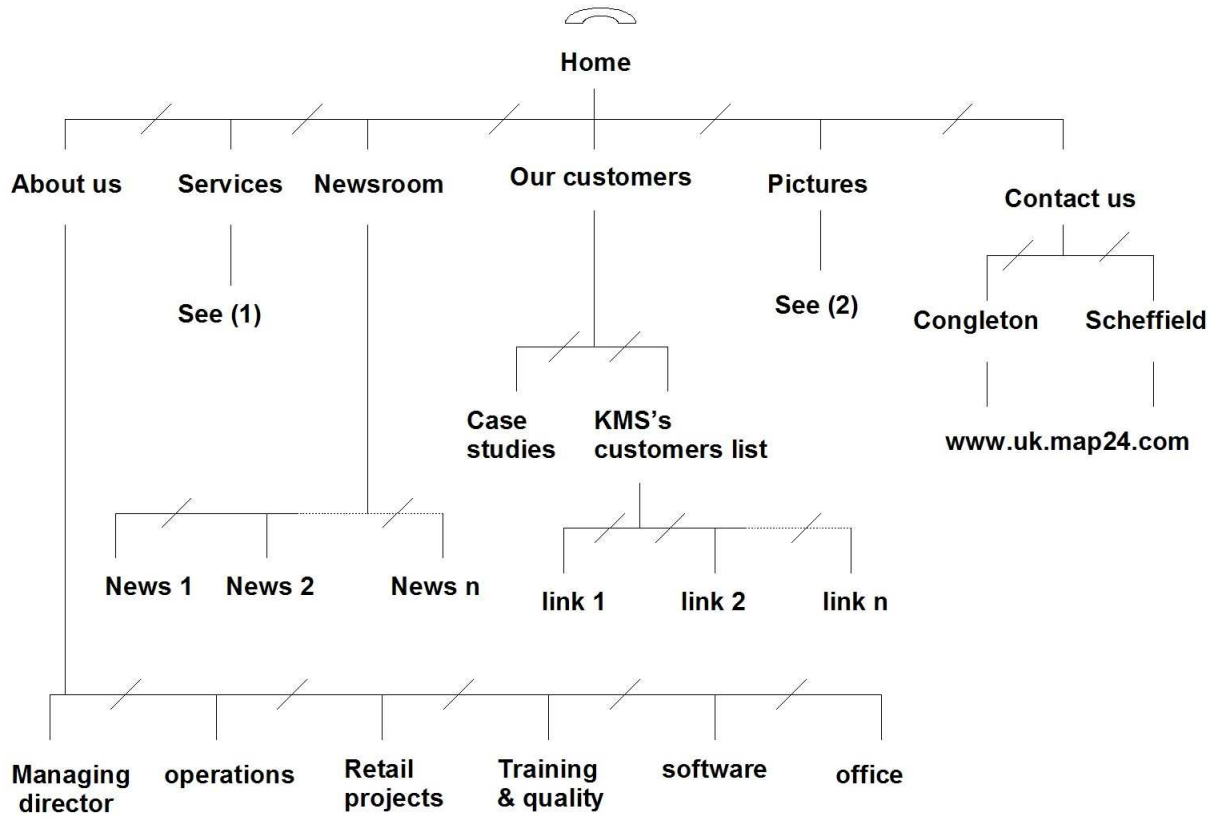


The graph above gives an idea of the schedule I was following. Two weeks were devoted to understanding the company, that means: spending time with engineers and field managers in order to understand what KMS do, discover its processes and its market.

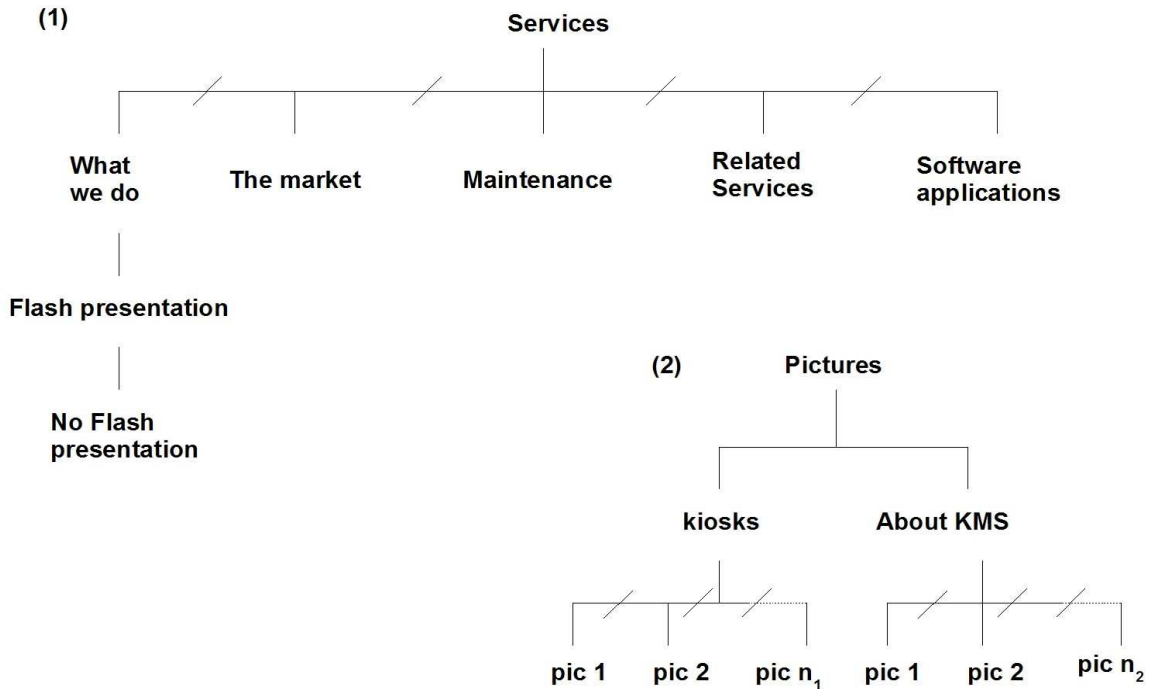
It was during this stage that I identified the goals and strategies of KMS.

## IV. Site structure.

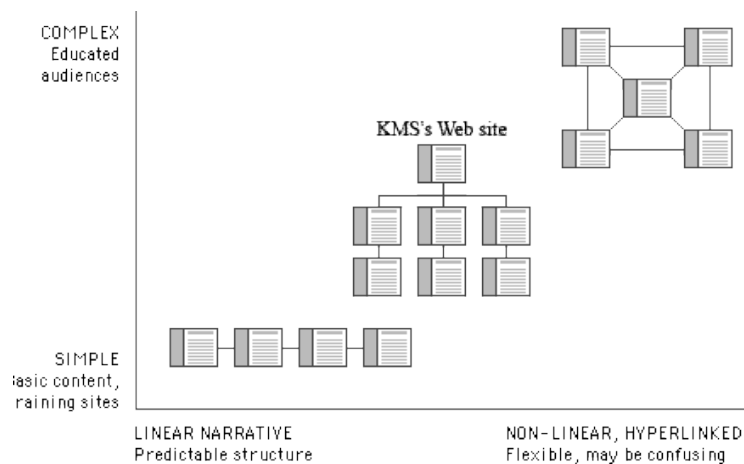
### 41. Site diagram. [👉 Back](#)



(1) } see next page  
 (2) }



The site diagram above gives an idea of the structure I selected. There are three essential structures which can be used to build a Web site: sequences, hierarchies and webs [SKL00].



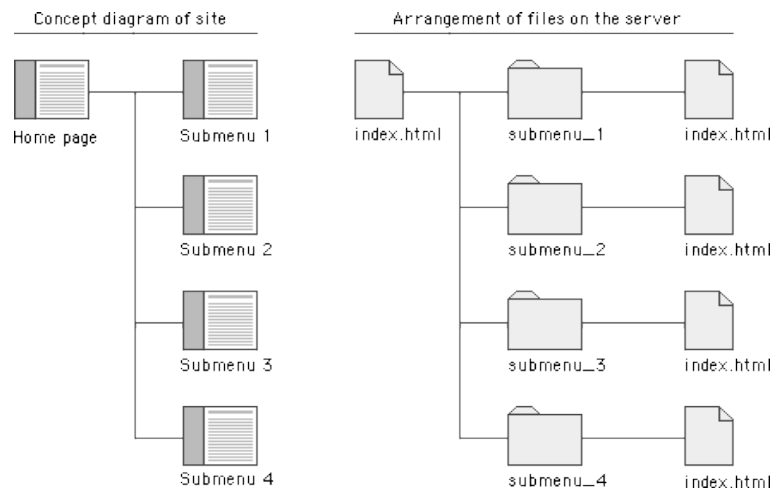
The chart above summarizes these three basic organizational patterns. I chose the second one (hierarchical organizations) because:

- it's the best way to organize most complex bodies of information,
- the site is organized around a single home page.

Hierarchical diagrams are very familiar in corporate and institutional life and most users find this structure easy to understand.

## 42. Site file and directory structures.

The pattern of directories and subdirectories of the site files mirror the major content divisions and structures on the site diagram:



The chart above shows how the site files are subdivided into directories on the server to be equivalent to the site diagram.

## **PART 2 : Site specifications**

## V. Design grids for Web pages.

The standard layout grid is used by all the internal pages. Therefore, there was a requirement to analyse the content structure and to decide what were the most general navigation purposes. In brief, the goal was to establish a logical and consistent approach to where basic graphic identity elements, navigation links, and other essential information appear on every page within the site.

### 51. Web site area.

Web page graphics that exceed the width dimensions of the most common display screens will inconvenience many readers by forcing them to scroll both horizontally and vertically to see the full page layout. It's bad enough to have to scroll vertically, so having to scroll in two directions should be avoided. Therefore, the layout is centred and limited in width to 840 pixels.

Line lengths are based on the physiology of the human eye [HUR78]: if the eye must traverse big distances on a page, the reader is easily lost and must hunt for the beginning of the next line. Studies show that moderate line lengths significantly increase the legibility of text. This is why a limitation of less than 20 words per line was chosen.

As regards page lengths, these are determined by the content of the document but to avoid the reader having to remember too much information and easily lose their sense of context, a limitation of a maximum length of 1230 pixels was chosen. Long Web pages only when absolutely necessary, for example, when it was easier to organize and for users to download (see for instance *hardware.html*).

### 52. Page headers.

Headers are often considered as an identity part of the Web site, a sort of graphic “signature” of a web site, which allows the reader to grasp immediately the purpose of the document.



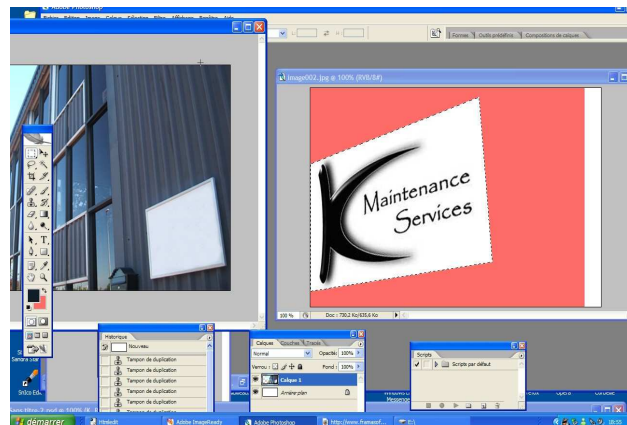
All KMS's web pages have a signature header graphic that includes:

- a KMS's logo graphic,
- a prominent title (“K Maintenance Services”),
- a banner with basic navigation links to facilitate accessibility.

#### Tips:

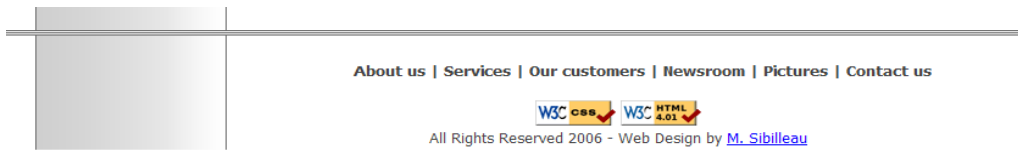
The banner construction required to master *Photoshop* software (see example opposite).

The intention was to summarize the company with 3 or 4 pictures in order to facilitate the reader to experience an aesthetically pleasing, modern and dynamic web site.

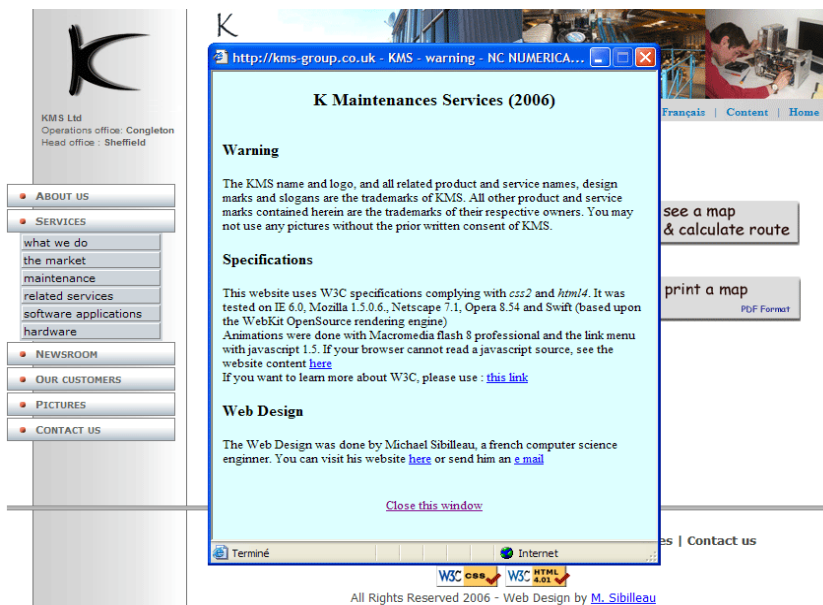


### 53. Page footers.

Whether page headers are an intrinsic part of a web site, page footers should contain the title links (Company information, contact link, etc.):



I added a short link menu with the main topics and another one to allow the reader to find more about copyright information and the designer. This link is activated when the pop-up below is opened.



Using a pop up avoids overloading the Web site layout. To create it, it was necessary to use JavaScript technology (see part III) because the “*target=blank*” instruction is not W3C valid.

### 54. Margins and columns.

A multicolumn layout is used to divide main text, site navigation and some graphics or pictures. Multiple columns provide a flexible space for variations in page layout and narrow the text column to a comfortable line length.

Margins define the reading area of a page by separating the main text from non text elements and also provide contrast and visual interest.

These features are incorporated in the image opposite:



## 55. Menu.

As there was a requirement for a large number of sub menu pages, a vertical dynamic menu was chosen in order to avoid having too many links.

☞ JavaScript code for this menu is available on the CD.

*Tips:*

- home page includes direct links for specialized information, like news articles.
- Because of potential compatibility problems (plug-in) with JavaScript, a content page was added. Basically, this latter offers another advantage by giving the reader an overall vision of the Web site.

## 56. Typography.

*561. Left-justify:*

Typography is controlled thanks to Cascading Style Sheets (CSS). Left-justified text was adopted as it is the most legible option for web pages, as, unlike justified text, left justification requires no adjustment to word spacing, thus the inequities in spacing fall at the end of the lines.

*562. Indents:*

Indents to signal the beginning of a new paragraph were used and a blank line was sometimes used to endorse this transition. These methods make pages easier to scan and provide extra white space for visual relief.

*563. Drop cap-style:*

Often Drop cap-style lettering is used (in *Papyrus* font) to start a new chapter. This method consists in making the first letter of a paragraph larger than subsequent letters and moving the first several lines of text over to accommodate the larger text. This was done to endorse the KMS's Web site identity: in lots of company's documents, titles are written with *Papyrus* font to make reference to Egyptian workers who built big monuments.

*564. Font sizes and colour:*

Macintosh and Windows operating systems display type differently, even when the same typefaces are being used, for example, type display on Windows web browsers will look 2 to 3 points larger than the equivalent face on Mac. Thus, a line of 12 point *Times* type on a Mac looks more than 14 points in *Times New Roman* on a Windows machine.

In designing this web site, a compromise was arrived at by using a 12 points *Taoma* type.

Almost all the text is written in a grey soothing colour, although enough dark to keep a contrast with the white pages background. Using a soothing colour helps induce a feeling of well-being in the reader.

## VI. Choices analysis

### 61. Theory.

This stage, which uses Mac Lean's principles [BER05], allows us to choose between several ergonomic or aesthetic options. Prime criteria are selected thanks to their factors:

Given  $\alpha_i$  the  $i \in \mathbb{N}_m$  criterion factor, an option  $j \in \mathbb{N}_n$  will be preferred to an option  $k \in \mathbb{N}_n$  if:

$$option_j = \left( \sum_{i=1}^{i=m} \alpha_i criterion_i \right) 1_{criterion_i \in option_j} > option_k = \left( \sum_{i=1}^{i=m} \alpha_i criterion_i \right) 1_{criterion_i \in option_k}$$

The table below summarizes criteria that were selected:

<i>criteria</i>	$\alpha_i$	<i>commentaries</i>
<b>Accessibility</b>	4	For the company, providing equal access to the Web site is a fundamental criterion. Indeed, all (potential) customers should be able to read it whatever the browser or operating system they have.
<b>Navigation aids</b>	3	A clear navigation aid gives the user confidence that they can find what they are looking for without wasting time. Moreover, users should always be able to return easily to the home page and to other major navigation points on the site.
<b>Simplicity</b>	3	Users are not impressed with complexity that seems gratuitous. It is better to follow general navigation and layout conventions of major web sites because the readers are already used to those conventions. So simplicity is fundamental to attract, manage and keep a large audience.
<b>Stability</b>	2	This means keeping the interactive elements of the site working reliably. There are two components : - getting things right, - keeping things functioning smoothly over time.
<b>Provide basic elements</b>	1	Unlike a book, web pages which use hypertext links need to be more independent. But at the same time, each web pages must provide copyright information, author and date details because a single page may be the only part of a site that some users will see. This entails providing basic elements such as: - Who: who is speaking, - What: a document title that captures the reader's attention and gives an idea of the overall content, - When: timeliness is an important element because a Web site is often an ongoing document, - Where: the World Wide Web is a huge "entity" and it is read by users throughout the world. Therefore it is important to specify in each web page where the company is physically located.

## 62. Example.

The Managing Director wanted the web site to have a flash animation aimed at representing his company. But he wanted this presentation to be a cover of the Web site and gave me the example of: <http://www.avantisol.com/>

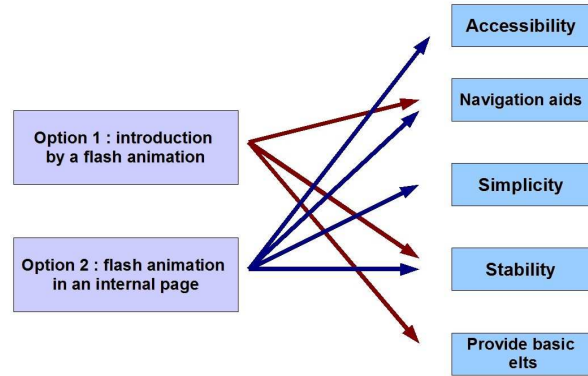
The opposite graphic aids us in deciding if it's better to follow his advice or not.

We easily have:

$$option_1 = \text{flash introduction} = 3 \times \frac{1}{3} + 2 \times \frac{1}{3} + 1 \times \frac{1}{3} = 2$$

$$option_2 = \text{flash in an internal page} = 4 \times \frac{1}{4} + 3 \times \frac{1}{4} + 3 \times \frac{1}{4} + 2 \times \frac{1}{4} = 3$$

As we have  $option_1 < option_2$ , the flash animation was put within an internal page ([http://kms-group.co.uk/summary\\_Flash.html](http://kms-group.co.uk/summary_Flash.html)). This also included a text transcript with simple graphics in case users' browsers required a plug-in ([http://kms-group.co.uk/summary\\_No\\_Flash.html](http://kms-group.co.uk/summary_No_Flash.html)).



## VII. Specific pages.

### 71. The home page.

The screenshot shows the home page of KMS Maintenance Services. The layout includes a vertical navigation menu on the left with links for ABOUT US, SERVICES, NEWSROOM, OUR CUSTOMERS, PICTURES, and CONTACT US. The main content area is divided into several sections: a header with the company logo and name, a 'Our mission' section with a detailed description of their services, an 'Our market' section with a small image of a kiosk, and a 'Service level' section. On the right side, there is a 'NEWS' section with a list of recent updates, each accompanied by a small icon. The footer contains a horizontal navigation bar with links for About us, Services, Our customers, Newsroom, Pictures, and Contact us, along with a copyright notice and a logo for W3C CSS and W3C HTML 4.01.

KMS's Web site is organized around its home page because this latter acts as a logical point of entry into the site and is the most visited part. In hierarchical organizations, the home page sits at the top of the chart, and all the other pages contain a direct link back to the home page.

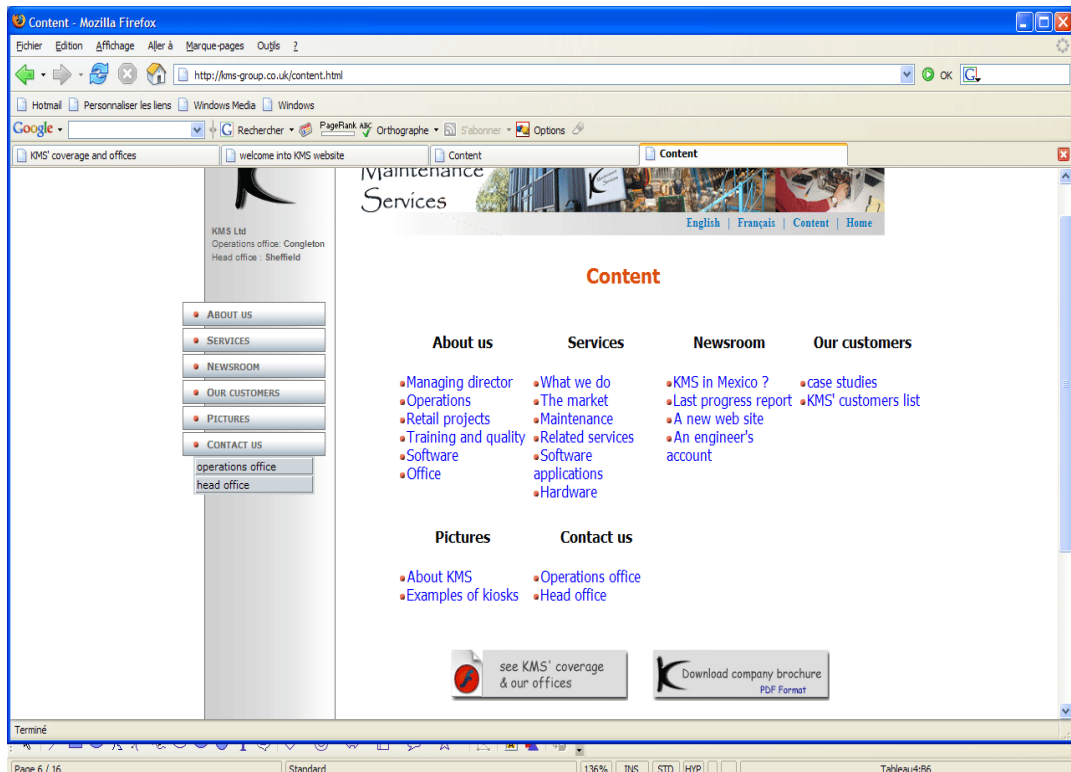
Studies show that the thirty square inches at the top of a home page comprise the most visible area of a web site. Therefore, the building of the banner is very important and should include main links (languages, content, home) to endorse efficient navigation.

A strategy which consisted in adding live information (news, director's speech) to make the home page more attractive and more likely to generate repeat visits was employed.

*Tips:* To create this page, inspiration was drawn from the Ensimag web site, particularly regarding the links behaviour. For instance, the User Action Notation (UAN) below summarizes the behaviour of the frame which contain the director's speech:

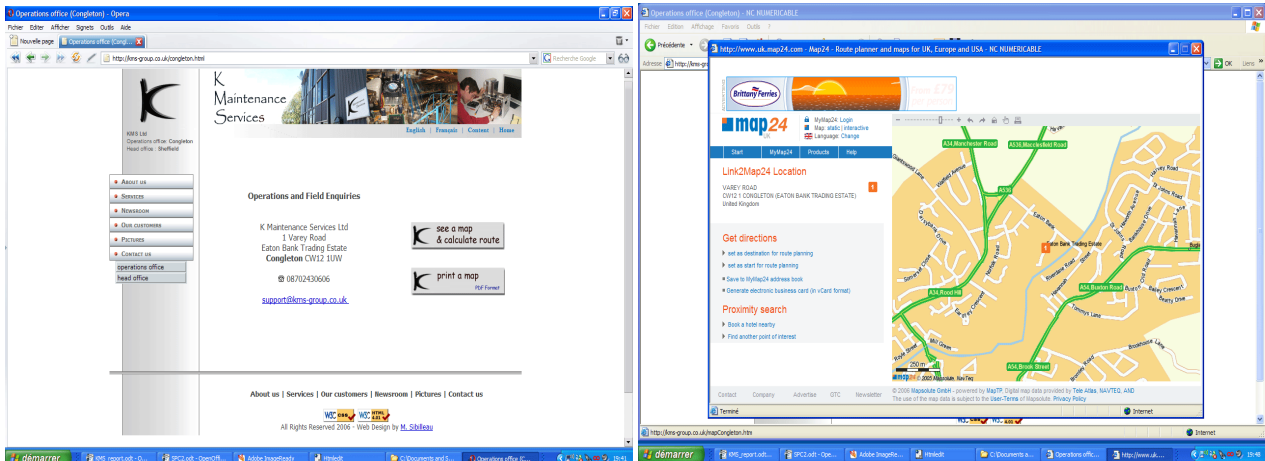
<b>Task : select the frame including director's speech</b>		
<b>User actions</b>	<b>Interface feed-back</b>	<b>Interface state</b>
director's speech' -!	director.html is open	Text decoration : none
~ [director's speech]	director's speech' !	Text decoration : underline
Mv	director's speech' !	Text strong
~ [director's speech] M^	Loading director.html	Close home.html Open director.html

## 72. A table of contents page.



This page design is an easy way to give the reader an overview of the site content and a clear sense of the extent, organization and context of the site. Unlike a book, this part points to the most relevant and useful occurrences of a keyword and ignores minor references which would be useless.

### 73. Contact informations.

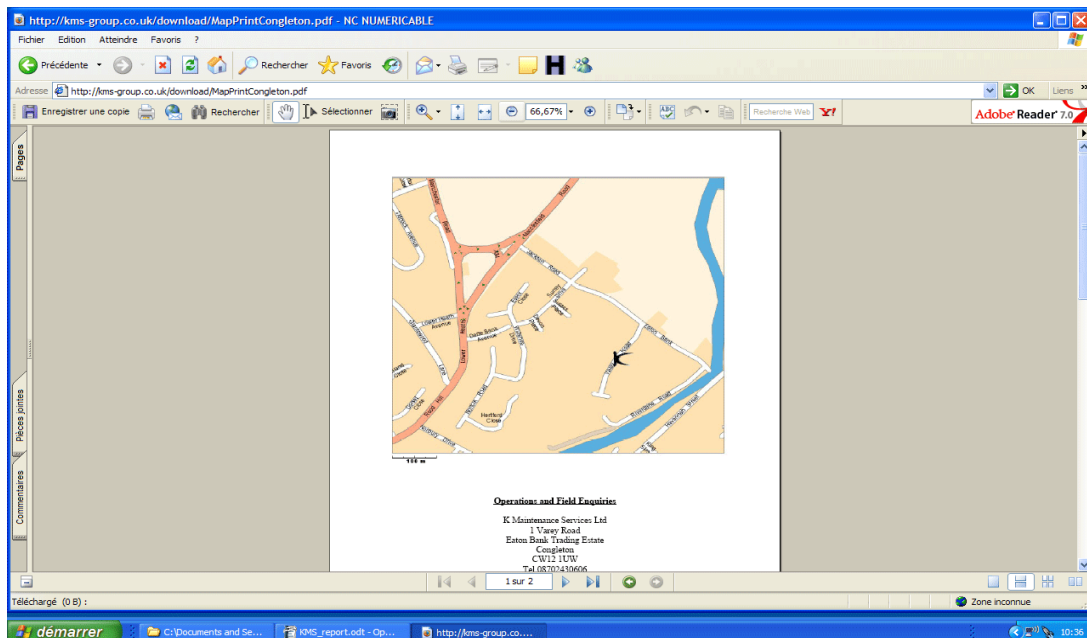


There are two web pages aimed at providing contact informations about KMS: one for the operations office in Congleton and another one for the head office in Sheffield.

These pages offer the readers the main contact information for the company: especially post and e-mail addresses and phone numbers.

Moreover, visitors can open a pop up providing Graphic maps, text-based directions to ensure that they will be able to reach the company easily and efficiently.

The pop up has been coded in JavaScript and calls a Map24 html page whose url points to the company address. Though, a pdf file containing most of contact information was added in case the reader's browser won't be able to open the pop up:



*.pdf file*

## **PART 3 : Codes**

Not all code is contained herein, if the reader requires more information, it is possible to view the full code on the CD.

## VIII. HTML and CSS.

### 81. HTML.

The code below (*index.html*) corresponds to the home page and gives an idea of the html structures used to create the Web site:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
  <title>welcome into KMS website</title>
  <META http-equiv="content-type" CONTENT="text/html; charset=iso-8859-15">
  <link REL="stylesheet" TYPE="text/css" MEDIA="all" HREF="includes/style.css">
  <META NAME="author" CONTENT="michael@sibilleau.com">
  <META NAME="keywords" CONTENT="maintenance services, bookmakers, betting shop, kms, kms
group, Congleton, Cheshire, K, kiosk, kiosks, kiosk maintenance, fobt maintenance, fobt kms,
touch screen, remote monitoring, plasma, plasma screen, nieznanski">
  <META NAME="description" CONTENT="KMS provides cost effective, first class maintenance and
software applications for public consoles in utility, retail, gaming, government and
entertainment sectors">
  <META NAME="robots" CONTENT="index, follow">
  <META NAME="revisit-after" CONTENT="30 days">
  <script src="includes/pop.js" language="javascript" type="text/javascript"></script>
</head>

<body>
<div id="CalqueBords">
  
  <div class="TexteHaut">
    &nbsp; English &nbsp; | &nbsp; <a href="Fr_index.html">Français</a> &nbsp; | &nbsp;
<a href="content.html">Content</a> &nbsp; | &nbsp; Home
  </div>
  <div class="gauche">
    <div id="adresse">
      <span class="gras">KMS Ltd</span>
      <br />Operations office: <span class="gras">Congleton</span>
      <br />Head office : <span class="gras">Sheffield</span>
    </div>
    <br /><br /><script src="includes/menu.js" language="javascript"
type="text/JavaScript"></script>
  </div>
  <div class="bas">
    <div class="milieu">
      <div class="TexteBas">
        <ol>
          <li class="pied"><a href="director.html"> About us | </a></li>
          <li class="pied"><a href="summary.html"> Services | </a></li>
          <li class="pied"><a href="satisfactions.html"> Our customers | </a></li>
          <li class="pied"><a href="News_mexico.html"> Newsroom | </a></li>
          <li class="pied"><a href="pic.html"> Pictures | </a></li>
          <li class="pied"><a href="congleton.html"> Contact us </a></li>
        </ol>
        
        <br />
        <span id="copyright"> All Rights Reserved 2006 - Web Design by <a
href="info.htm" onclick="Information();return false;">M. Sibilleau</a></span>
      </div>
    </div>
  </div>
</div>
</div>
```

```

<div id="CalqueMilieu">
  <div class="milieu">
    <div class="FenetreDroite">

      <!-- JMN words -->
      <p class="SousFenetreHaut"><a href="director.html" target="_self"><span
class="gras">J.M. NIEZNANSKI, Managing Director of KMS</span><br /><br />
      
      &nbsp; "Public Information Networks are now a vital component of any business
who wants to provide their customers with essential news,
      product and service information or transactional applications. <br /> During
your navigation in KMS website, it will become
      apparent to you that KMS business is based on 3 fundamentals ..." <br />
      </a>
      </p>

      <!-- News -->
      <div class="SousFenetreBas"><br /><br />
      <a href="News_mexico.html">&nbsp; KMS is currently in negociation to obtain a new market in Mexico </a><br />
      <a href="News_report.html">&nbsp; Last progress report of our company (August 2006)</a><br /><br />
      <a href="News_website.html"> &nbsp; KMS now has a new web site, more adapted to our customers</a><br /><br />
      <a href="News_account.html">&nbsp; One of our engineers explains why he has choosen KMS</a><br /><br />
      </div>

      <!-- main text -->
      <span class="Lettrine">K </span>Maintenance Services Ltd is the <span
class="gras">British leader in installation and maintenance</span>
      of electronic public display devices.<br />

      <p class="titres">Our mission</p>
      <div class="retrait"> Our Mission is to provide complete specialist service based on
a detailed knowledge and experience of the sector together with a first class
      understanding of the customer culture, activity and needs. </div>
      Also, by using our expertise, we are able to both advise and direct our clients to
design, source, implement and maintain
      the best suited solution.
      <br /> KMS has become <span class="gras">the leader in implementation, monitoring and
maintenance of PC based devices, kiosks and
      electronic displays.</span> <br />
      <p class="titres">Our market</p>
      
      We operate in the finance, gaming, retail and public sector and we work with most
manufacturers and software companies.
      Thanks to this, KMS is one of the few companies able to understand most issues and
needs, no matter which sector or application.
      KMS's core business is to install and maximise uptime of the electronic front end of
an application allowing its customers to focus
      on their core business. <br />
      <p class="titres">Service level</p>
      <div class="retrait">KMS has been involved in 100&#39; s of projects and has never
failed to deliver a single one on time and on budget. <br />
      Our Service Level Agreement (SLA) compliance statistics bear comparison with any
other major service company and are available to any prospective customers. </div>
      </div>
</div>
</body>
</html>

```

## 82. CSS.

Even though Transitional Doctype allows a mixture of css and legacy HTML formatting to design the pages, it was decided to handle all styles using css. Thus, making it be easier to convert html files in a strict Doctype if the webmaster wants to do it later.

The code below is just a part of a css file:

```
/*
*****
/*          KMS web site's Style Sheet          */
/*          -----                          */
/*          Author : michael@sibilleau.com      */
/*          July and August 2006                */
*****
/*
*****
/*    general layouts    */
*****

body {margin: 0; text-align: center;}

/* banner and bottom */
#CalqueBords {
    background: url(../images/banner.gif) right top no-repeat;
    width: 840px;
    margin-left: auto; /* the following lines aimed at centering the web site */
    margin-right: auto;
    text-align: left;
}

/* main division */
#CalqueMilieu {
    position: relative;
    margin-top: -680px; /* to be defined */
    margin-left: auto;
    margin-right: auto;
    height: 720px; /* to be defined (essential for Opera) */
    width: 840px;
}

/* left part on which the menu is */
.gauche {
    position: relative;
    background: url(../images/BackMenu.gif) left top repeat-y;
    margin-top: -6px;
    width: 214px;
    height: 720px; /* to be defined */
    z-index: 1;
}

/* center part */
.milieu {
    position: relative;
    margin-left: 214px;
    text-align: left;
    font-family: tahoma;
    font-size: 13px;
    color: #444;
}

/* bottom part */
.bas {
    position: absolute;
    background: url(../images/footer.gif) center repeat-x;
    margin-top: -210px;
    width: 840px;
    z-index: 2;
}
```

```

/* commentaries under the KMS's logo (left part) */
#adresse {
    margin-left: 35px;
    line-height: 130%;
    font-size: 10px;
    font-family: arial;
    color: #575757;
    width: 150px;
}

/*****
/*      top and bottom's links      */
*****/

/* top's links */
.TexteHaut {
    margin-top: -11.5px;
    margin-right: 15px;
    text-align: right;
    font-size: 11.5px;
    font-weight: bold;
    color: #0077BF;
}
.TexteHaut a {color: #0077BF; text-decoration: none;}
.TexteHaut a:hover {text-decoration: underline;}

/* bottom's links */
.TexteBas {
    position: relative;
    margin-top: 130px;
    margin-left: -45px;
    font-size: 13px;
    text-align: center;
}
.pied {
    font-weight: bold;
    display: inline;
    list-style-type: none;
}
.pied a {text-decoration: none; color: #444}
.pied a:hover {color: #DC4E0A}
#copyright {list-style-type: none;}

/*****
/*      paragraphs      */
*****/

/* titles */
.titres {
    color:#DC4E0A;
    font-size: 14px;
    font-weight: bold;
    margin-bottom: 5px;
}

/* Drop Cap-style letter */
.Lettrine {
    font-family: Papyrus, Gill Sans MT Condensed, Andy, Comic Sans ms;
    font-size: 200%;
    font-weight: bold;
    float: left;
    margin-top: -5px;
    margin-right: 5px;
    margin-bottom: -10px;
    color: #E64602;
}

/* others */
.citation {font-weight: bold; font-size: 14px; text-align: center}
.gras {font-weight: bold;}
.italique {font-style: italic;}
.retrait {text-indent: 35px;}

```

```

.TextCentre {text-align: center ! important;}
.TextDroit {text-align: right ! important;}
.TextSousTitre {font-size: 16px; font-weight: bold; color: #E64602;}

/*****
/*   Images   */
*****/

/* on the right */
.ImgDroite {
    float: right ! important;
    margin: 10px ! important;
}

/* on the left */
.ImgGauche {
    float: left ! important;
    margin: 10px ! important;
}

/* small size and left */
.PetitFormatG {
    width: 67px;
    height: 75px;
    float: left ! important;
    margin-right: 10px ! important;
}

/* right used in the news */
.ImgDroiteNews {
    float: right ! important;
    margin-right: -140px;
}

/* images used in summary.html */
.ImgSummary {
    border: none;
    margin-top: 5px;
    margin-bottom: 10px;
}

/* images used in pics.html */
.ImgPicsGauche {
    float: left;
    border: none;
}
.ImgPicsDroite {
    float: right;
    border: none;
}

/* images' links */
.ImgLien {border: none;}

/*****
/*   Tables   */
*****/

.LargeurFixe {
    width: 250px;
    text-align: center;
}

.TableauFix {
    table-layout: fixed;
    width: 640px;
}
.TableauFix td {border-color:white; border-style:solid;}
.TableauFix a {text-decoration: none;}
.TableauFix a:hover {text-decoration: underline;}

```

```

/*****
/*      index.html general layout      */
*****/

.FenetreDroite {
    float: right;
    width: 260px;
    height: 550px;
    font-size: 12px;
}

.SousFenetreHaut {
    background-color: #DADADA;
    margin-left: 20px;
    border-style: dashed;
    border-width: thin;
    border-color: #0077BF;
    width: 240px;
    height: 220px;
    padding: 8px;
}

.SousFenetreHaut a {text-decoration: none; color:#000;}
.SousFenetreHaut a:hover {text-decoration: underline; color:#000;}
.FenetreDroite img {float: right; border: none;}

.SousFenetreBas {
    background-color: #FFF;
    margin-top:30px;
    margin-left: 20px;
    border-style: dashed;
    border-width: thin;
    border-color: #E64602;
    width: 240px;
    height: 180px;
    padding: 8px;
}

.SousFenetreBas a {text-decoration: none; color:#0000FF;}
.SousFenetreBas a:hover {text-decoration: underline; color:#0000FF;}
.SousFenetreBas img {float:left; margin-top: 5px; margin-right: 3px; margin-bottom:-10px;}

/*****
/*      javascript menu (see menu.js)      */
*****/

.hide{display: none;}

/* borders */
.BordureMenu {
    border-top: gray 1px solid;
    border-bottom: gray 1px solid;
    cursor: pointer;
}

/* left border */
.BordureMenuGauche {
    border-left: gray 1px solid;
    border-top: gray 1px solid;
    border-bottom: gray 1px solid;
    cursor: pointer;
}

/* right border */
.BordureMenuDroit {
    border-right: gray 1px solid;
    border-top: gray 1px solid;
    border-bottom: gray 1px solid;
    cursor: pointer;
}

```

```

/* layout without selection */
.MenuNonSelect {
    background-image: url(../images/bgcolor.gif);
    font-family : verdana, arial, helvetica, sans-serif;
    font-size : 11px;
    font-weight : bold;
    font-variant: small-caps;
    color : #666666;
    text-decoration:none;
}

/* layout with focus and selection */
.MenuSelect {
    background-color : #fff ;
    font-family : verdana, arial, helvetica, sans-serif;
    font-size : 11px;
    font-weight : bold;
    font-variant: small-caps;
    color : #FF3333;
    text-decoration:none;
}

/* sub menu */
.SousMenu {
    background-color: #CDD4DA;
    color : #0077BF;
    font-family : verdana, arial, helvetica, sans-serif;
    font-size : 11px;
    font-weight : normal;
    font-variant: normal;
    text-decoration:none;
}

/* sub menu selected */
.SousMenuSelect {
    background-color: #fff;
    font-weight : bold;
    border-right: gray 1px solid;
    border-top: gray 1px solid;
    border-left: gray 1px solid;
    border-bottom: gray 1px solid;
    cursor: pointer;
}

/* sub menu without selection */
.SousMenuNonSelect {
    border-top: white 1px solid;
    border-left: white 1px solid;
    border-right: gray 1px solid;
    border-bottom: gray 1px solid;
    color: #000;
    cursor: pointer;
}

```

## IX. Dynamic HTML.

### 91. Flash.

To meet the requirements of the Managing Director, an animation aimed at presenting the company was created. *Macromedia Flash* was chosen for the following reasons:

- *Consistent*: a Flash file will run more or less the same on a Mac using Internet Explorer 5 as it does on Windows machine running Netscape 4. Unlike HTML, JavaScript and css which are interpreted variously by the various companies that make browsers, a single company (Macromedia) develops Flash. Thus, there are no cross-browser or operating system incompatibilities.
- *Ubiquitous*: According to Macromedia, 95% of the Web-browsing public has some version of the Flash plug-in installed. Although this figure may be a slightly optimistic, there is a good chance that the audience will be able to view the animation.

- *Attractive*: Flash gives a wide range of creative tools from which to choose.
- *Small*: Flash files deliver a lot of dynamic bang for the buck.

Reading the Flash code requires the software *Macromedia flash 8* and .fla files. These files are available on the CD (see “Flash\_Animation” directory).

## 92. JavaScript.

### Pop-ups' codes :

```
// -----
//      pop up management
//      Author : michael@sibilleau.com
//
// KMS's web site
// July and August 2006
// -----

var newWin = null;

// pop up "warning" called by sibilleau link
// This link appears at the bottom of each page (centered!)
// -----
var largeur = 450; // width
var hauteur = 500; // height
var Haut = (screen.height-hauteur)/2; // top
var Gauche = (screen.width-largeur)/2; // left

// pop up aimed at opening a map24 file (centered)
// -----
var largeurMap = 1000; // width
var hauteurMap = 600; // height
var HautMap = (screen.height-hauteurMap)/2; //top
var GaucheMap = (screen.width-largeurMap)/2; //left

// function used by the "warning" pop up
// -----
function Information() {
    closeWin();
    newWin = window.open("info.htm", "",
"top="+Haut+",left="+Gauche+",height="+hauteur+",width="+largeur+",");
    newWin.focus();
}

// similar function for french version
// -----
function Fr_Information() {
    closeWin();
    newWin = window.open("Fr_info.htm", "",
"top="+Haut+",left="+Gauche+",height="+hauteur+",width="+largeur+",");
    newWin.focus();
}

// function used by the map24 pop up
// -----
function Map() {
    closeWin();
    newWin = window.open("mapCongleton.htm", "",
"top="+HautMap+",left="+GaucheMap+",height="+hauteurMap+",width="+largeurMap+",");
    newWin.focus();
}

// to close a pop up
// -----
function closeWin(){
    if (newWin != null){
        if(!newWin.closed) newWin.close();
    }
}
}
```

## Menu's codes :

```
// -----  
//                Javascript menu  
//  
// KMS's web site  
// July and August 2006  
// -----  
  
// main topics  
option = new Array();  
  
option[0] = new Array();  
option[0][0] = "About us";  
option[0][1] = "";  
  
option[1] = new Array();  
option[1][0] = "Services";  
option[1][1] = "";  
  
option[2] = new Array();  
option[2][0] = "Newsroom";  
option[2][1] = "";  
  
option[3] = new Array();  
option[3][0] = "Our customers";  
option[3][1] = "";  
  
option[4] = new Array();  
option[4][0] = "Pictures";  
option[4][1] = "";  
  
option[5] = new Array();  
option[5][0] = "Contact us";  
option[5][1] = "";  
  
// sub topics  
  
lien = new Array();  
// About us  
lien[0] = new Array();  
lien[0]["managing director"] = "director.html";  
lien[0]["operations"] = "operations.html";  
lien[0]["retail projects"] = "retail.html";  
lien[0]["training and quality"] = "training.html";  
lien[0]["software"] = "software.html";  
lien[0]["office"] = "office.html";  
  
// Services  
lien[1] = new Array();  
lien[1]["what we do"] = "summary.html";  
lien[1]["the market"] = "market.html";  
lien[1]["maintenance"] = "maintenance.html";  
lien[1]["related services"] = "services.html";  
lien[1]["software applications"] = "soft_appli.html";  
lien[1]["hardware"] = "hardware.html";  
  
// Newsroom  
lien[2] = new Array();  
lien[2]["KMS in Mexico"] = "News_mexico.html";  
lien[2]["last progress report"] = "News_report.html";  
lien[2]["a new web site"] = "News_website.html";  
lien[2]["an engineer's account"] = "News_account.html";  
  
// Our customers  
lien[3] = new Array();  
lien[3]["case studies"] = "satisfactions.html";  
lien[3]["KMS' customers list"] = "customers.html";  
  
// Pictures  
lien[4] = new Array();  
lien[4]["about KMS"] = "pic.html";
```

```

lien[4]["kiosks"] = "kiosks.html";

// Contact us
lien[5] = new Array();
lien[5]["operations office"] = "congleton.html";
lien[5]["head office"] = "scheffield.html";

// function aimed at displaying the vertical menu
function EtatSousMenu(visible) {
    for (var i=0; i<option.length; i++)
        if (i == visible) {
            document.getElementById('menu' + i).className='sousmenu';
        }
        else {
            document.getElementById('menu' + i).className = 'hide';
        }
}
// Main
document.write("<table cellspacing='0' cellpadding='0' width='80%' border='0'><tbody>");
for (var i=0; i<option.length; i++) {
    document.write("<tr class='MenuNonSelect'>");
    if (option[i][1] != "") { // if the topic has a direct link
        document.write("<td width='2%' " + " class='BordureMenuGauche'>&nbsp;&nbsp;</td>"); // to
delete the sub topics links
        document.write("<td height='25' width='96%' class='BordureMenu'
onmouseover='EtatSousMenu(" + i + ")'>"); // to display the sub topics when the parent topic
has the focus
        document.write("&nbsp;&nbsp;<img src='images/menu.gif' height='9'
width='8'>&nbsp;&nbsp;&nbsp;"); // red point
        document.write("<a href='" + option[i][1] + "' target='" + option[i][2] + "'
class='MenuNonSelect' onmouseover='\"this.className='MenuSelect';\"
onmouseout='\"this.className='MenuNonSelect'\">" + option[i][0] + "</a>"); // lien d'un menu
    } else { // otherwise (by sub topics)
        document.write("<td width='2%' " + " class='BordureMenuGauche'>&nbsp;&nbsp;</td>");
        document.write("<td height='25' width='96%' class='BordureMenu'
onmouseover='EtatSousMenu(" + i + ")'>");
        document.write("&nbsp;&nbsp;<img src='images/menu.gif' height='9' width='8'>&nbsp;&nbsp;&nbsp;");
+ option[i][0]);
    }
    document.write("</td><td width='2%' " + " class='BordureMenuDroit'>&nbsp;&nbsp;</td></tr>");
    document.write("<tr>");
    document.write("<td " + "></td>");
    document.write("<td><center><table width='90%' class='hide' id='menu" + (i) + "'>");
    // sub topics' links
    for (url in lien[i]) {
        document.write("<tr onclick='\"document.location.href='" + lien[i][url] + "'>");
        document.write("<td class='SousMenuNonSelect'
onmouseover='\"this.className='SousMenuSelect';\"
onmouseout='\"this.className='SousMenuNonselect';\">" + url + "</tr></td>");
    }
    document.write("</table></center></td><td " + "></td><td></td></tr><tr " + "><td
colspan='2'></td></tr>");
}
document.write("</tbody></table>");

```

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