

Welcome to the IEEE Customer Breakfast

SLA 2007 Annual Conference
June 5, 2007



About the IEEE

- A not-for-profit society
- World's largest technical membership association with over 370,000 members in over 160 countries
- Four core areas of activity
 - Publishing
 - Conferences
 - Standards
 - Membership



IEEE Mission

IEEE promotes the engineering process
of creating, developing, integrating, sharing,
and applying knowledge about electro and
information technologies and sciences *for*
the benefit of humanity and the profession



IEEE Members are the Leaders of Today and Tomorrow



James Flanagan

IEEE Medal of Honor
2005

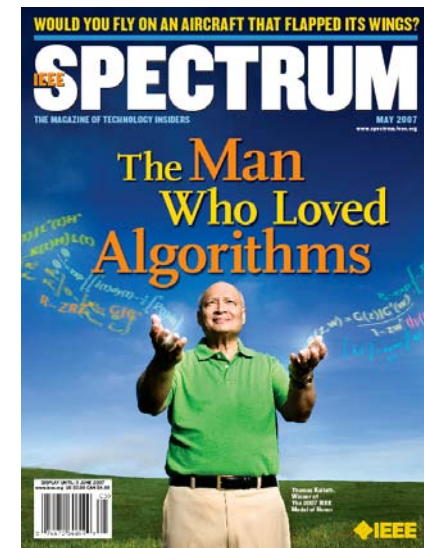
Invented MP3 players,
VOIP and more
Holds 18 patents



James Meindl

IEEE Medal of Honor
2006

Microelectronics pioneer:
low-power, biomedical,
on-chip networks



Thomas Kailath

IEEE Medal of Honor
2007

Algorithms for credit card
processing, text messaging &
video cell phones

IEEE Publications

- **IEEE Journals & Magazines** - The top-cited journals and magazines in the fields of electrical engineering and computing – more than 120 in all!
- **IEEE Conference Proceedings** - The cutting edge papers presented at over IEEE conferences held annually throughout the world
- **IEEE Standards** - Quality product and technology standards used around the globe to help industries and companies open business opportunities, ensure safety, drive technology, and develop markets
- **IEEE Expert Now Continuing Education Courses** - The best IEEE educational courses and tutorials from conferences around the world delivered in a series of engaging and highly interactive, one-hour online learning courses

6 new
in 2007

Now
700 Annual
Titles!

Enhanced in
IEEE
Xplore

New from
IEEE!

IEEE Covers All Areas of Technology

More than just electrical engineering & computer science

- Aerospace
- Biomedical Engineering
- Communications
- Electronics
- Imaging
- Nanotechnology
- Optics
- Power Systems
- Remote Sensing
- Secure Communications
- Transportation
- Antennas
- Circuits
- Computing
- Energy
- Information Technology
- Nuclear Science
- Power Electronics
- Radiology
- Robotics & Automation
- Software
- Wireless

Over 1.5 million articles and papers!

Technology Review Magazine

Published by MIT, Mar/April 2007 Issue

Spotlighting 10 technologies that can change industries, fields of research and even the way we live!



Technology Review
10 Emerging Technologies 2007

This year, as every year, we present the 10 technologies we find most exciting—and most likely to alter industries, fields of research, and even the way we live.

“10 Emerging Technologies 2007”



Peer-to-Peer Video
Internet



Quantum-Dot Solar Power
Energy



Neuron Control
Biotechnology



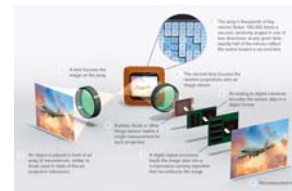
Nanohealing
Nanotechnology



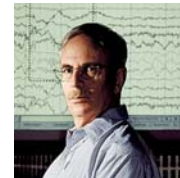
Mobile Augmented Reality
Telecom



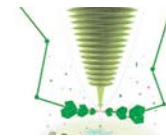
Metamaterials
Nanotechnology



Compressive Sensing
Software



Personalized medical
monitors
Medicine



Optical antennas
Nanotechnology



Single-cell analysis
Biotechnology

Peer to Peer Video

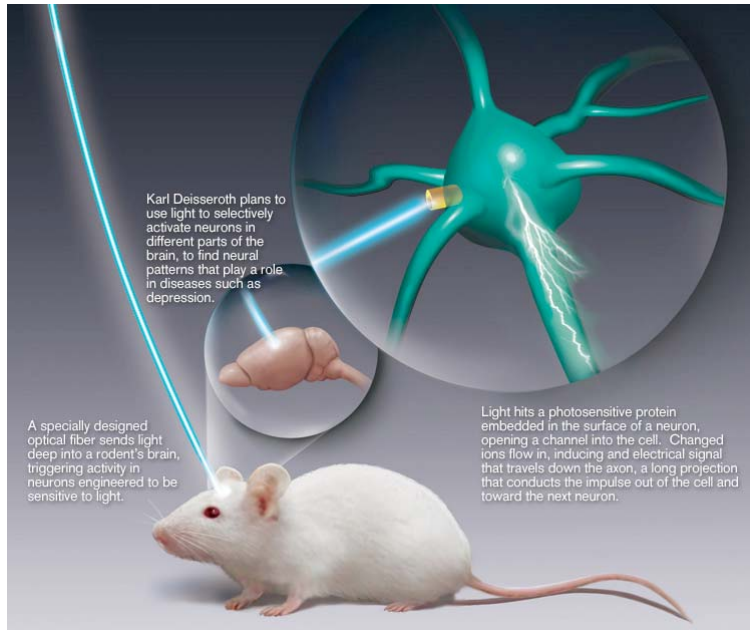
Internet



- By 2009, 98% of Internet traffic will be video
 - The Internet is about to drown in traffic
- With P2P there are no central servers, saving huge bandwidth
- Being developed by Hui Zhang, Carnegie Mellon
- 172 articles by Zhang in IEL since Oct 1995
- 19 other articles on P2P video architecture

Neuron Control

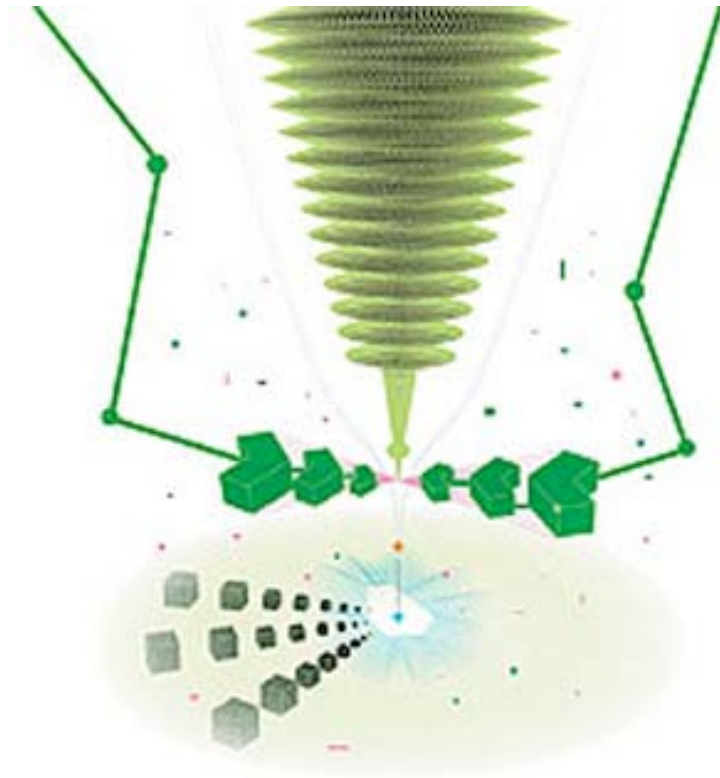
Biotechnology



- A genetically engineered “light switch” lets scientists turn selected parts of the brain on and off
- May help improve treatments for psychiatric & neurological disorders
- Being developed by Karl Deisseroth, Stanford
- 1 article by Deisseroth in IEL, 18 others by leading experts
- 1st article in IEL = August 1997

Optical Antennas

Nanotechnology



- Developers creating high-capacity DVDs have hit the “diffraction limit”
- Adding nanoscale “optical antennas” to lasers can focus light onto a spot $1/20$ of light’s wavelength
 - DVD’s could contain 3.6 terrabytes of data
- Developed by Kenneth Crozier & Federico Capasso, Harvard
- 4 articles by Crozier in IEL, 160 by Capasso
- 1st article in IEL = Aug 1983

“10 Emerging Technologies 2007”

- All 10 emerging technologies in IEEE *Xplore*®
- Most published many years before MIT’s 2007 article
- Many papers were presented at IEEE conferences
- Papers in medicine, energy, nanotechnology etc, not just EE



Who Uses IEEE Information?

Leading Organizations Worldwide Invest in IEEE

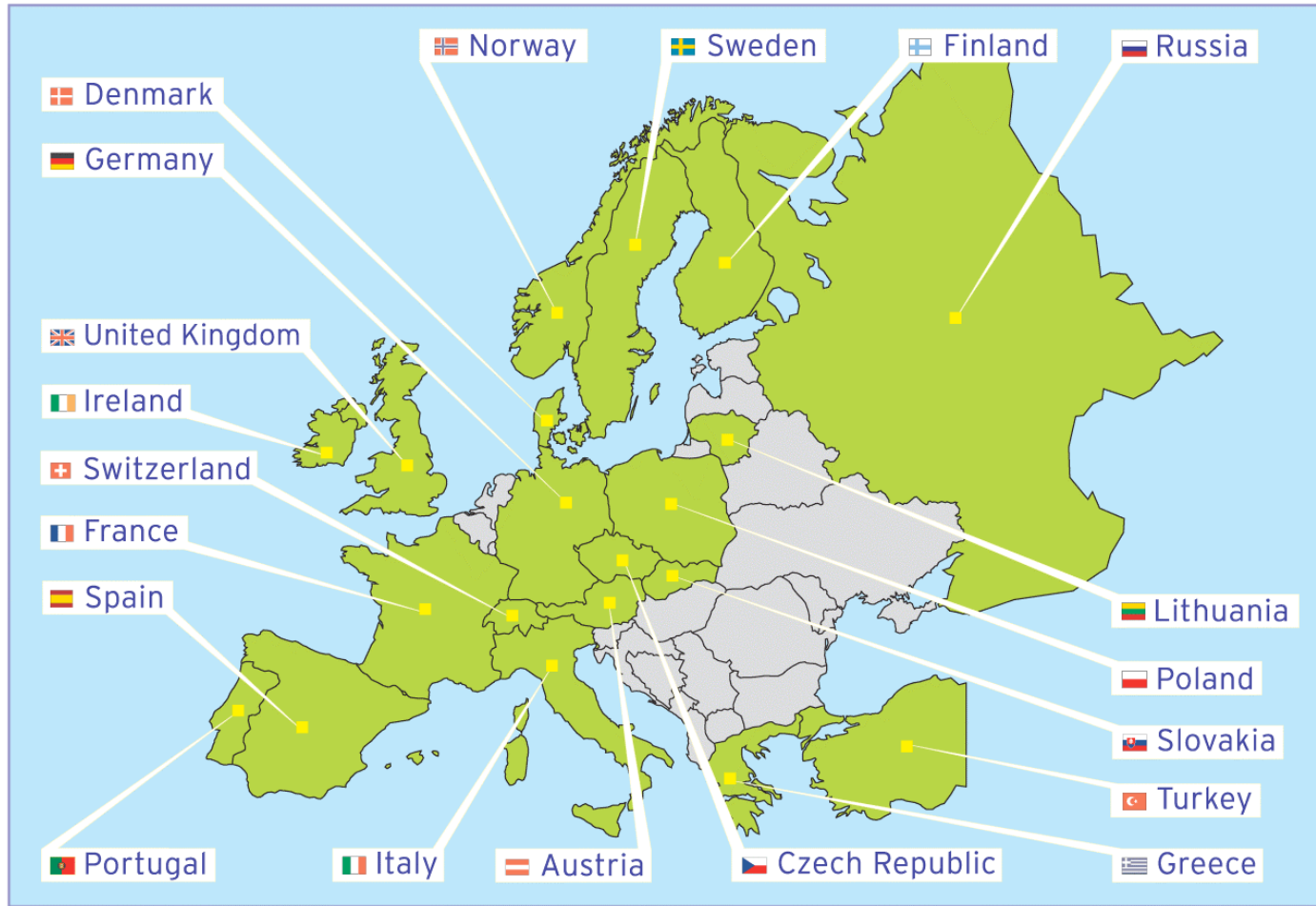
- 8 of Top 10 Aerospace companies
- 10 of Top 10 Semiconductor companies
- Top 3 Telecommunications companies
- Top 3 Automotive companies
- 6 out of Top 7 Computer companies
- #1 company in Computer Software company
- 8 of Top 10 Networking companies
- Japan's "Big Five" Electronics companies
- And the Top 50 U.S. Engineering Schools



Source: Fortune's Top 1,000 Companies Worldwide
2006 & U.S. News & World Report

Universities Across Europe Choose IEEE Online

IEEE Academic Consortia 2006



The Most Innovative Companies Subscribe to IEEE

Business Week's "2007 Most Innovative Companies"

- **15 of the top 25** of overall list subscribe to IEEE
 - 60% despite the fact that the overall list includes retailers (Target, Walmart, Starbucks) & Pharmaceutical
- In the technology category, **all 10 of the top 10** most innovative technology companies are IEEE subscribers



Source: Business Week Most Innovative Companies 2007

Why Do the Leading Technology Organizations Choose IEEE?

IEEE = Leader in Technology

2005 Journal Citation Report Results, by Impact Factor

- 18 out of Top 20 journals in Electrical Engineering
- 9 out of Top 10 in Telecommunications
- 7 out of Top 10 in Computer Science, Hardware & Architecture
- 8 out of Top 20 in Computer Science, Software Engineering
- 8 out of Top 20 in Computer Science, Information Systems
- # 1 in Imaging Science
- # 1 in Robotics
- # 2 in Artificial Intelligence
- # 3 in Biomedical Engineering
- # 3 in Remote Sensing
- # 3 in Nuclear Science & Engineering
- # 6 in Aerospace Engineering

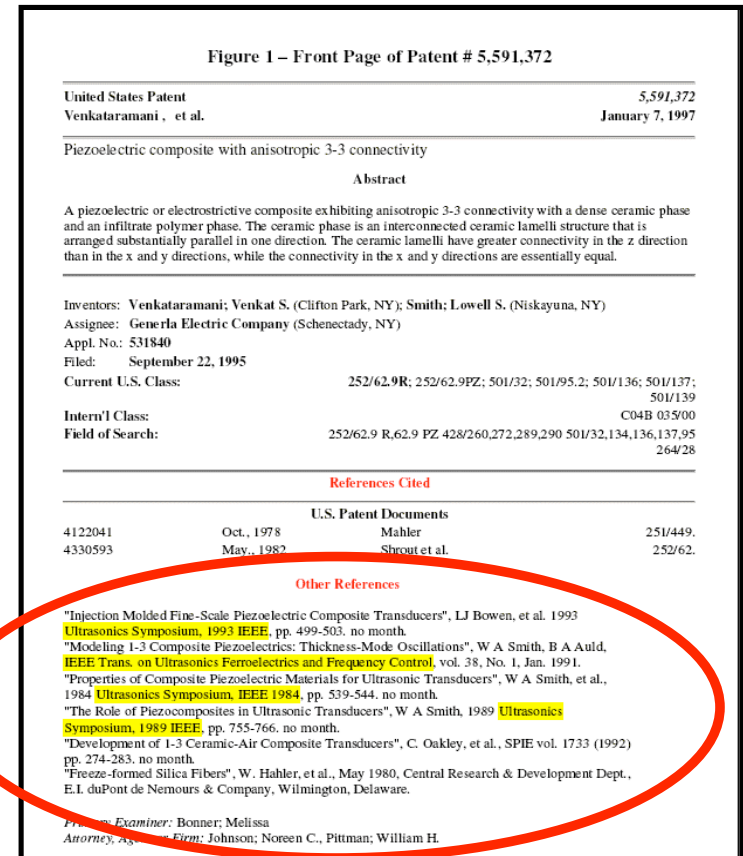


Source: Thomson 2005 Journal Citation Report “presents quantifiable statistical data that provides a systematic, objective way to evaluate the world’s leading journals”

Key Findings of New Patent Study

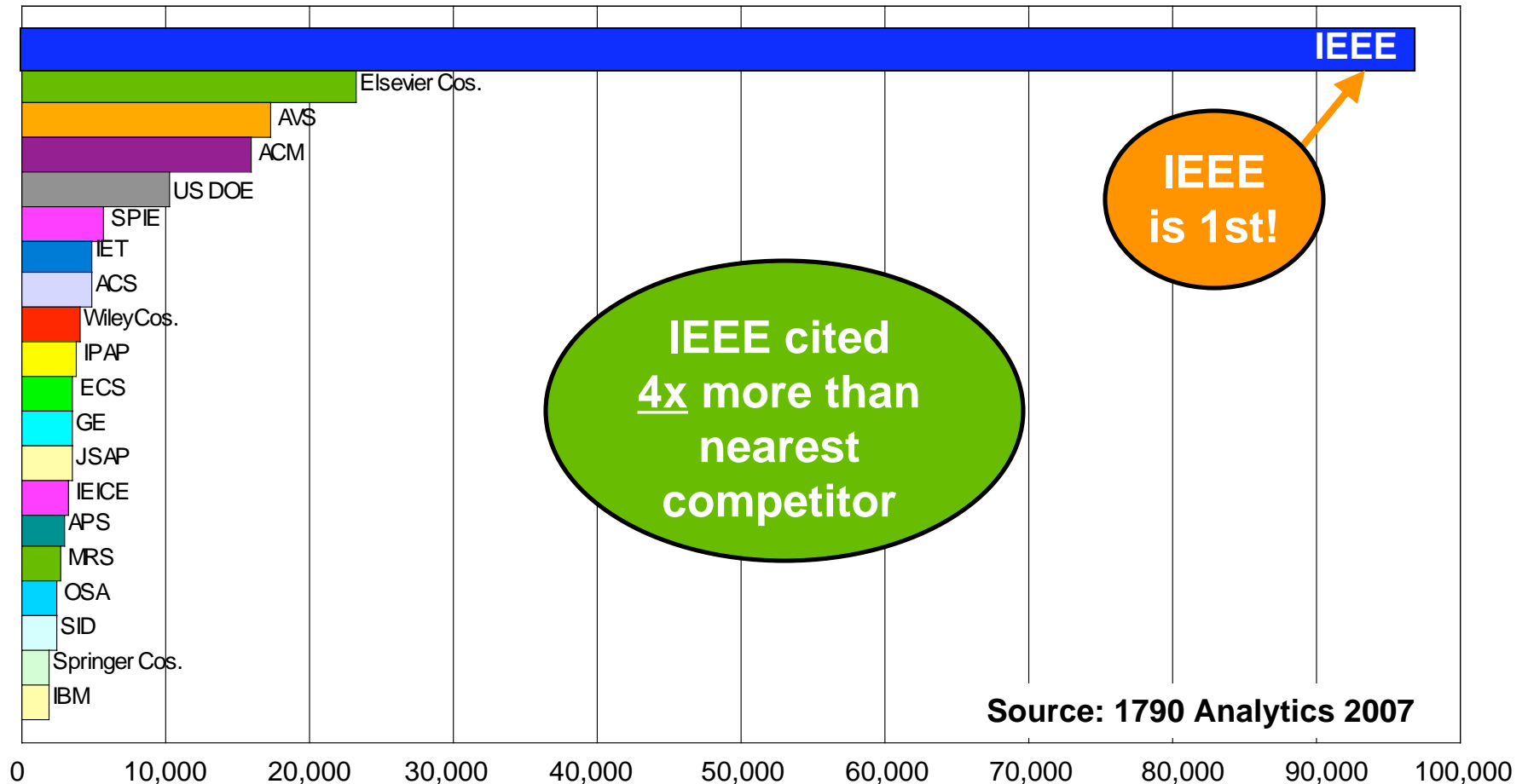
- Examines Sci-Tech references in patents for the year's 25 top-patenting organizations for patents filed with the USPTO in 2006
- Reveals that the importance of sci-tech literature on patents is increasing and continues to outpace growth in patent activity
 - # of patents up 27% over prior year
 - # of sci-tech references up 59%
- 38%** of sci-tech literature cited by the top 25 patenting organizations is to **IEEE**
- IEEE dominates in our core technologies and is highly cited in other areas:
 - medical devices
 - optics
 - and business software

Source: 1790 Analytics LLC 2007



Sample U.S. patent citing IEEE information

Patent References to STM Publishers



U.S. Patent References to Top 20 Publishers

Based on top 25 patenting organizations USPTO patents in 2005 - 2006



Your Digital Collections: Under The Microscope



- As an increasingly visible budget line item, digital content and all of your digital collections have now made it onto the CFO's radar screen
- Senior management needs to question every purchase today and may ask you:
 - “Do we really need this?”
 - “Can we cut it and get by?”

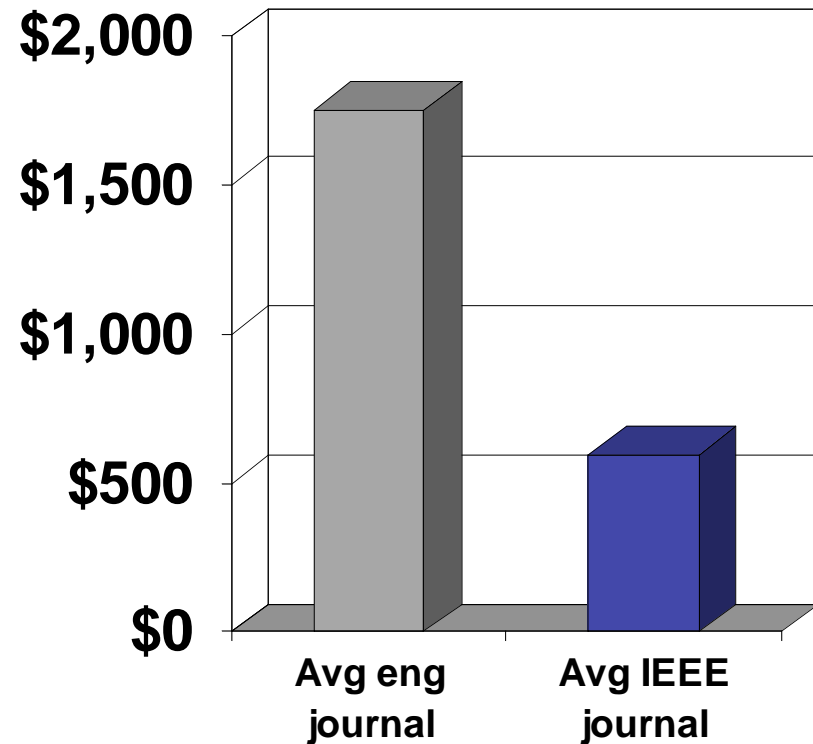


IEEE is one of the best values in your digital collection...

IEEE Offers Extraordinary Value

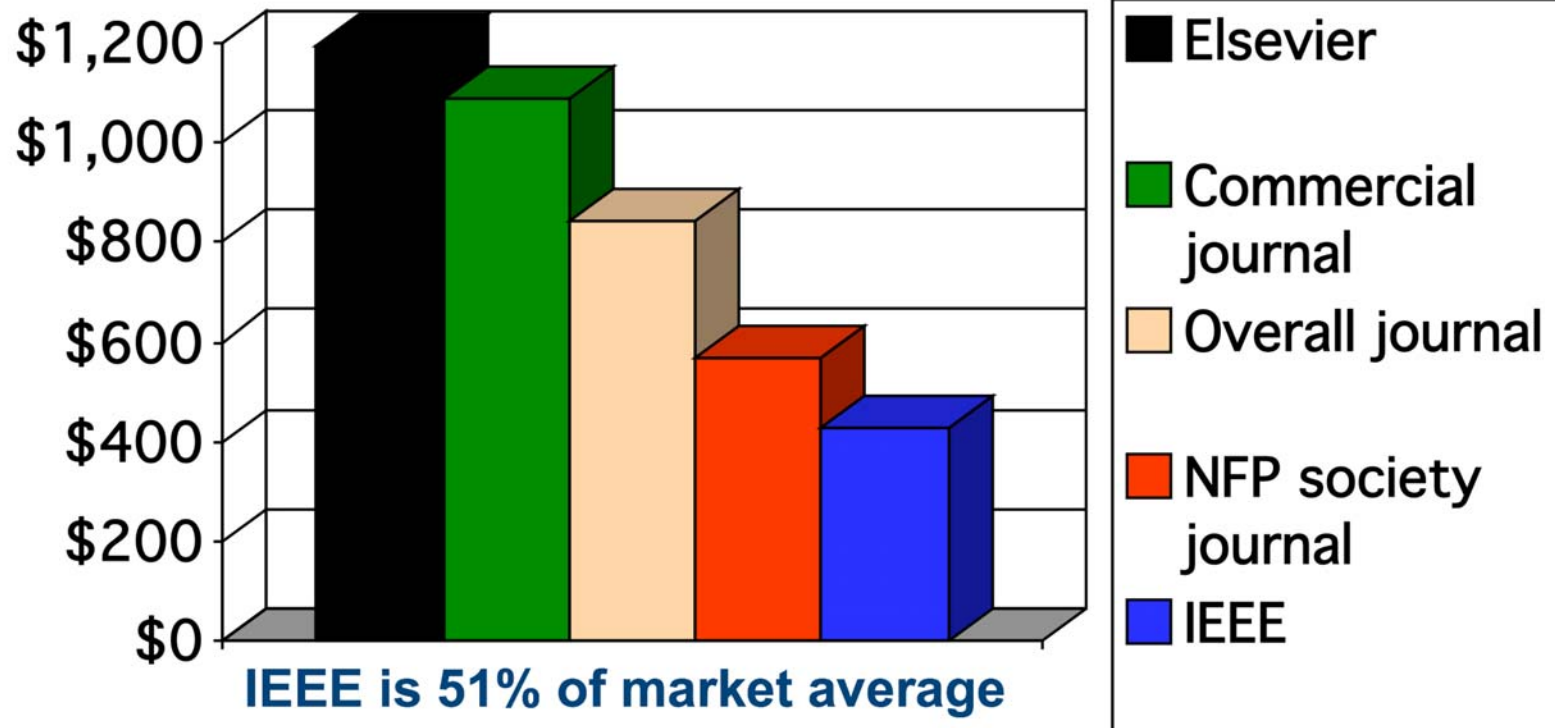
One of the best values in your digital collection

- According to Library Journal the average price of an engineering journal is \$1,756
- But the price of the average IEEE journal is just \$593 – **67% lower than the competition**



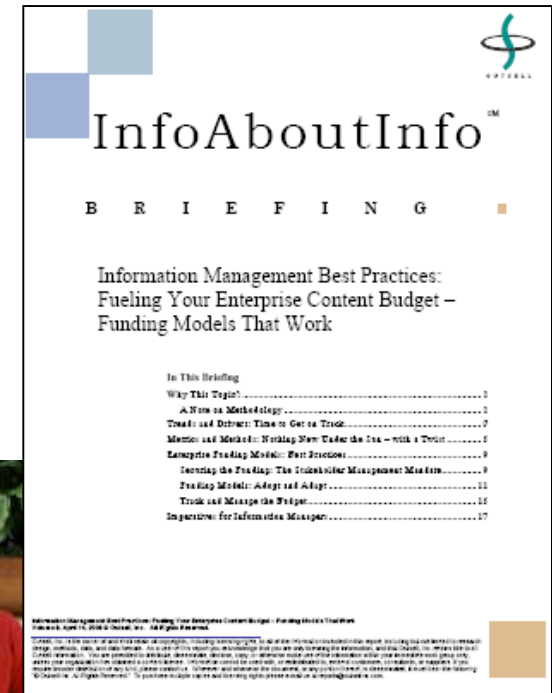
Source: Library Journal, April 2006

2007 Prices of Engineering Journals



Information Management Best Practices – Funding Models That Work

- 2006 study by Outsell, Inc.
- Provides solid evidence that an enterprise-wide centralized content buying model is significantly better than users buying individual information ad hoc
- Average of **25% cost savings** using centralized resources
- **40 percent increase** in number of users reached with an enterprise wide resource



Mary Corcoran
Vice President and Lead Analyst
Outsell, Inc.
mcorcoram@outsellinc.com

How Does IEEE Access Help Your Team?

“Motorola has had a subscription to IEEE for quite some time now. IEEE has been an essential part of my work to be able to go in and access such a broad variety of technical information whenever I need it.

I have always believed that in the vast majority of cases when you are beginning a new project, **somebody somewhere has probably worked on a similar problem** and it is then very important that you find it, read it, and understand it before you begin planning your new work. And IEEE helps me do exactly that.

Any resource of such information that IEEE offers becomes an essential tool in order to develop the best program plans possible. In addition to finding out if someone has already solved your problem, but also even if they didn't, just what their approaches were and why they may have failed.

In our business, saving time in any way you can is critical, and avoiding reinventing wheels is one of the greatest time savers there is.

Access to IEEE articles and papers is key in this regard.”



Jon Candelaria
Project Manager
Motorola

IEEE Meets the Needs of Today's Engineers

- **Information you can trust**
 - Peer reviewed
 - IEEE is the most highly cited in the field
 - IEEE is cited in patents more than anyone else
- **Saves time = greater productivity**
 - Convenient desktop access 24/7
 - Don't waste time sifting through unproven clutter on the Net
 - IEEE users save time and money by not “reinventing the wheel”
- **Search any way you want**
 - Simple search or advanced options or just search Google!
- **Access options for any size organization**
 - One of the best values in your digital collection

Thank You for Your Time Today!

