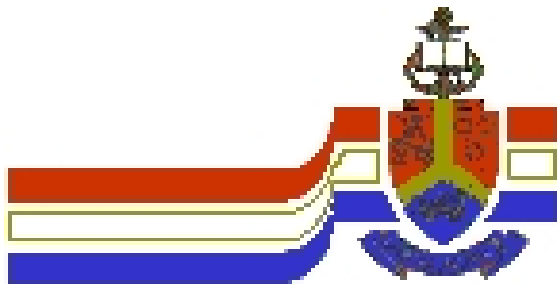
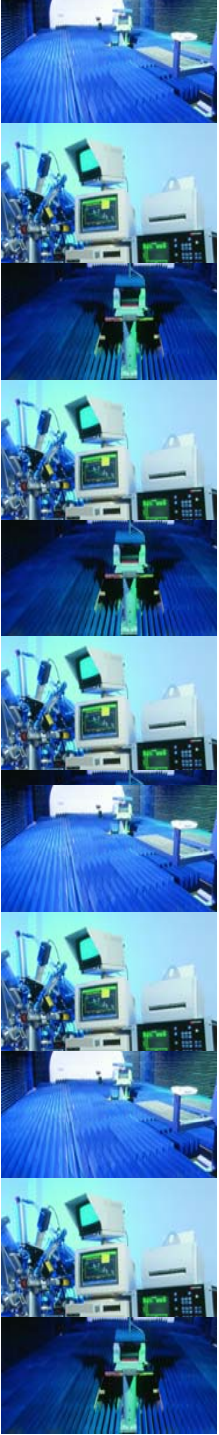


Online Electronic information for Engineers



University of Pretoria

Sunette Steynberg
Academic Information Service
SAOUG Conference 2005



- 👉 Who are our customers?
- 👉 What are their needs?
- 👉 How do we address these needs?
- 👉 What effect does this have on the library and its personnel?



WHO ARE OUR CUSTOMERS?

*“Normal people believe that if it ain’t broke,
don’t fix it.”*

*Engineers believe that if it ain’t broke,
it doesn’t have enough features yet. “*

ENGINEERS ARE:



Future professionals



Highly computer literate



Always constrained by time



Self-sufficient



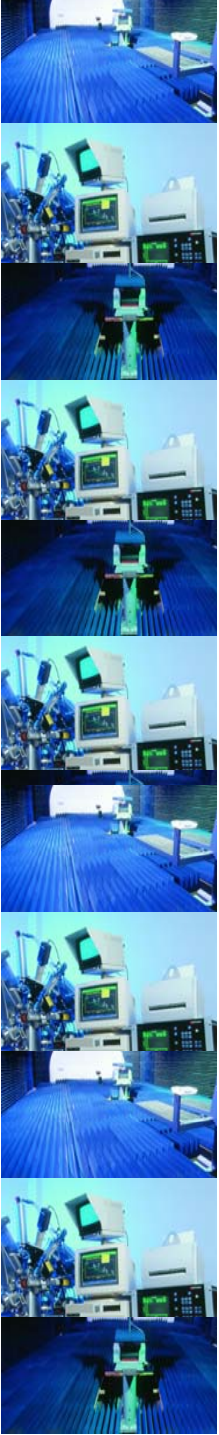
Not frequent library users

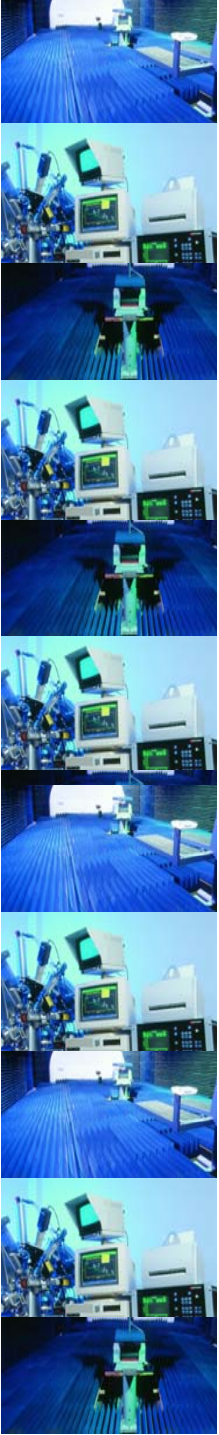


Personality type: Mostly introverts, very realistic and has the ability to linear thinking



Dress code: very conservative





Engineers vs. scientists



Comparison with other professions



Their training

WHAT ARE THEIR NEEDS?



Engineers need far more information than they generate



They consume information primarily to produce physically encoded information or things

THIS INFORMATION HAS TO BE



Accurate



Up to date



Reliable



Original










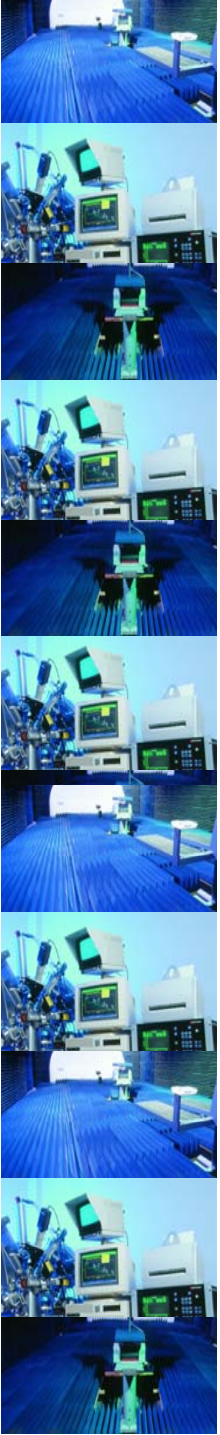
Immediate, i.e. online in full text, ready to download immediately



Integrated, all on one platform. They tend to get hooked on one platform and refuses to use anything else

According to *Leckie* the following are reasons why engineers use certain databases rather than other:

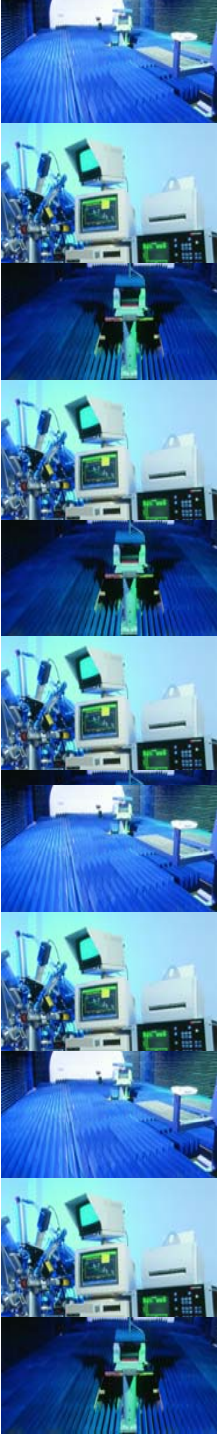
-  Familiarity
-  Trustworthiness – information accurate and confidentiality of search
-  Prior success
-  Packaging
-  Timeliness
-  Cost
-  Accessibility



According to *King* engineers spend 2/3 of their time in communicating, both as input to their work (reading, listening) and as output resulting from their work (written documents, presentations)

HOW DO WE ADDRESS THESE NEEDS?

At the Academic Information Service, i.e. the library of the University of Pretoria, we strive to assist and link to the vision and mission of the University of Pretoria, but also of the different faculties we serve



VISION

The University of Pretoria strives to be -



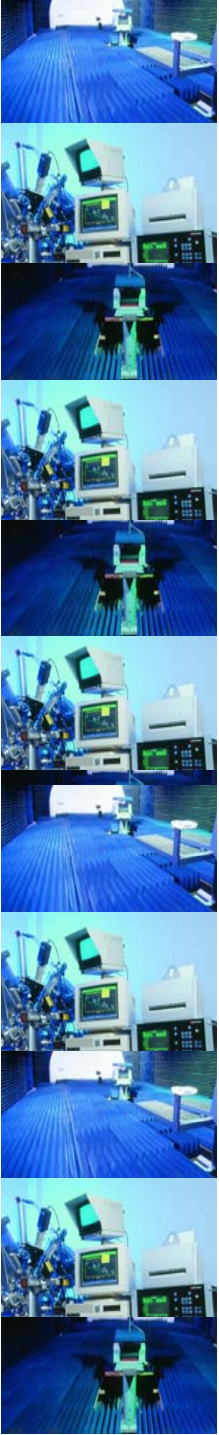
a **leader** in higher education that is recognised **internationally** for academic excellence and a focus on quality



a university that is known for **international competitiveness** and **local relevance** through continuous innovation

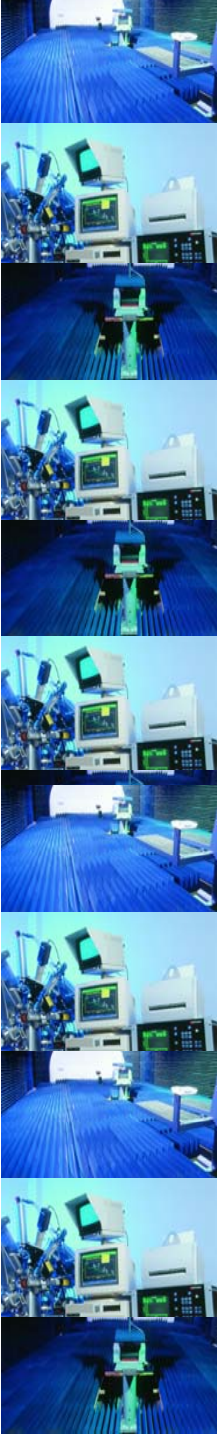


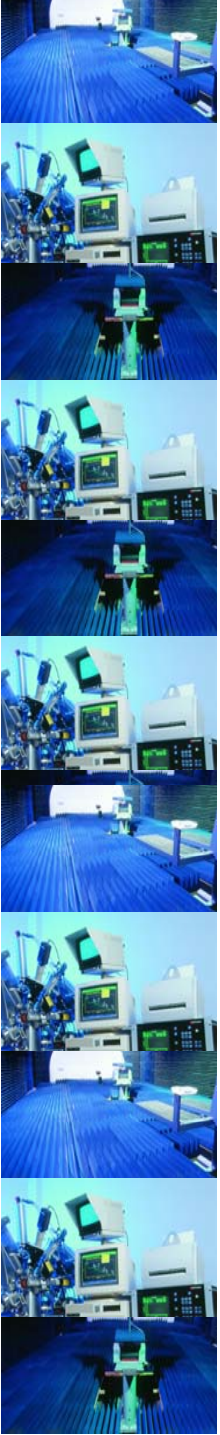
the premier university in South Africa that **acknowledges its prominent role in Africa**, is a symbol of national aspiration and hope, reconciliation and pride, and is committed to discharging its social responsibilities



MISSION

The mission of the University of Pretoria is to be an **internationally recognised** South African **teaching and research university** and **a member of the international community of scholarly institutions**





The Vice-Chancellor and Principal of the University of Pretoria, prof. Calie Pistorius, like to say:

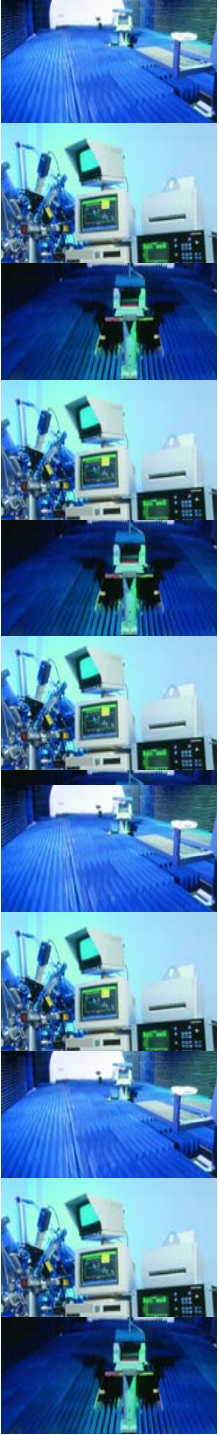
“We are transforming a very good university into a truly great university”.

We are training the Innovation Generation of the Future and want to deliver world class engineers to the world. Our researchers and students are therefore entitled to only the very best the University can afford.

THE DEPARTMENT OF ELECTRICAL, ELECTRONIC AND COMPUTER ENGINEERING (EEC)



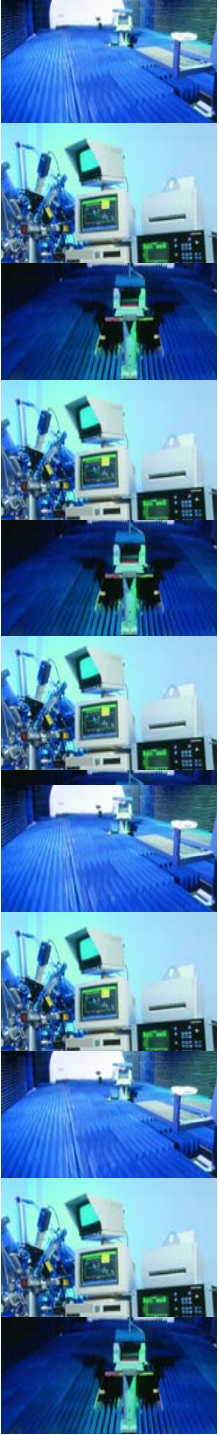
Background and needs



Most researchers and scientists indicate that the most frustrating part about online searching is limited access to full text documents



Not even broken hypertext links or inadequate search engines come close to this



2001: DISASTER AND FRUSTRATION

2002: SOLUTION



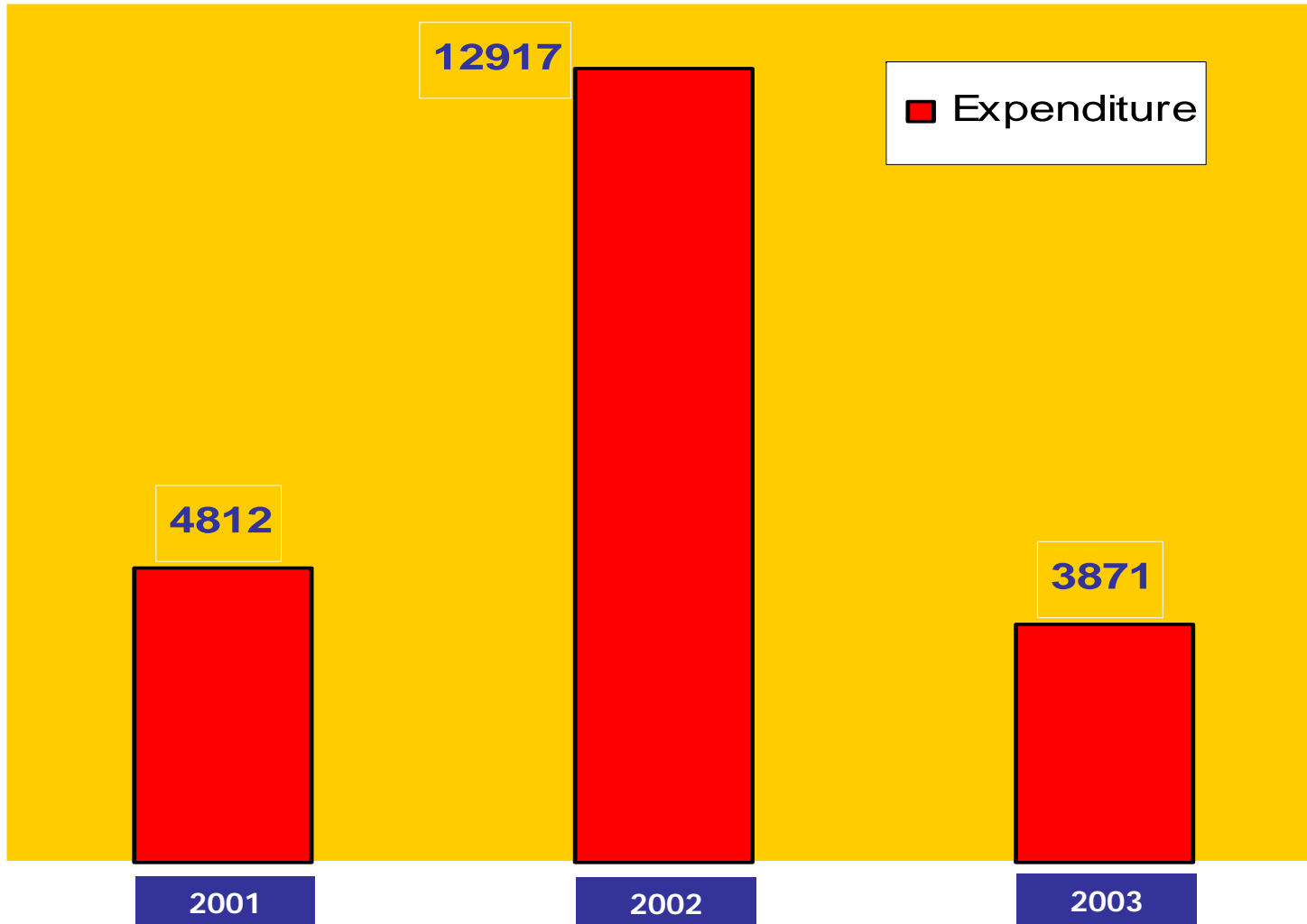
The decision to buy online access to 113 IEEE Transactions, 1988+ in full text

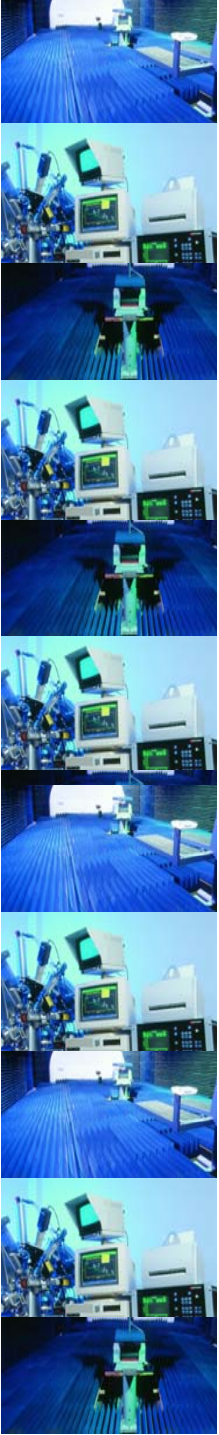
2003: ULTIMATE SOLUTION



Buy the full IEEE/IEE Electronic Library (IEL) package

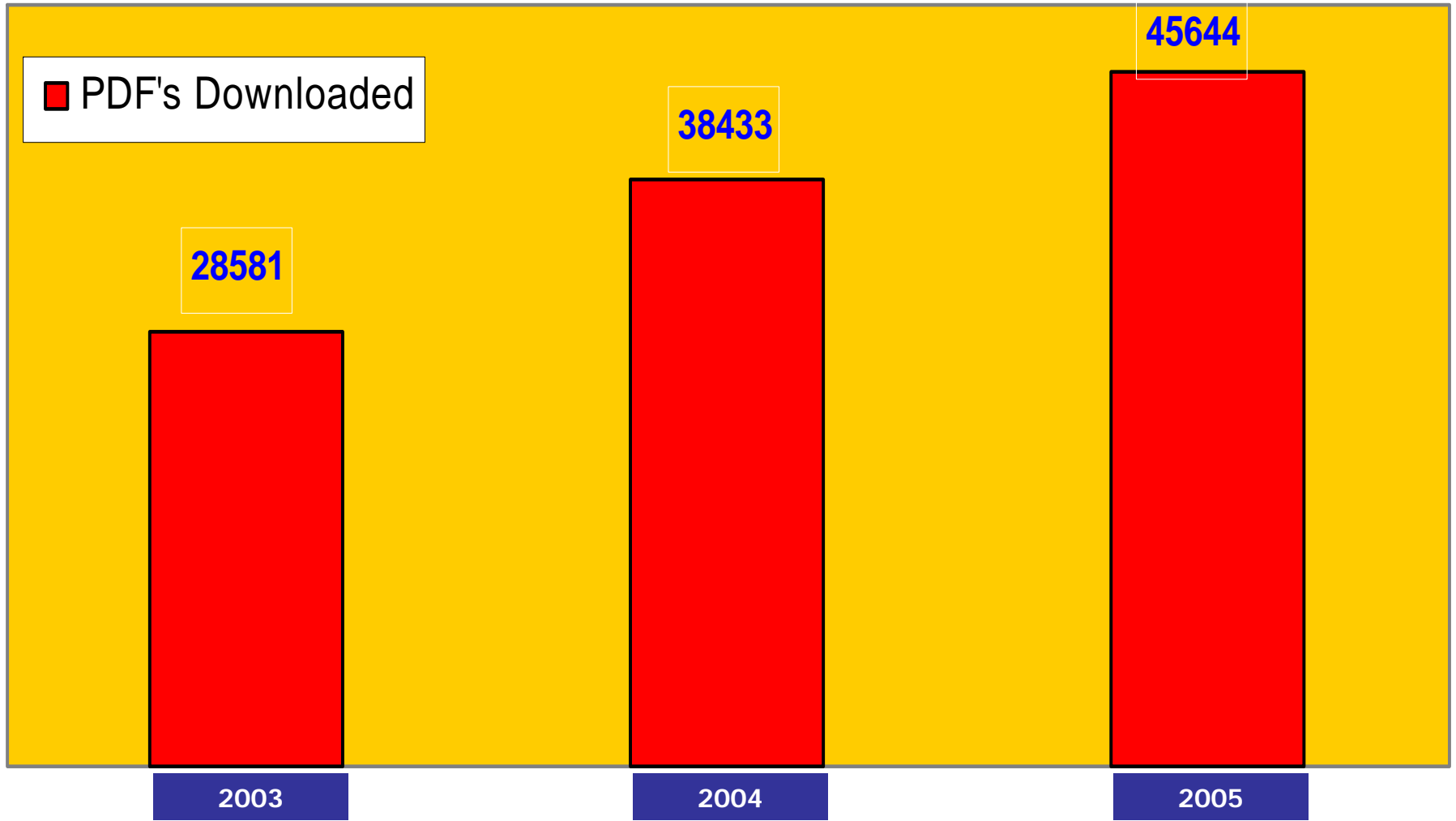
INTERLIBRARY LOANS STATISTICS FOR 2001 – 2003

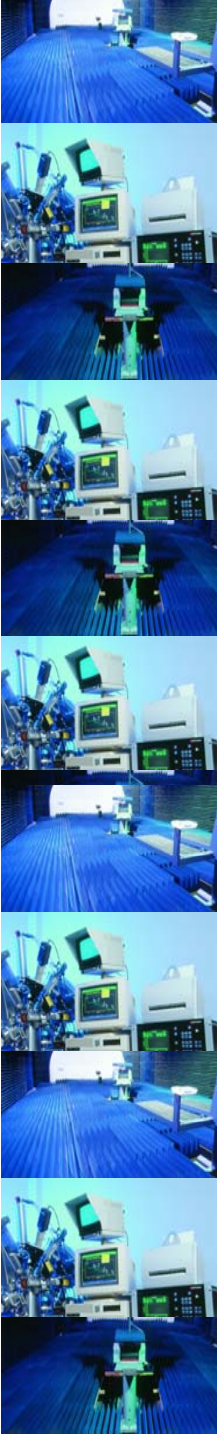




RIPPLE EFFECT:

IEEE STATISTICS





FEEDBACK

from the Department of EEC Engineering

Head of the Department



"The IEEE is the largest Institute in the world (all disciplines included)



IEEE is the sole or combined organiser of all important conferences on their fields of research



Access to all IEEE publications, therefore is very important to the department as well as other departments



One of the PhD students finished his studies earlier than expected, because of our access to the IEL



An IEEE member and previous member of the Executive Office of the University

- ☞ IEEE is an incredible resource. Very few people understand the huge volume of publications included in the IEEE transactions and proceedings
- ☞ With the Electronic Letters and IEE Proceedings added, it is one of the most powerful resources there is
- ☞ The platform is quite easy to use and the results are being presented in a user friendly manner.
- ☞ References can be gathered within a couple of weeks, that normally would have taken years. No serious researcher can do without this tool!



Another IEEE member



Since the availability of the IEEE Explore facilities, the level of research that our students do before tackling final year projects, has improved drastically



The accessibility of new papers relevant to their selected topics, and the ease with which these can be used to “dig down” for previous work has a great deal to do with the above.



Chair person of the IEEE student organisation



Access to the latest research and thoughts allows for cutting edge studies and can only help facilitate the learning process



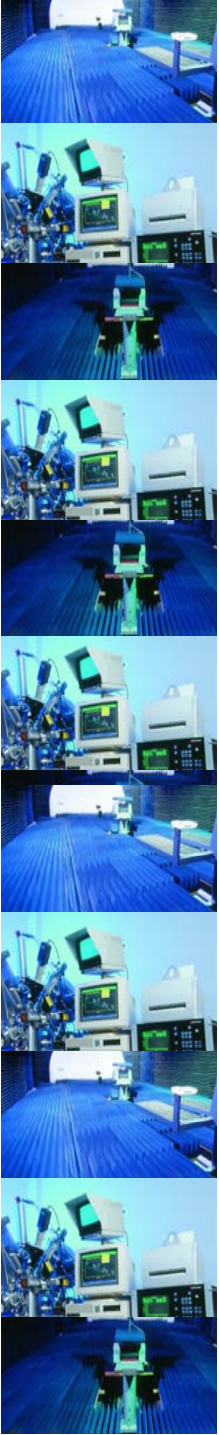
Final year students in the Department of EEC Engineering are required to research and reference at least three articles and material covered in IEEE publications for their project



Having access to the IEEE resources has allowed me to further my own education and my colleagues agree



As the Chairman for two years I have been able to use the fact that our library provides access to the IEEE resources as a drawing card for prospective members







**WHAT EFFECT DOES THIS HAVE
ON THE LIBRARY AND ITS
PERSONNEL?**

IMPLICATIONS FOR A NUMBER OF DEPARTMENTS WITHIN THE AIS

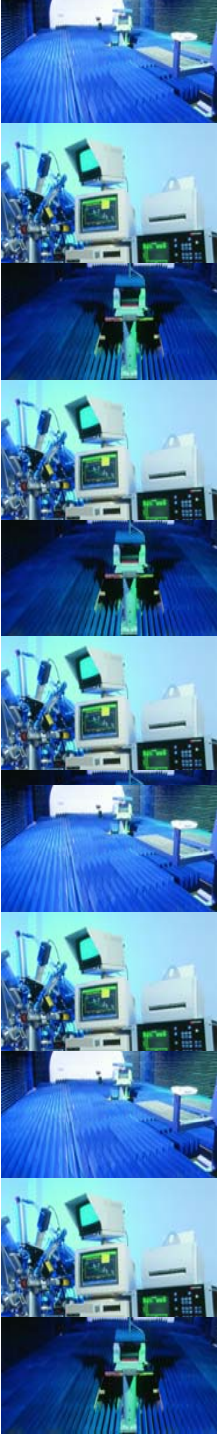
-  Interlibrary loans
-  Subscriptions to journals
-  The Binders
-  Physical facilities
-  Finances
-  Changing roles of personnel

THE CHANGING ROLE OF THE INFORMATION SPECIALIST

-  Information seekers to educators
-  Courses provided
-  Linkage of courses to web pages
-  Library training combined with assignments

CONCLUSION

- ☞ The IEL is one platform the University of Pretoria will not be easily able to go without
- ☞ It minimizes our client's stress and frustration levels by having all these information available
- ☞ Clients have an advantage over others



BIBLIOGRAPHY

- King, DW, Casto, J and Jones H, Communication by Engineers: a literature review of engineers' information needs, seeking processes, and use, Center for information studies, University of Tennessee, Aug. 1994.
- Leckie, GJ, Pettigrew KE and Sylvain C, Modeling the information seeking of professionals: a general model derived from research on engineers, health care professionals, and lawyers, *Library Quarterly*, vol 66, no. 2, 1996, pp 161-193