Across the globe, practitioners are deploying standards and architectures for exchanging everything from learning objects to extensive aggregations of knowledge. Knowledge repositories and marketplaces are emerging and evolving. Effective communities of practice are growing and being recognized as powerful engines for knowledge sharing. Corporations, educational institutions, professional societies and other enterprises have built new infrastructures that enable them to personalize knowledge interactions with learners, customers, members, and other stakeholders. The world is on the verge of order-of-magnitude gains in the capacity to share knowledge.

Individuals and organizations must fundamentally reshape the manner in which they create, manage, deploy, and leverage knowledge. These new competencies will be compelling sources of competitive advantage in the Knowledge Economy. Over time, technology will be a core component of all knowledge management and learning. The “e” will truly be redundant in reference to e-knowledge management, e-learning, and e-business activities. If it is not already so.

The time to participate is now. A diverse assortment of training organisations and industry consortia are well-positioned to advance this transformation. Poised for leadership and success are standards organizations, content aggregators, and collaborative alliances of knowledge organizations including libraries, colleges and universities, professional societies and associations.
Solution providers are creating applications that will evolve into powerful and pervasive e-knowledge capabilities. An e-knowledge economy is emerging, consisting of providers and users in every sector. All have a stake in the development of policies, protocols and practices that will accelerate the growth of e-knowledge to meet the knowledge sharing imperatives of the Knowledge Economy. As the e-knowledge industry emerges, we can expect a series of “jump shifts” in our best practices for learning and knowledge management.

### “Jump Shifts” in the e-Knowledge Industry

<table>
<thead>
<tr>
<th>YESTERDAY</th>
<th>TODAY</th>
<th>TOMORROW</th>
</tr>
</thead>
<tbody>
<tr>
<td>An Information Economy. Most knowledge is proprietary and hoarded.</td>
<td>An Emerging Knowledge Economy. The power of shared knowledge becomes evident.</td>
<td>An e-Knowledge Economy. Rewards knowledge sharing and the proliferation of knowledge.</td>
</tr>
<tr>
<td>Value and supply chains for knowledge are embedded in proprietary sources of knowledge.</td>
<td>Value chains for content begin to be unbundled and disintermediated.</td>
<td>Value chains become “Value Nets” as content is unbundled and available from many sources.</td>
</tr>
<tr>
<td>Content is king. Learning silos. Learning as program delivery.</td>
<td>Content and context are important. ‘Distance’ learning plus emerging e-learning.</td>
<td>Content, context, and community are equally critical. Pervasive e-learning. Learning as interactivity.</td>
</tr>
<tr>
<td>Tactical learning is a response to specific needs and skills gaps.</td>
<td>Integrated learning is shared across the organization.</td>
<td>Strategic, enterprise-wide learning is a consistent tool for rapid responses to organizational challenges.</td>
</tr>
<tr>
<td>Rudimentary standards for computer based training (CBT).</td>
<td>Clusters of international standards groups creating the first generation of standards for learning objects and e-content repositories.</td>
<td>Iterative cycles of standards development, creating truly scalable, interoperable standards for digital content.</td>
</tr>
<tr>
<td>Developing organizational infrastructures for using digitized knowledge.</td>
<td>First generation of integrated portal, ERP, learning management systems, learning content management systems, and knowledge sharing tools.</td>
<td>Powerful, open organizational technology infrastructures support knowledge sharing.</td>
</tr>
<tr>
<td>Content is held in proprietary channels – courses, books, and corporate repositories – that are impermeable, vertical silos.</td>
<td>New repositories and models of sharing are under development – e.g., Merlot and the ADL co-lab.</td>
<td>Robust, open content marketplaces create horizontal channels for sharing content and aggregating supply and demand.</td>
</tr>
<tr>
<td>Formal knowledge management is practiced by selected, knowledge-centric organizations.</td>
<td>Knowledge management begins to expand as KM tools develop.</td>
<td>Knowledge management is practiced throughout all organizations, fused with learning.</td>
</tr>
</tbody>
</table>
A Manifesto for the e-Knowledge Industry

The time is ripe for a multi-faceted initiative for the e-knowledge industry. A manifesto is needed to inform, catalyze, motivate, and mobilize corporate leaders, educators, practitioners, and policy makers regarding the implications of the emerging Knowledge Economy. This is a global phenomenon, and it requires decisively global perspectives and solutions. Moreover, this initiative can provide guidance on making sound decisions today to support the development of the e-knowledge industry in the future.

To this end, an international team of authors, academics, expert practitioners and policy makers has been assembled. We are inviting sponsors from around the globe to support a multi-faceted initiative called Transforming the e-Knowledge Industry (TKI). This initiative includes three stages:

Proposed Elements of the TKI Initiative

Stage I

A monograph, Transforming the e-Knowledge Industry, will explain the meaning of these developments in terms that are clearly understandable. Put simply, this monograph aims to be a manifesto. Through sponsorship, a significant number of free copies of the monograph will be distributed globally to policy makers, organizational leaders and managers, and educators and learning professionals in all settings.

Stage II

A website of resources which will provide a continuously refreshed collection of examples, case studies, best practices and other insights. These materials will be drawn from across the globe, from many sources. Consideration is being given to localized versions of the Website in Australasia, the Americas and Europe.

Stage III

A fresh framework and set of activities for advancing the development of e-knowledge practices through effective application and sharing of ideas and insights. This framework will stimulate development of communities of practice embracing the energies, capabilities and contributions of all who choose to engage. We will also stage thought leader meetings, convened to bring international leaders together to discover ways to leverage and accelerate e-knowledge accomplishments and competencies.
An International Team

The most striking single characteristic of the e-knowledge industry is its global character. Every aspect of the TKI initiative has an international flavor.

An Invitation to Participate. We are seeking a limited number of additional sponsors for the monograph, website and framework phases of the initiative. A balanced mix of sponsors from the New Economy is invited to support key aspects of this initiative. When completed, our sponsors will include a selection of leading technology corporations, governmental entities and standards organizations. We expect these initial sponsors will come from organizations that recognize the strategic importance and opportunity of driving the success of this initiative.

A Respected Managing Organization. Strategic Initiatives, Inc. headquartered in Washington, D.C., is an international consultancy recognized for its thought leadership and practical approach to technology-based organizational transformation. They are known for using publications and web-based materials to shape opinion and practice. Strategic Initiatives, Inc. will manage the development of the monograph/manifesto, the Website, and the activities for advancing the development of e-knowledge.

Our Inaugural Sponsor. Our inaugural sponsor is education.au limited, a not-for-profit company owned by the education and training ministers in Australia. The business of education.au limited is to develop and manage online services that are of benefit to the education and training sector and are national in scope. The company uses collaborative and consultative processes to build networks and collaborative approaches to the opportunities afforded by the Knowledge Economy.

The Authors for Transforming the E-Knowledge Industry have an international perspective and deep understanding of e-knowledge developments in Australasia, The Americas, and Europe.

Donald M. Norris, President, Strategic Initiatives, Inc. is well known as a thought leader, researcher, and consultant. His monograph, Transforming Higher Education: A Vision for Learning in the 21st Century (1995) was instrumental in providing a framework for advancing the concept of transformative e-learning in the late 1990s. Dr. Norris has also written E-Business in Education: What You Need to Know (1999) and Expeditions in E-Business for Associations (2000 and 2001 editions). He consults on knowledge transformation strategies with a leading-edge set of educational institutions, technology-enabled solution providers, and professional societies and non-profit organizations. He is a frequent speaker at educational and professional meetings on the subject of organizational transformation and the realignment of enterprises to Knowledge Age imperatives.

Jon Mason, Director, Strategic Initiatives, education.au limited and Assistant Director, IMS Australia, has an advocacy role in developing interoperability standards relevant to Internet-enabled education and training in Australia. His focus is on fostering collaboration and building alliances with a view to achieving mutual benefit. Jon's other roles include: co-chair, the Dublin Core Metadata Education Working Group; member of the IEEE LTSC; Australian delegate, ISO/IEC JTC1 SC36, IT in Learning, Education and Training; Chair, Standards Australia IT-19-1; Member, Standards Australia Knowledge Management Reference Group; Member, Australian ICT in Education Committee, Standards sub-Committee; and, co-lead, IMS Global Learning Consortium, Digital Repositories Interoperability Working Group. Mr. Mason is well respected for his perspectives on the strategic importance of networked knowledge, standards, and knowledge marketplaces.

Paul Lefrere, Director of Networking and Partnerships, Centre for Educational Technology Interoperability Standards, University of Wales and British Open University is widely recognized for his insights on reusable information objects and related tools; knowledge creation, innovation, and exploitation; and web-based learning services. Dr. Lefrere's association with the British Open University has led to a variety of new, mass market Open University courses and other breakthroughs in technology-based teaching. He has worked with a wide range of relevant organizations, including IMS Global Learning Consortium, IEEE LTSC, CEN/ISSS, NSF, JISC and European Commission's PROMETEUS. He has worked with many European corporations. Dr. Lefrere frequently is invited to speak on topics relating to e-learning and knowledge management at international meetings.
A Distinguished Advisory Committee. To support this initiative, we have assembled a committee of professionals recognized leaders in the e-learning, knowledge management, and international standards movements. Additional advisors are being sought to represent the key aspects of the Knowledge Industry.

**Professor Jim Taylor,**
**University of Southern Queensland, Australia** is widely regarded as one of the top experts in the theory and practice of e-learning in the world. He and his university have been recently recognized as leaders in dual-mode University education.

**Judy Brown,** University of Wisconsin System and Executive Director of the ADL co-lab is a key figure in the development and deployment of SCORM (Sharable Content Object Reference Model).

**Professor Toshio Okamoto,**
**University of Electro Communications, Japan** is a full Professor in the Graduate School of Information Systems, the University of Electronics and Communications and is a leading figure in the e-learning standards movement in Japan. He is also president of the Japanese Society for Systems and Information of Education.

**Dr. Mats Svenson,**
**Lund University, Sweden** is an active participant in the IMS Global Learning Consortium and European standards bodies.

**Dr. Mary Jackson,**
Senior Program Officer for Access Services, American Association of Research Libraries is Project Director for the Scholar’s Portal Initiative and a participant in the IMS Global Learning Consortium activities.

**Professor Zhu Zhiting,**
is Vice Dean of the College of Online Education at East China Normal University and Director, (Chinese) National Committee of Distance Learning Technology Standardization. He is a specialist in educational technology and a leading figure in the development of e-learning standards and practices in China.

**Dr. Robby Robson,**
President, Eduworks Corporation, is Chair of the IEEE Learning Technologies Standards Committee (LTSC) and is regarded as a leading adviser and practitioner in the field of e-learning standards and products.

**Dr. Andrew Robinson,**
Deputy Director of the Open University (UK) is responsible for the Open University’s European strategy and development. He is active in the European Commission and other bodies.

**Maria Theresa Martinez,**
Director, Academic Development, Technical Millenium University, part of ITESM is widely involved in Monterrey Tech’s e-learning activities that extend throughout the Americas.

**Dr. Madanmohan Rao,**
editor, INOMY.com is a well-known commentator on e-business, e-learning, and knowledge development in India. He was formerly the Communications Director at the United Nations Inter Press Service bureau in New York, and vice president at India World Communications in Bombay.

An Experienced Publisher with established alliances and channels of distribution. The Society for College and University Planning (SCUP), headquartered in Ann Arbor, Michigan, USA, has been approached to publish the English language edition of the monograph. SCUP will work with other TKI sponsors to develop international editions and channels of distribution for the monograph and other materials. Working with sponsors from a variety of countries, we plan to develop editions of the monograph in other languages. Preliminary conversations have explored versions in Spanish, French, German and Chinese.
Contents of the Monograph

The attached Table of Contents illustrates the focus of the monograph, *Transforming the e-Knowledge Industry*. Chapter 1 introduces the emerging concepts of e-knowledge, expressed in terms understandable to the layperson. Chapter 2 presents vignettes that describe how the sharing and processing of knowledge will change in the not-so-distant future. Chapter 3 describes the different paths that area available to the e-knowledge future. It suggests a useful, three-part taxonomy for understanding the indicators of e-knowledge development in organizations.

These three sets of interconnected indicators are the primary lenses we use to understand the emergence of e-knowledge practices. These indicators are the basis for Chapter 4, Chapter 5, and Chapter 6.

Chapter 4: Standards, Processes, and Marketplaces for e-Knowledge.

A new coin of the realm is emerging: transactable learning objects that can be shared, repurposed, and exchanged through content repositories. A wide range of international standards groups is working aggressively to create open, interoperable standards for learning objects, content packaging, and interoperability of digital repositories. These standards are a first step in facilitating the unbundling of digital content currently embedded in books, courses, and other proprietary repositories. For this unbundling to occur, academic publishing, libraries, academic research apparatus, and other knowledge repositories must reinvent their processes.

Equally important, a new breed of content marketplaces will be essential to the exchange of e-content. Merlot, the ADL co-labs, and other repositories are the precursors of the next generation of content marketplaces. The new breed of marketplaces will need to aggregate both the supply of learning objects and the demand for their use in learning and knowledge management. They will also provide content creation tools and value-added content services. The emergence of these e-content marketplaces will dramatically change the way individuals and enterprises share knowledge in all settings – universities, associations, corporations, and non-profits. The old vertical channels of content distribution will be reinvented through the appearance of these new, horizontal marketplaces for sharing e-content.

Chapter 5: Organizational Infrastructures, Tools, and Competencies.

Over the past decade, organizations have developed the first generation of infrastructures that will ultimately enable a quantum leap in the processing, personalization, and sharing of knowledge. These infrastructures have included advances in the use of the Internet and new combinations of portals, the next generation of enterprise resource planning systems (ERP) and customer relationship management (CRM) systems, and content and learning content management systems (CMS and LCMS). In addition, organizations have discov-
ered the fundamental importance of formal and informal communities of practice as powerful engines for exchanging tacit knowledge. These communities will be recognized as an integral element of every organization’s knowledge sharing infrastructure.

Organizations are still discovering how to use these infrastructures to share and process knowledge. Over the next few years, the availability of horizontal e-knowledge marketplaces will provide new opportunities to use these organizational infrastructures in creative ways. The combination of facile infrastructures and e-content marketplaces will herald a new cycle of best practices in e-learning and knowledge management.


Our current concepts of best practices in e-learning and knowledge management will be reinvented over the next few years. Organizational strategies and business models will undergo cascading cycles of reinvention as knowledge enterprises begin to use their new infrastructures and new generations of content marketplaces to reshape their knowledge sharing practices.

e-Content marketplaces will rewrite the business models for sharing content. While some content will decline in value as it is be “commoditized”, other combinations of content and context will emerge that will command a premium price. Moreover, the availability of content marketplaces will create secondary markets for content that have never existed before for universities, associations, corporations, and other enterprises. The next decade will be a time of stunning new strategies for sharing and processing knowledge.

Chapter 7 of the monograph enumerates how individuals and enterprises can utilize Transforming the e-Knowledge Industry tools and activities to accelerate their e-knowledge development. Our basic thesis is that shrewd deployment of these principles will be a critical source of competitive advantage in the Knowledge Age.

For more information on the TKI initiative, please contact:

Donald M. Norris, President, Strategic Initiatives, Inc.
Telephone: +1 703 450 5255  E-mail: stratinit@aol.com

Jon Mason, Director, Strategic Initiatives, education.au limited.
Telephone: +61 8 8334 3207 E-mail: jmason@educationau.edu.au

Paul Lefrere, Director of Networking and Partnerships, CETIS, British Open University
Telephone: +44 1 908 653 388  E-mail: p.lefrere@open.ac.uk
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