



MIDDLE EAST TECHNICAL UNIVERSITY

IATUL 2006 Conference / Porto, Portugal

May 22-25, 2006

Cost-Benefit Analysis of Electronic Information Resources: An Evaluation of the Middle East Technical University Library

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Middle East Technical University





OUTLINE

- Purpose of Cost-Benefit Analysis
- Overview of METU
- Data Sources and Methods
- Findings
- Conclusions and Recommendations



Purpose of the Cost-Benefit Analysis

- Provide Assessment for new trends
 - Increasing
 - number of electronic resources
 - amount of budget allocations to electronic resources
 - usage
- Informed/qualified services
 - collection management
 - user education
 - subscription/licensing of electronic resources



Overview of Middle East Technical University (For the year 2005)

Background

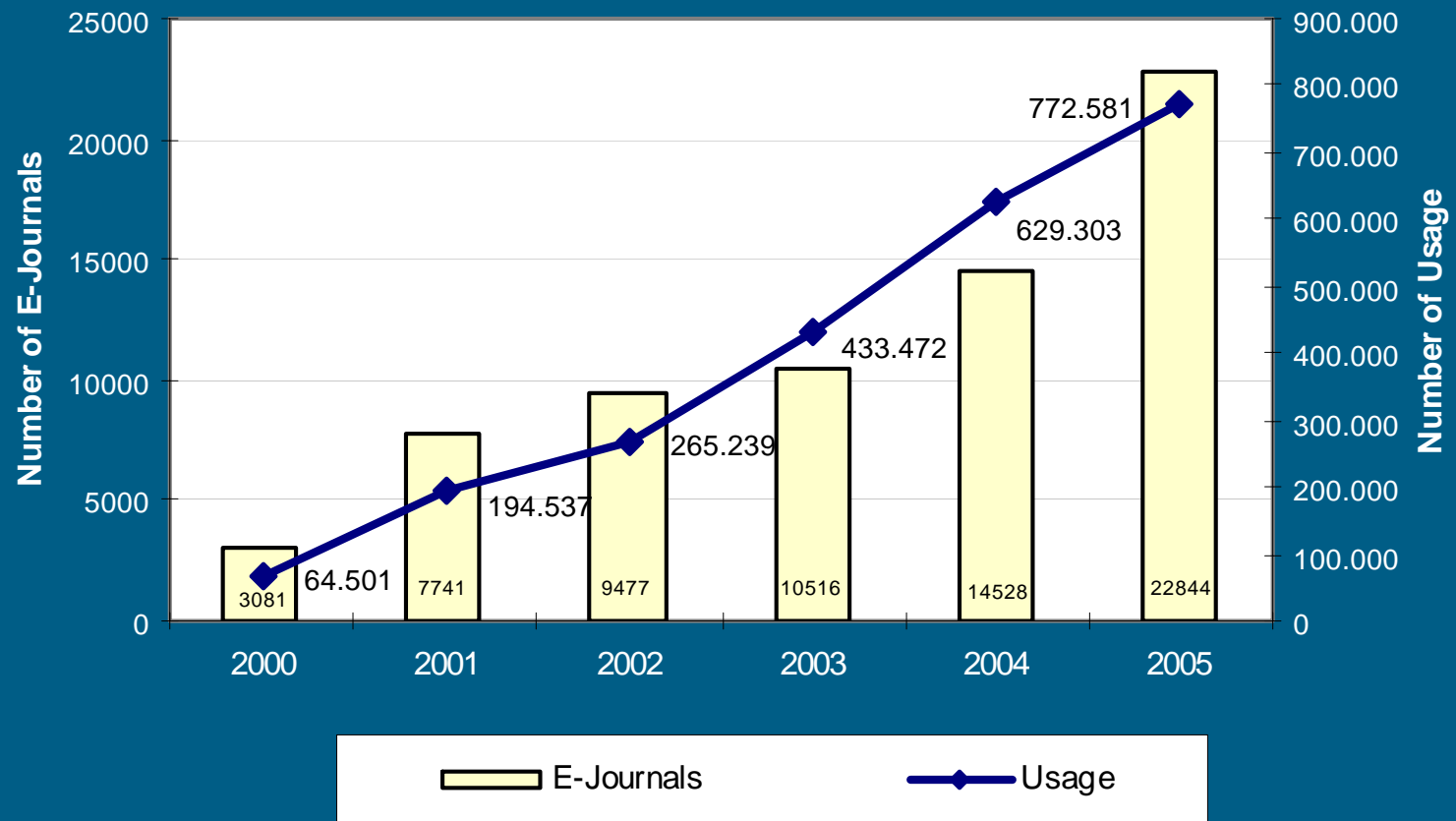
- Founded at 1956
- 12,269 Undergraduate students
- 3,980 Graduate students
- 2,860 Academic staff

E-Resources Collection

- Founder and Member of ANKOS
- 22,844 electronic journals
- 772,581 full text downloads



METU Evolution of Electronic Journals and Usage





Data Sources and Methods

Databases Analysed

- ScienceDirect
- EbscoHost
- Web of Science

Standards Methods

- COUNTER
- Bradford's Law of Scattering
 - Distribution of journal usage



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FINDINGS





ScienceDirect

Cost

- Based on print/electronic subscription
- Average cost of annual subscription: **\$501,269**

Usage

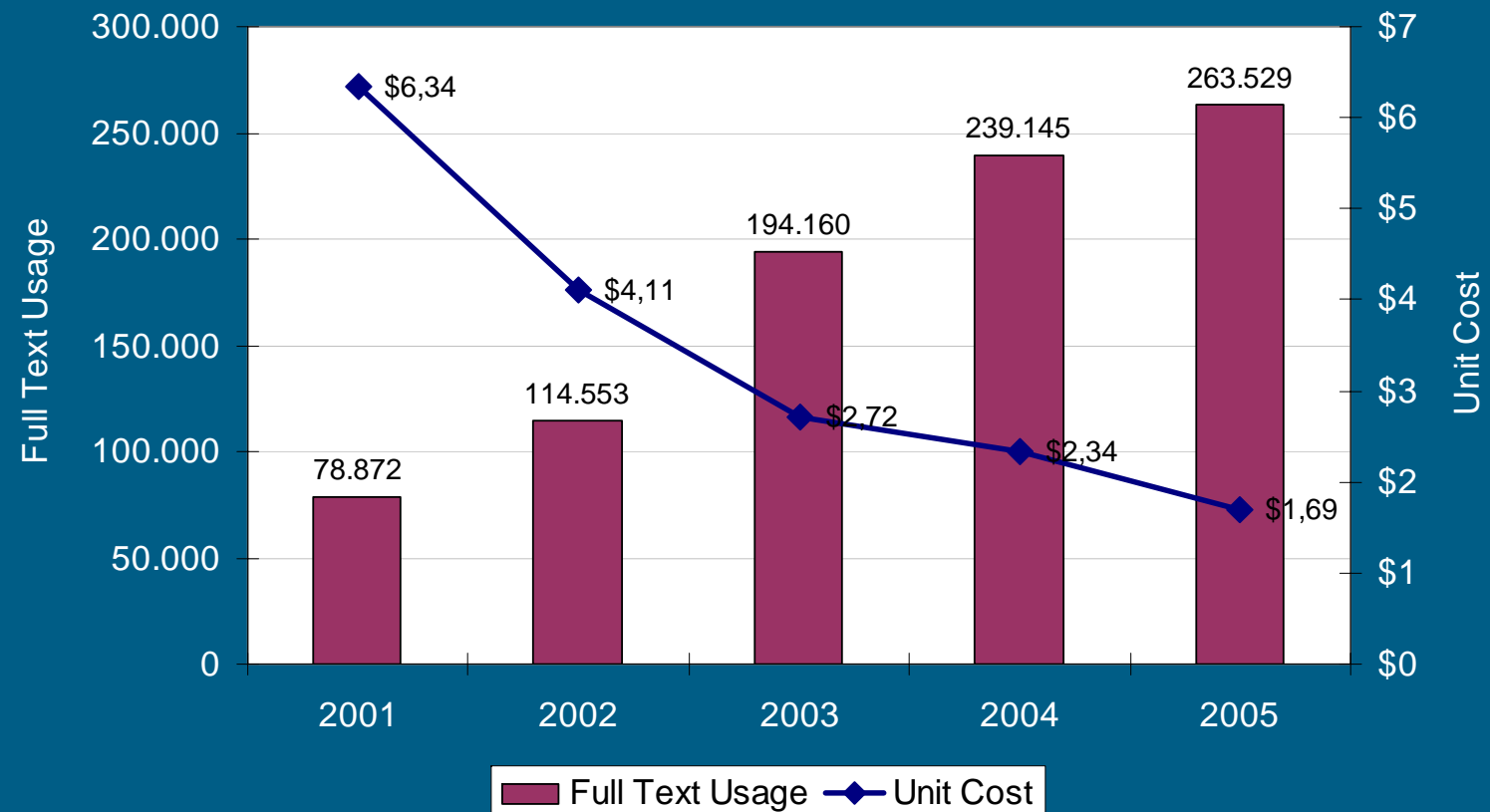
- Total number of full text downloads between 2001-2005: **865.875**

Unit Cost

- Average unit cost by years (2001-2005): **\$3.44**



ScienceDirect Usage and Unit Cost By Years





EbscoHost

Cost

- Fixed Prices for packages
- Average cost of annual subscription: **\$40,386**

Usage

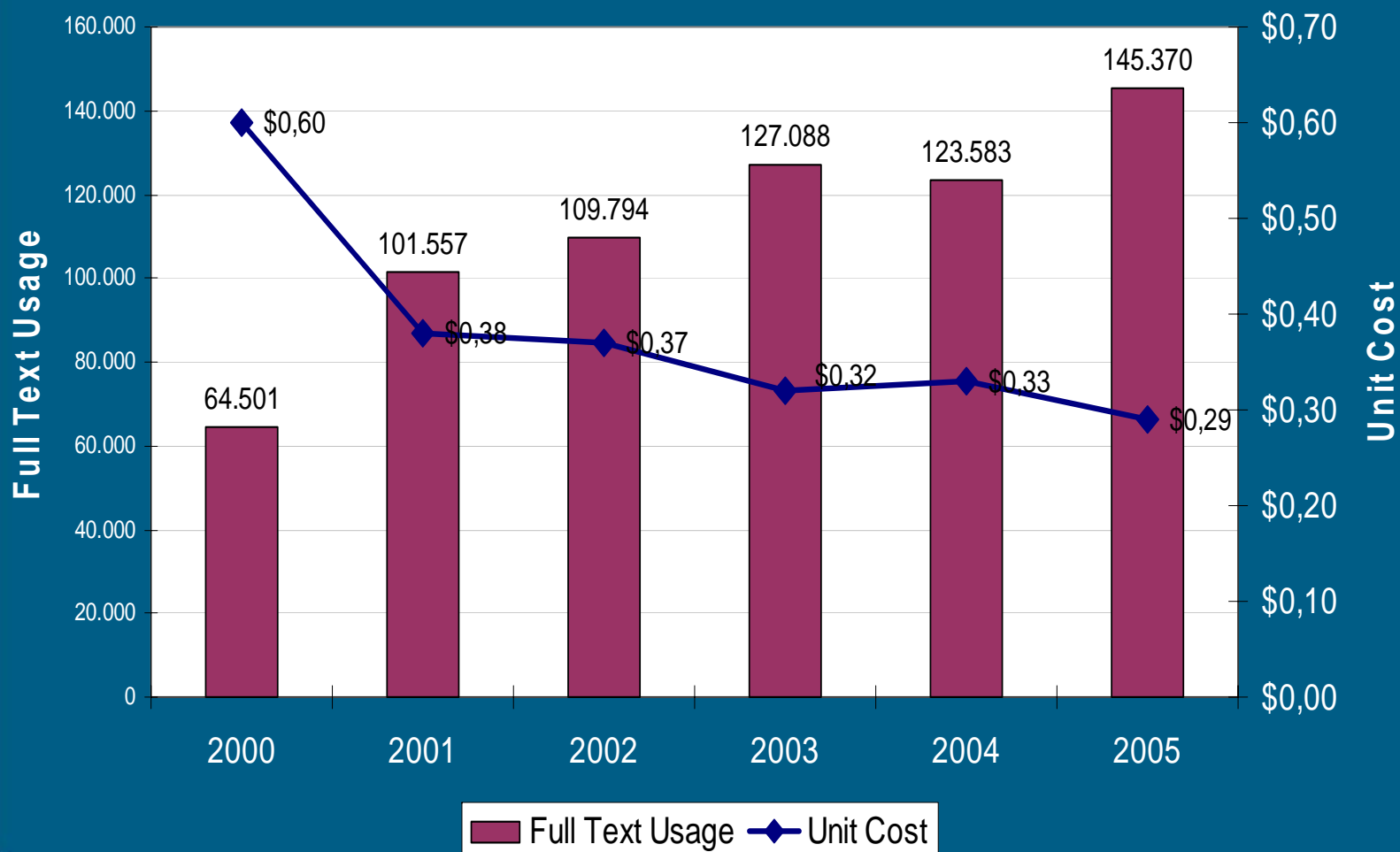
- Total number of full text downloads between 2000-2005: **671,893**

Unit Cost

- Average unit cost by years (2000-2005): **\$0.38**



EbscoHost Usage and Unit Cost By Years





Web of Science

Cost

- Based on FTE numbers of universities
- Average cost of annual subscription: **\$24,150**

Usage

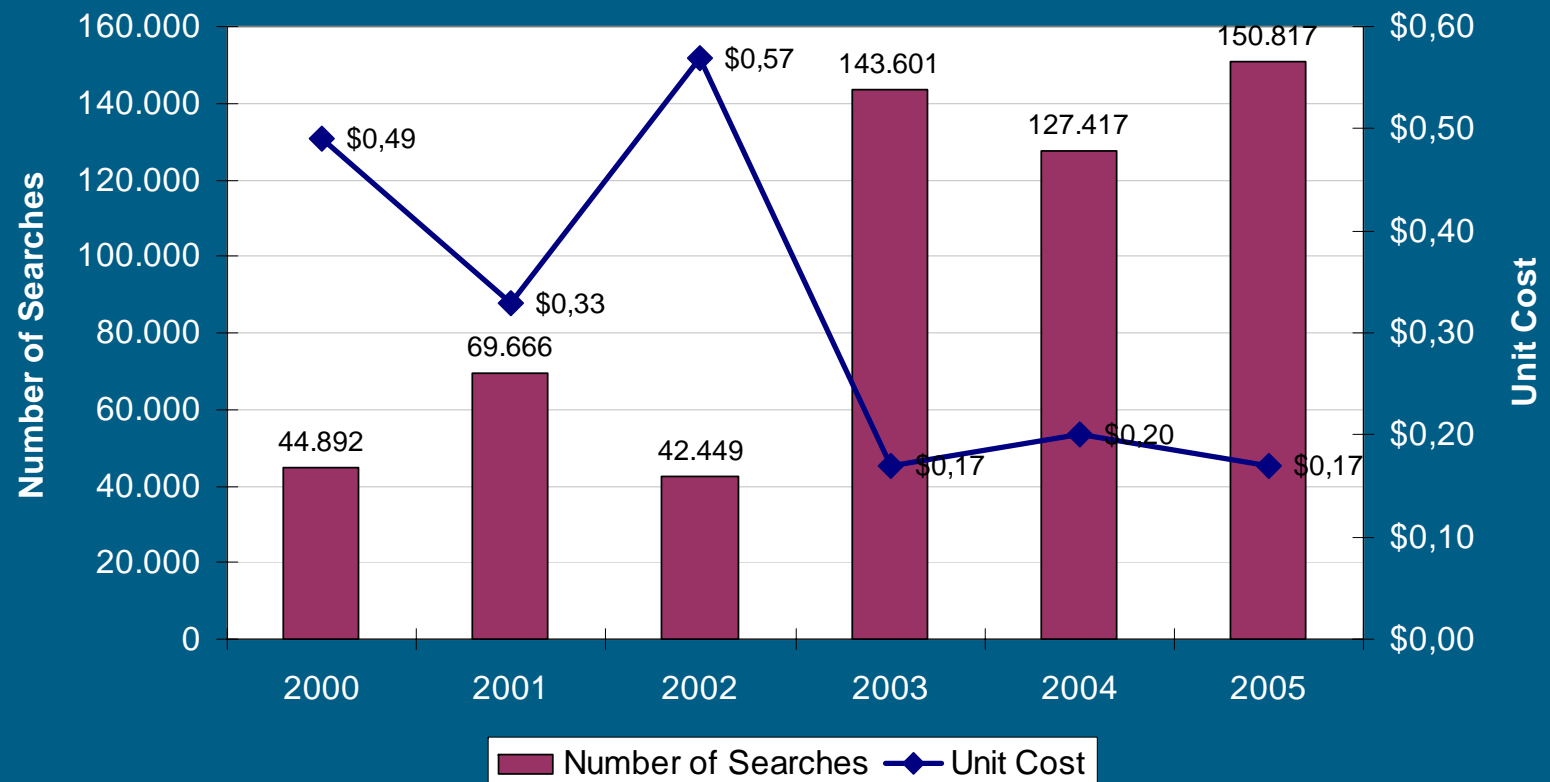
- Total number of searches between 2000-2005: **578,842**

Unit Cost

- Average unit cost by years (2000-2005): **\$0.32**



Web of Science Usage and Unit Cost By Years





The Effects of Cost and Usage of Universities within the ANKOS Consortium

Cost

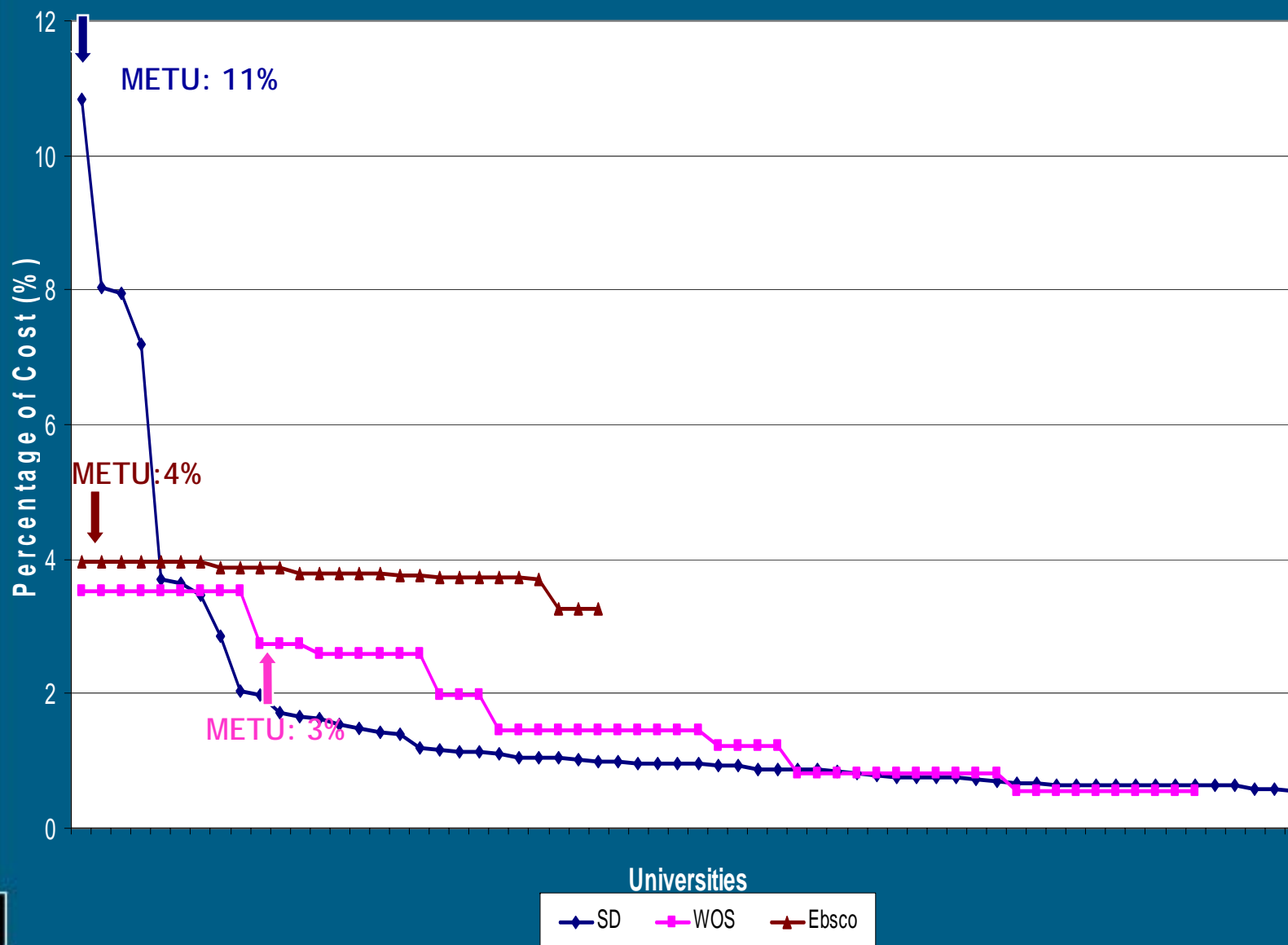
- Print/electronic holding value
- Size of universities

Usage

- Subject areas of universities
- User services
- Usage patterns

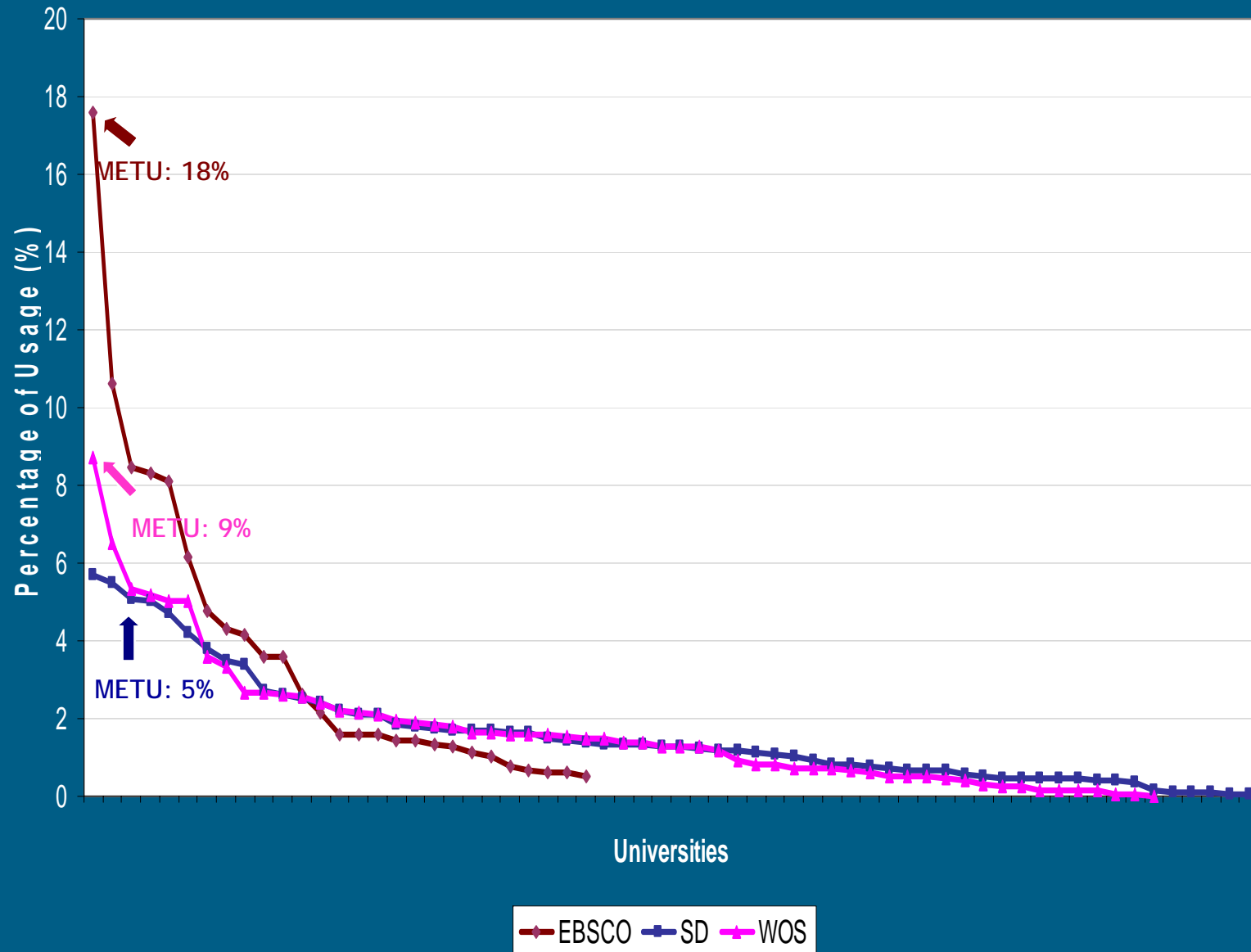


Cost Distribution Among the Universities within ANKOS (%)





Usage Distribution Among Universities within ANKOS (%)





Comparison of Unit Costs of METU and ANKOS Member Libraries

ScienceDirect

- Average Unit Cost of ANKOS members: \$1.79
- Unit Cost of METU: \$1.69

EbscoHost

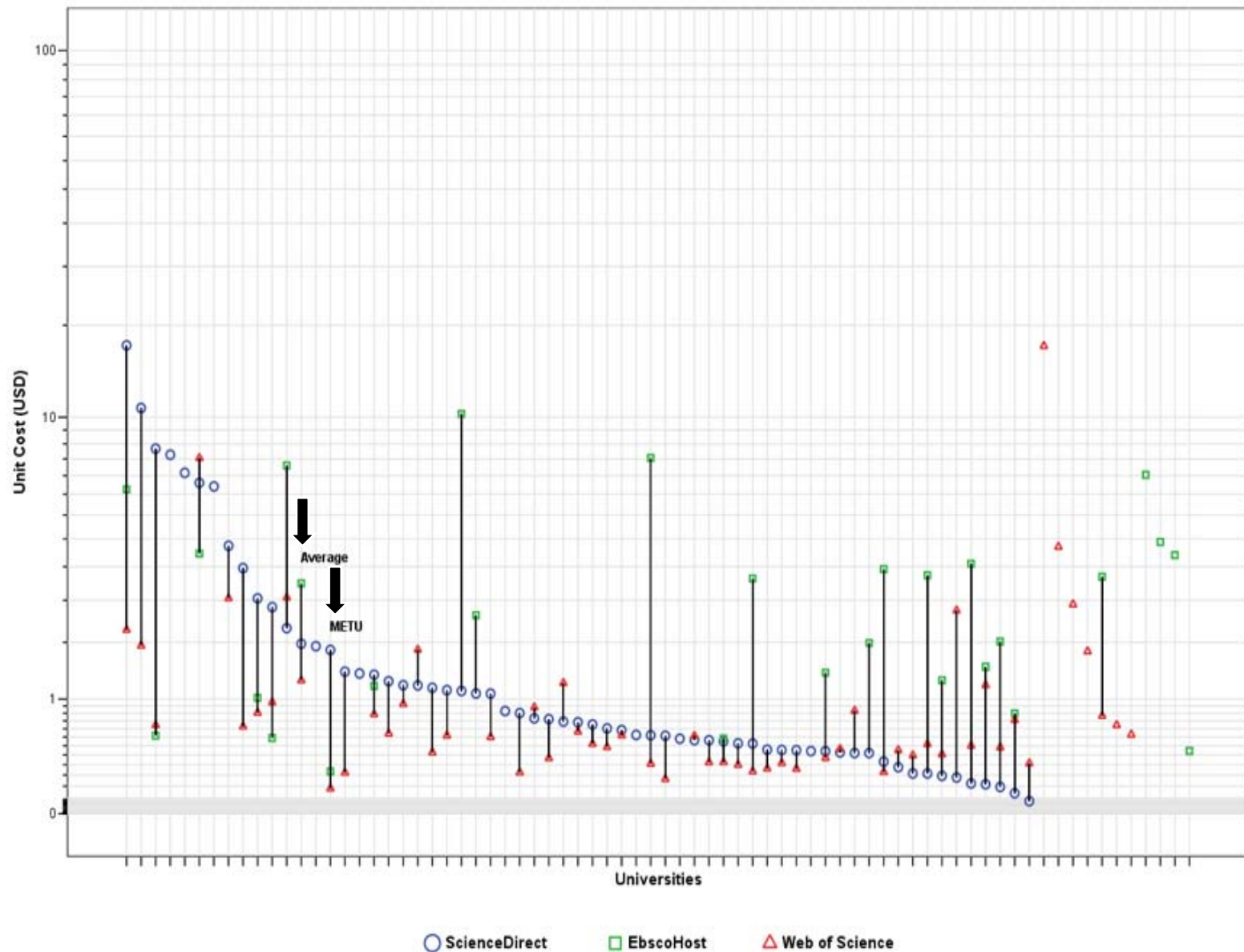
- Average Unit Cost of ANKOS members: \$3.09
- Unit Cost of METU: \$0.29

Web of Science

- Average Unit Cost of ANKOS members: \$1.24
- Unit Cost of METU: \$0.17



Average Unit Costs of ANKOS Member Libraries by Databases



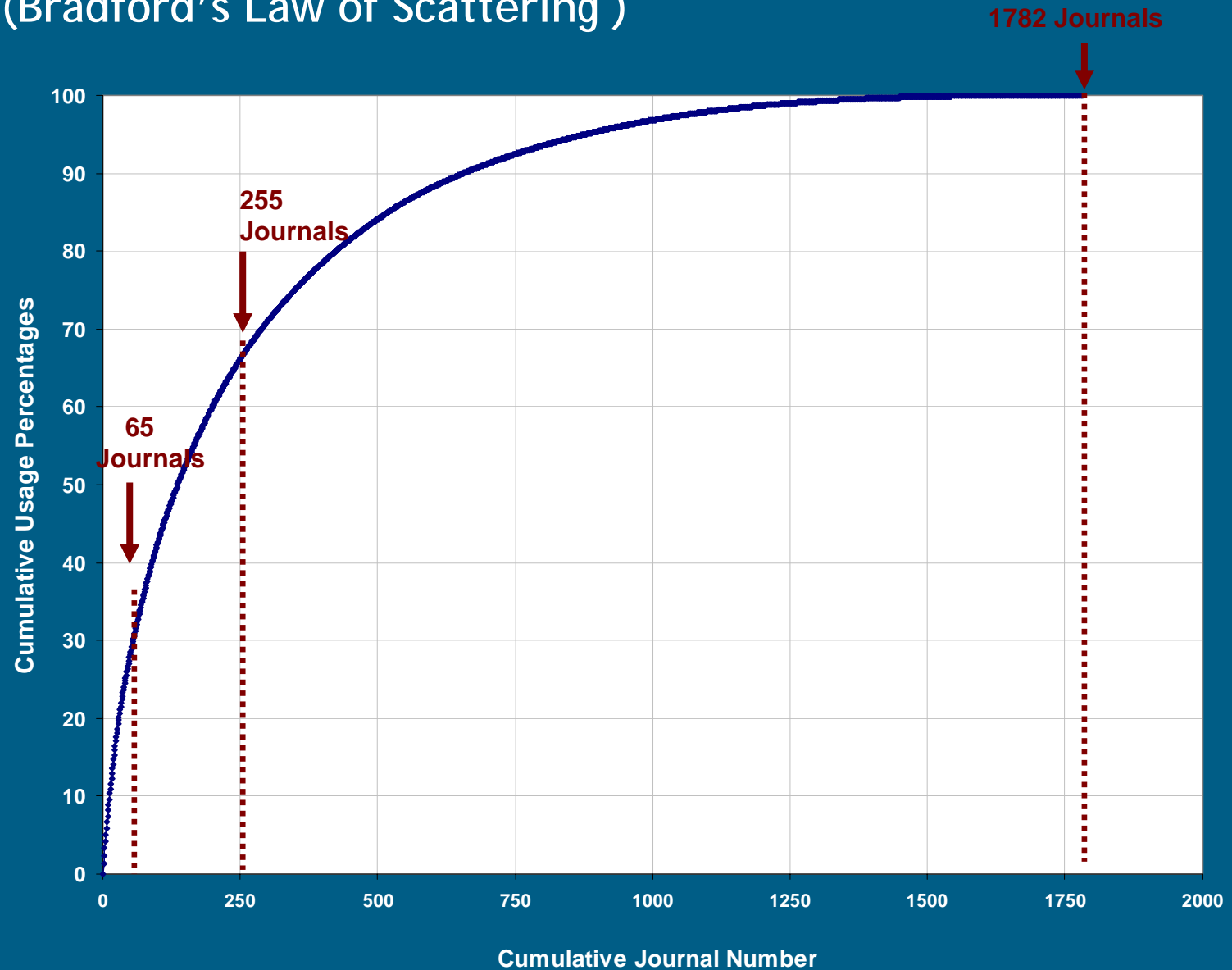


Distribution of Electronic Journal Usage

- Core journals satisfy the majority of usage
 - 34 journals (2%) 53,663 usage (22.4%)
- Majority of journals are used infrequently
 - 884 journals (52.9%) 16,169 full-text usage (6.7%)
- For Subject Areas
 - Chemistry, Chemical Engineering, Energy, Engineering has the highest usage
 - Nursing, Psychology, Medicine has the lowest usage



ScienceDirect Number of Journals By Cumulative Usage (Bradford's Law of Scattering)





Distribution of METU Usage by Subject Area (ScienceDirect, 2004)

- Chemistry %10
- Chemical Engineering %10
- Energy %9
- Earth Sciences %9
- Engineering %7
- Environmental Sciences %6
- Physics %6
- Decisions Sciences %5
- Materials Sciences %5
- Agriculture %4
- Mathematics %4
- Biochemistry %4
- Computer Sciences %3
- Business %3
- Economy %3
- Pharmacology %2
- Immunology %2
- Neurology %2
- Art %2
- Veterinary %2
- Social Sciences %1
- Medicine %1
- Psychology %1
- Nursing %0



CONCLUSIONS

Cost/Usage

- METU pays the highest license fees among ANKOS member libraries
- METU has the highest number of use among ANKOS member libraries.
- Unit cost of METU is below than those of ANKOS member libraries

Collection Management

- Few highly used journal titles satisfy the majority of use



RECOMMENDATIONS

Consortium

- Justification for Cost Distribution Among ANKOS Member Libraries
- Usage Based Decisions
 - Title based usage
 - Unit cost

Institutional

- Long Term Evaluation
- Usage Based Services Development
 - License/Acquisition Services
 - User Services



With thanks...

- Data used in this presentation comes from my master's thesis.
- Thanks go to
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