First Class is an Italian company that performs services and organizational activity of residential scientific-medical training events. The company had the needs to offer new services to its customers, in order to make itself more competitive in a market particularly aggressive, as is the one of services to pharmaceutical companies and medical association. Effective Knowledge team has been tasked to create an innovation of process and product that would allow an increase of efficiency in the supply of First Class services to its customers and the opening towards a new business model, related to distance learning. With more than 15 years of experience in international research and innovation projects in the field of artificial intelligence, knowledge management, data mining, social collaboration, management and distribution of intelligent content and social media, Effective Knowledge secured a strategic partnership with First Class in order to develop a platform for the supply of e-learning courses in order to complement the residential training activities in parallel to the distance education (FAD) one.

Among the challenges that the position required:
- creating an e-learning platform compatible with the increasingly popular tablet and smartphone, and consequently make it compatible with various operating systems that equip these devices (Android, iOS, etc.)
- creates a platform that fulfill the requirements imposed by the Ministry of health for distance education in medical science
- creates a series of innovative services in support to the platform that represent an added value to the simple supply of training content

A specific platform has been designed and set-up that integrates different technologies, partially based on open source solutions, which have been integrated with specifically developed innovative
**eBrain:**
- accelerates the creation, capitalization and sharing of knowledge;
- establishes and strengthens the community cohesion;
- promotes the sharing of information and ideas between users;
- improves brand awareness and customer loyalty;
- supports users on a wide range of devices, browsers and operating systems.

The XLMS solution was recently selected by the Agency for disseminating innovation technologies Agency for the promotion of Innovation Technologies of the Presidency of the Council of Ministers in the project "Italy of Innovators".

Once you have created the training content, these are loaded on the distance learning platform and organized in courses which include the evaluation of what has been learnt in order to issue the certificated course credits.

Users interested in accessing to a course for the accreditation must login in the platform and request access to the course of interest. The release of course credits is guaranteed only if the discipline that the User specifies in his/her profile at the moment he registers in the platform, corresponds to the one indicated in the course. Otherwise the User will be able to take advantage of the course but the credits will not be issued.

For automating the back-office activities the infrastructure relies on a proprietary solution developed by Effective Knowledge called AXCP that automatically manages all the activities of creation, ingestion, management and distribution of content and data.

The distance learning portal is able to manage not only simple learning contents such as videos or slides, but also complex contents and small applications that can be published and visualized within the pages of the portal. These complex objects are not only simple audio or video files, but real applications, such as interactive calculators that work with specific formulas (for example drug dosing), algorithms that help to follow medical procedures, guided courses consisting of multiple media assets organized within a single object, sequences of slides, interactive
games, educational, interactive Flash format animations, video and synchronized slides, etc.

These are real mini-applications that can be run on PC and on any mobile device like iPhone/iPad, Android and Windows Phone and that allow Users to have a real continuing learning without the restriction of time, place and network.

A specific application was developed for Users participating to residential events allowing them to receive on their mobile device some services to increase their involvement in the event. Through the so-called White Rabbit app, the User is invited in real time to answer to a short questionnaire of evaluation or to a survey on the quality of the event or to the evaluation of the classroom learning. Managing services from sending Users’ devices is handled by the teacher in real time directly from the platform where the administrator can simple create events and set some parameters to use and maintain the statistics of the received results. If the evolution of real-time event presents an interactive action to be performed by the users, such action must be carried out synchronously within a limited time in which users can act.

The First Class' platform has many innovative features. Compared to traditional e-learning solutions it allows you to download the contents (if allowed by the content provider) and to view them offline, or watch simple video. The platform allows a much more flexible management of contents and offers the possibility to define in detail the permissions for access to contents (for example, by allowing the download of contents or giving access only to certain users, while excluding the resource view of users coming from a certain country).

A user who accesses to an e-learning course has consistently a view of the achieved results, the content he has seen and those who hasn’t see yet: an informational block in the course page updates him of his progress within the course and allows him to quickly access contents of interest.

The access to learning contents is certified and proven by statistics and log files that show the activities carried out by the User. At the
conclusion of the course, as provided by law, if the user answers correctly at least to the 75% of the questions, the platform automatically sends the certificate of accreditation of course credits.

Among the features implemented in the platform there is the one that allows the access to course for Users by using a personal code that is typically distributed by the sponsoring companies of the training courses.

The solution also allows to create access channels to courses with custom graphic layouts and independent management of courses and users (multitenancy mode). In this way each promoter can offer its users a custom login page with a personalized graphics and content, without requiring the user to have the perception that the platform also hosts other learning contents from other organizations.

Through a dedicated mobile app for iPhone/iPad, Android, and Windows Phone that allows to access, download and view the training contents on the e-learning portal in off-line mode (if permitted by licenses associated with the content). The app is able to save the report of the activities carried out by the User and send it to the e-learning platform as long as the device is located in an area covered by the network in order to keep track of all activities performed by the User and credited them to it, although if carried out when the device was offline.

This is an important innovation in the industry, that offers total freedom to the User, since typically e-learning courses are generally not accredited using mobile devices, due to network failure that does not allow to keep track of the activities carried out by the User.
user’s benefits

- business growth through the opening of new business opportunities
- chance to broaden its customers portfolio thanks to the E-Learning market
- existing customers' loyalty by offering an innovative technology and an integrated set of services that are associated with

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First Class is based on the Effective Knowledge's eBrain solution. eBrain is the platform that leverages technologies of artificial intelligence in order to improve organizational performance and training by integrating tools and solutions such as: knowledge management, data mining, social collaboration, project management, intelligent content and social media.

eBrain is a solution suitable for a many different applications such as:

- best practice networks, knowledge management and business intelligence
- social media network, collaborative work on contents and their distribution
- social learning management system with any type of content and accessible on any device
- enterprise social network, project management
- obtaining and managing skills and semantically organized information
- community management for institutions, companies and public bodies
- WebTV, IPTV users enabled
- support for contents distribution for PC and mobile devices

eBrain accelerates the phases of acquisition, distribution and capitalization of knowledge, establish and strengthen the cohesions within the practice community, promotes the sharing of information and ideas between users, the emerge of individual and team skills, improves users' loyalty and awareness in the brand.

TECHOLOGIES:

- Drupal
- Moodle
- MySQL
- RDF Store
✓ Solr
✓ SPARQL
✓ AXCP AXMEDIS
✓ Natural Language Processing
✓ GeoNames
✓ dbPedia
✓ Java Script

eBrain ADDITIONAL MODULES:
✓ eLearning, creation and advanced management of courses and training contents, questionnaires and Users, compliant with regulatory requirements
✓ AXMEDIS AXCP, scalable solution based on GRID for automating back-office processes
✓ Content Organizer, mobile Contents Organizer tool for iPhone, iPad, Android for access to contents, chat, access via QR, etc.
✓ saving and loading SCORM contents for export and import to/from other systems
✓ management of surveys and questionnaires during and at the end of residential or remote events, reviews, opinions, and verification, certification etc.
✓ CAS-DRM: Advanced Control System and protection of content, includes IPR Wizard

REFERENCES:
FIRST CLASS: http://fad.fclass.it