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Paper No. 12

Below is a short synopsis of the talk I will be giving:

Topic:

"I Have Read The Digital Future - And It Spells "The Electronic Book"

With the advent of the Internet & 'anyplace, anytime' multimedia, and the increasing convergence of print publishing, Computer technology, and media broadcasting, the market expectations today provides content providers & publishers with a new powerful medium to distribute and market content - the E-Book. This talk will elucidate on how this "new-age, new-economy" information tool can be exploited by content providers & publishers to extend their markets for existing and new content. According to Dick Brass, a Microsoft Vice-President for Technology Development, "the publishing industry is at a crossroad". "By 2020, 50% of everything we read will be in electronic form", says Mr. Brass. The talk will also present on the development and of Singapore's "e-book" for collaborative education & training - the eduPAD, which can also be applied in future to other collaborative applications.




Mission

- KRDL spearheads the research and development of information and networking technology
- Collaborating actively with industry partners in the development and transfer of leading-edge technologies, KRDL builds intellectual assets vital to keeping the nation, industry and businesses ahead globally



Kent Ridge Digital Labs

- Premier R & D... for Leading-Edge Businesses
- Incubator for Seeding High-Tech Start-Up Ventures that have innovative technologies & persuasive business models




I Have Read The Digital Future - the Advent of the E-Book & the eduPAD (E-Book, PDA, Web PC)

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Technology Development Areas

- **Learning**
 - Media for Learning
 - Collaborations in Learning
- **Knowledge**
 - Language based interfaces
 - Text Mining
- **Biomedical**
 - Surgical Workstations
 - Data Integration and Analysis for bio-informatics
- **Ubiquity**
 - Information Security
 - Digital Home / Info-appliances
 - Authentication
- **Transportation**
 - traffic info systems
 - Supply chain mgmt
- **Infocom**
 - Mobile wireless
 - Network Engines
 - New Internet services



Some KRDL Start-ups

- **Star+Globe (WholeTree.com)**
- **Multilingual Tools for the Internet**
- **Third Voice**
- **Electronic Post-it note**
- **BuzzCity**
- **Information filtering**
- **CommonTown**
- **Web based communities**
- **Mustard Seed**
- **Multilingual name search**




Singapore Scene

- **KRDL's strong IP position and the desire to enrich its partners**
- **Government's push to create info-comm and other industries**




The Future Today - eBooks, PDAs* & Wireless Communications

- ◆ The e-Book
- ◆ Personal Digital Assistants
- ◆ Wireless, Mobile Communications
- ◆ Content & Community,
- ◆ Communications & Commerce



The E-Book Revolution

- $E=(MC)^2$
- $E\text{-Book}=(\text{Money}*\text{Commerce})^2$
- Microsoft's market vision for e-books:
 - 2005 : Sale of e-books reach US\$1 billion in USA
 - 2006 : E-Newstands in every corner
 - 2008 : E-Book versions of titles outsell paperback
 - 2009 : Bestselling authors publish directly online
 - 2018 : E-Books are called "books"
 - 2020 : 90 % of all titles are in e-book format



The E-Book Revolution

- Examples of e-books:
 - NuvoMedia's Rocket eBook
 - Libraris' Millennium E-Reader
- But real revolution is in area of content delivery, not devices
- MP3 has shaken the music industry...so will e-books will be radical change for the traditional book publishing business
- The impact is much greater than "e-tailing" (using the Web to sell existing books, e.g. Amazon.com)
- Will radically change our very definition of what a book is

The E-Book Revolution

- Advantages of e-books (for the reader):
- No physical inventory - store capacity is effectively infinite never out of stock!
- Books & magazines on demand - download & printed
- Reader-reader interaction & reader-author interaction is enabled (through updating features/communications)
- Access single chapters or pages (target reading)
- Provide regular updates - enable ongoing relationships with reader (especially for non-fiction subjects)
- Copyright expiration rules - many texts can be distributed for free.

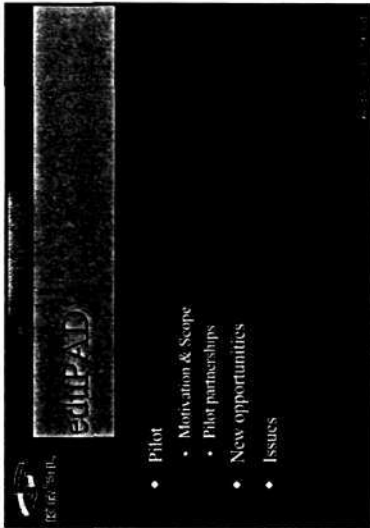
The E-Book Revolution

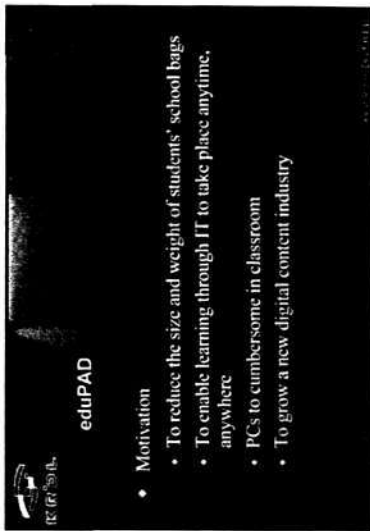
- Advantages to authors/publishers:
- New avenues for control over content management, distribution & marketing
- Copyright ownership protection
- New business revenue models
- Bigger financial pie for authors (previously 10% of book-sales revenue)
- Author might make more money on an e-book selling at \$5 than a paper book selling for \$30

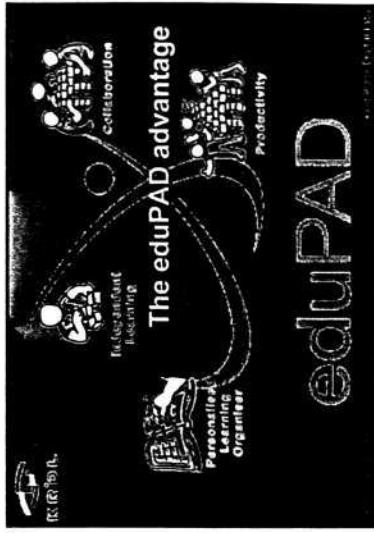
The E-Book Revolution

- E-Book examples:
- Stephen King Novel "Riding The Bullet" (not available for print). Price : US\$2.50, Publisher: Simon & Schuster


















eduPAD

- Launched eduPAD project on 17 Sept 1999 by Education Minister RAhm Teo Chee Hean
- Duman Secondary School
- 160+ Secondary One Express students
- Portable handheld device developed jointly by MOE, KRDL, CET Technologies, NCB, 5 Local publishers
- 4 classes
- July 99 to December 99 Trial period
- Strong school and parents support (essential)




eduPAD

- eduPAD Features
- Electronic textbooks (or eduBOOKS)
- Postage stamp-size digital storage cards
- eduBOOKS - feature animation, hyperlinks
- Glossary - meanings of words - speaker built-in
- Internet/Web browsing - wireless network
- e-assignments & tests : upload & download
- Notebook/Scratchpad - stylus handwriting recognition
- Calendaring & appointments




eduPAD

- Resources
- KRDL - 15 (learning-9, ubiquity-2+, JRC-4)
- CET - 6
- MOE - 12 (ETD-5, NIE-1, School-6)
- Publishers - Shing Lee, Federal, SNP, Longman, PanPac
- Total - 21 engineers, 6 industry companies, 3 govt agencies




eduPAD

- Growing a new digital content industry
 - Anywhere, Anytime Learning
 - Merger of content industry
 - Learning standards



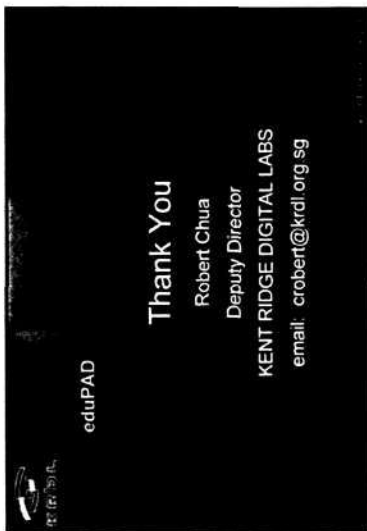
eduPAD

- Growing a new digital content industry
 - Merger of content industry
 - Overseas merger of large textbook and courseware publishers
 - Local content industry
 - Times Learning Systems and Federal publishing
 - SNP multimedia and SNP publishing
 - Shing Lee and Techmedia



eduPAD

- Issues ::
- Ownership and Responsibility
- Resources and Funding



eduPAD

Thank You

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