



Partners



Stakeholder



Project financed by:

The iSLe project is backed by public financing granted by the Tuscan Region to firms and groups of firms for the development of economic and cultural competitiveness in the region. Specifically, iSLe is among the technological innovation projects financed through POR-CREO 2007-2013, the Programma Operativo Regionale – obiettivo Competitività Regionale e Occupazione (Regional Operating Programme – objective Regional Competitiveness and Employment) activated thanks to the EFRD (European Fund for Regional Development). The iSLe project owes its eligibility for financial support to its high degree of specialization in technical-scientific resources in the field of public-private partnership with META as key player, the ILC-CNR of Pisa as research body and the Tuscan firms (SPACE, 01Servizi, Viditrust).



iSLe

INTELLIGENT SEMANTIC LIQUID EDUBOOK

A new liquid book for multiplatform educational and professional publishing

iSLe is a platform supporting publishers in the development of digital production and distribution. It enables the fruition of teaching content in transmedia digital contexts on online, offline and mobile devices.

Devised and developed by META Srl in conjunction with the Istituto di Linguistica Computazionale del CNR of Pisa and with a number of Tuscan ICT firms, the iSLe platform facilitates the management of books in digital format through an approach based on linguistic analysis techniques, the semantic web and the personalization of teaching programmes.

iSLe enables the creation of digital teaching content for teachers and students. There is always the risk that users are penalized, rather than aided, by the advent of technology which, if used badly, can cause divided attention and loss of concentration. iSLe focuses and acts on this aspect of the digital divide, employing new learning methods, favouring personalized programmes and enhancing media creativity in order to offer non-linear teaching processes.

Distribution and communication of the iSLe project are conducted in conjunction with the AIE – Associazione Italiana Editori.

A publishing flow which is entirely digital

iSLe is available to the world of publishing and education as a well-structured author-system for the production, cataloguing, archiving and distribution of teaching content. On this platform authors and editors can insert texts, digital pictures and content, interactive images, timelines and conceptual maps. At the core of the system is a liquid book and the author-system is inserted into a dynamic computer infrastructure which works on the basis of semantic analysis, and analysis of the legibility and linguistic complexity of texts or parts of text.

Liquid book. A new tool for the education of tomorrow

'Liquid' for iSLe is not just a synonym of portable or responsive. Above all, it is indicative of content which can be personalized and adapted to the user's context and profile, since it is tagged and interconnected through semantic and contextual relationships.

Personalized lesson planner

With iSLe, learning goes beyond the sequential form of a book. Learning can take place, for example, through lessons created by the teacher, who can assemble content acquired through a simple search, or, on specific pages, insert exercises, supplementary work or further lessons according to the particular needs of each student. The lessons can be in formats which match teaching requirements and the students' learning dynamics.

A book in layers

A layer for the teacher, with contents, notes and dedicated pathways. A social layer, for sharing notes within a class. A tutoring layer, in which the student does the tests directly in the book, supported by a system which can suggest other tests or follow-up exercises on the basis of the results achieved.



Interoperability

In iSLe, content is treated as an entity in itself, regardless of how it will be distributed. It can thus assume various forms of output, including future. iSLe is compatible, both in input and output, with the main standards being developed for educational content (Edupub, QTI, LTI, ARIA). It will thus be possible to use the content generated on the platform in any system that complies with the standards, thus guaranteeing interoperability.

Safe management and protection of digital content

The iSLe platform is endowed with a management system which is expressly structured to facilitate digital native publishing production and to protect authors. An SSO (Single Sign On) system with the option of the administration of roles, groups and operational levels determines totally safe conditions in the production phase. A DRM (Digital Rights Management) and Social DRM system with a high degree of resistance protects the published item and its textual, visual and audio-visual components during the phases of distribution and fruition.

Stakeholders

iSLe has, as its first stakeholder, the publishing house of Mondadori Education which chose it as an experimental platform for the digital and liquid development of its products for the world of education. This result, achieved during the research phase, is an early indicator of the validity of the solutions planned and experimented by the team of CNR researchers, and the researchers of META and other partners.