1 What is LearnITy™?

LearnITy is an advanced ***eLearning solution***. The development of LearnITy is based on a unique synthesis of ideas drawn from fields of knowledge management, learning theories; intelligent tutoring systems, distributed computing, and adaptive multimedia. The current practices of the eLearning industry such as standard compliance (SCORM) and web-based technical architecture (XML, Java) have been adopted right from the beginning.

2 What is unique about LearnITy™?

LearnITy has some unique attributes that make it an eLearning solution of choice:

- LearnITy is built in a manner that enables the separation of content from instructional strategy. LearnITy is not biased towards any particular learning theory or instructional strategy. Instead of hard-coding any particular strategy or implementing any particular theory in the source code, the unique feature of externalisation of the instructional strategies in XML notation enables the system to support an infinite variety of instructional strategies. Thus the same content may be delivered using different strategies based on student model or other conditions. This externalisation of instructional strategy allows users to quickly implement their strategies of choice and provide their learners with customised learning experiences.

- Most organisations have a rich collection of content in various areas such as Sales Training, Management Training, etc., in various formats such as Microsoft Word files, PowerPoint presentations, etc. LearnITy makes it possible to make use of any existing source of content (as long as the content may be viewed within a browser with the help of suitable 'plug-ins'). Also, since LearnITy conforms to the SCORM standard for eLearning content, a rich collection of 3rd party content is immediately made available to customers of LearnITy.

- LearnITy has been developed to work on any platform that supports Java. Since almost all platforms today support Java this means that LearnITy can run on a number of platforms (Linux, Windows, Solaris, etc.). Also the standard driven nature of LearnITy helps since the standards (say SQL) are likely to be supported across platforms rather than particular products (say a particular content management system or a particular OODBMS).

- The features (content reusability, standard conformance, & platform issues) make LearnITy a solution that is very easy to implement. Additionally the feature of externalisation of instructional strategy allows customers to quickly implement their strategies of choice and provide their learners with customised learning experiences. We also plan on providing pre-packaged bundles of instructional strategies

(categorised by "vertical" subject areas) based on ontology of instructional design to enable quick implementation of eLearning projects using LearnITy.

- LearnITy has a much lower cost of ownership compared to other products. The software environment used by LearnITy does not require the usage of high cost software components (high-end database servers, application servers, workflow engines, content management systems, etc.). In fact LearnITy, having been built on open standards such as Java, XML, and SQL, enable the customers to protect their existing investments in IT by virtue of the product being able to inter-operate with solutions provided by other standard conformant vendors as well as utilise software provided by the open source community.

3 Components of LearnITy

The LearnITy solution comprises of 6 components:

3.1 The LearnITy LMS/LCMS

This product consists of a number of modules given below:

3.1.1 Engine

This is the core product that delivers content to the learners based on their learning objectives and learning preferences. The engine accesses learning content, course structure information, course meta information, learning strategy information, and learner records in order to provide the learners with the learning experiences that is appropriate to his/her learning style and learning strategy. The Engine works with any type of content that may be displayed in a Web Browser (with a plug-in if necessary), e.g., MS Word, MS Powerpoint, PDF, HTML, Flash, etc. Content is delivered through a portal that is a rich browser based GUI (fully customisable) that provides a single point of access to content, collaboration, and services. It empowers users with the ability to search for and have access to digital information, applications, and services specific to their function.

3.1.2 Administrator

This is a course management, deployment, tracking and reporting system. It is provided to institution so that the entire eLearning function may be efficiently managed. Training administrators have access to a personalised account that allows them to assign and track learners, to assign specific courses to learners, and to monitor, measure and report on all account activity; both at the organisational and individual level.

3.1.3 Designer

A standalone component that is used to create reusable learning objects (for incorporation into multiple training contexts) and WWW based virtual

courses. This product provides a drag-and-drop GUI to create and maintain course structures and course meta information. The Designer is made available in the form of a stand-alone Java application that can be run on a PC. This product is used in an off-line mode (without requiring an on-line connection with the LearnITy servers) and the various outputs produced by the tool are later up-loaded to the LearnITy Repository using the LearnITy Administrator. This product also includes a Quiz Builder module that is used to create and maintain online quizzes and tests.

3.1.4 EkSathe

This is a asynchronous collaboration module including:

- ❖ Online Notice Boards
- ❖ Online Forums (Threaded Discussion Groups)
- ❖ Shared Calendar

3.2 The LearnITy Assessor

This product is used to implement online testing and evaluation. It is based on the IMS QTI standards for assessments and supports various types of assessment types such as multiple choice, fill-in-the-blanks, multiple response, true/false, etc. Various types of randomised testing are supported including parameterised testing based on assessment metadata. This product also includes drag-and-drop GUI module that is used to create and maintain assessments and save them as QTI compatible XML files.

3.3 The LearnITy Virtual Classroom

Virtual Classroom is ideal for interactive and engaging learning in which the teacher wants to retain the human element of interaction while benefiting from delivering real-time multimedia communications. This product supports collaborative learning where participants can work as a group and collaborate on ideas, communicating with both teacher and each other via textual messages, whiteboard, voice, and streaming video. This product supports various types of synchronous types of collaboration including:

- Virtual Classroom features (hand raising, stepping out, etc.)
- Shared Whiteboard
- Co-browsing
- Chat and Instant Messaging
- Desktop Sharing
- Streaming Audio and Video
- File Transfer

3.4 The LearnITy Course Management System

A course management system (CMS) is a software module that brings Web-based automation to many of the administrative aspects of teaching. Faculty and students access the CMS via a Web browser. Some of the administrative benefits of these systems include controlled access to materials, dynamic class lists and grade books, and online management of assignments (e.g., Web delivery, grading, follow-up). By using the CMS for the course's organization, the purpose of class time would be almost exclusively devoted to discussion and student activities. Freed from having to repeat routine activities, instructors could become more engaged in the process of sharing ideas. The students could become more active learners, taking more responsibility for what they learn and becoming more important in the dynamic of the classroom.

3.5 The LearnITy Training Management System

This product is a single point of entry for the entire training and skill management function. A Training Management System (TMS) is a software module that facilitates tracking and management of training events and features automated collection, analysis, and interpretation of training data. A Skill Management System is used to define and manage the organisational skill sets, staff competence in those skills, providing top management with strategic inputs regarding staff development and hiring.

3.6 The LearnITy Digital Knowledge Library

The LearnITy™ Knowledge Library is an innovative product that provides under a single umbrella all your electronic library requirements:

- Digital Library (with full support for Dublin core metadata standard)
- e-Journals
- e-Books
- Online Databases
- Integrated ILS for Institutional Library – The module provides a browser-based OPAC for your institutions physical libraries (for printed items). Back office support for integrated library system (acquisition, accessioning, classification, cataloguing, circulation, serial management) is also provided.