

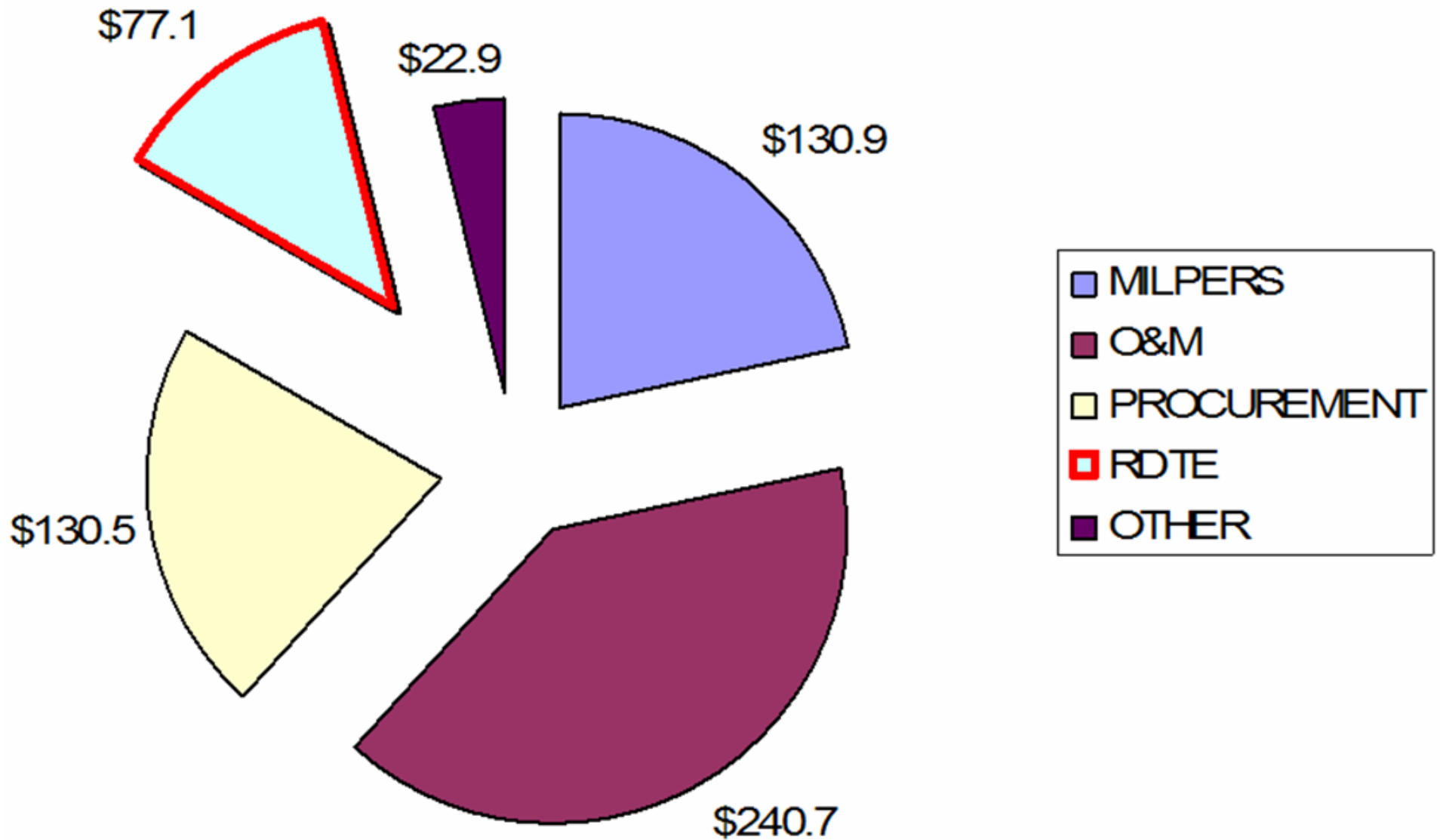


Acquisition Research Program: Creating Synergy for Informed Change

The Crossing

LT Suzanne L. Schang

President's DoD Budget Authority FY07 (\$601.9B)



Agenda

1. **Coordination**
2. **Complications**
3. **Command and Control?**
4. **End-User Issues**
5. **Case studies**
6. **Graphs**

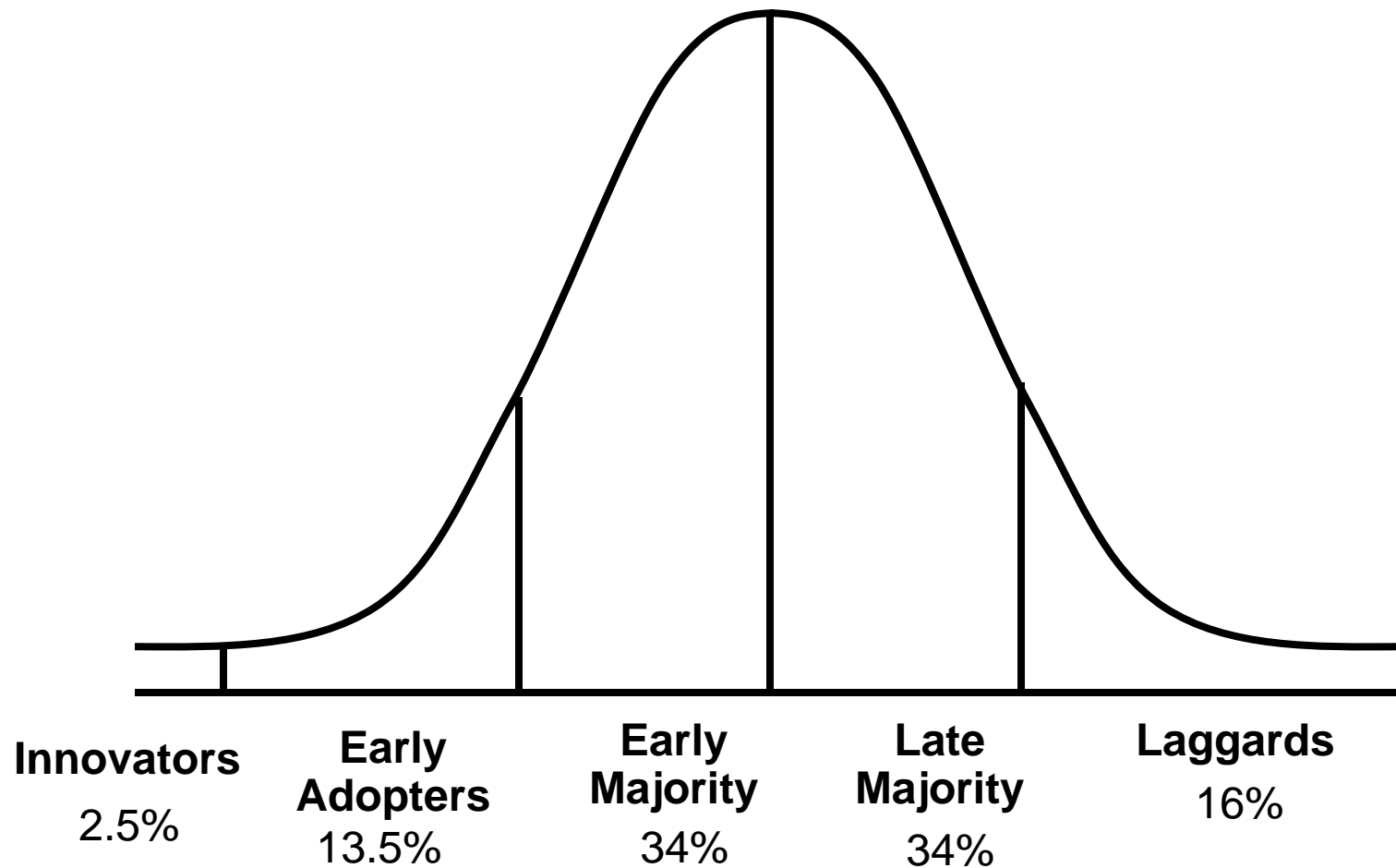


1. Coordination

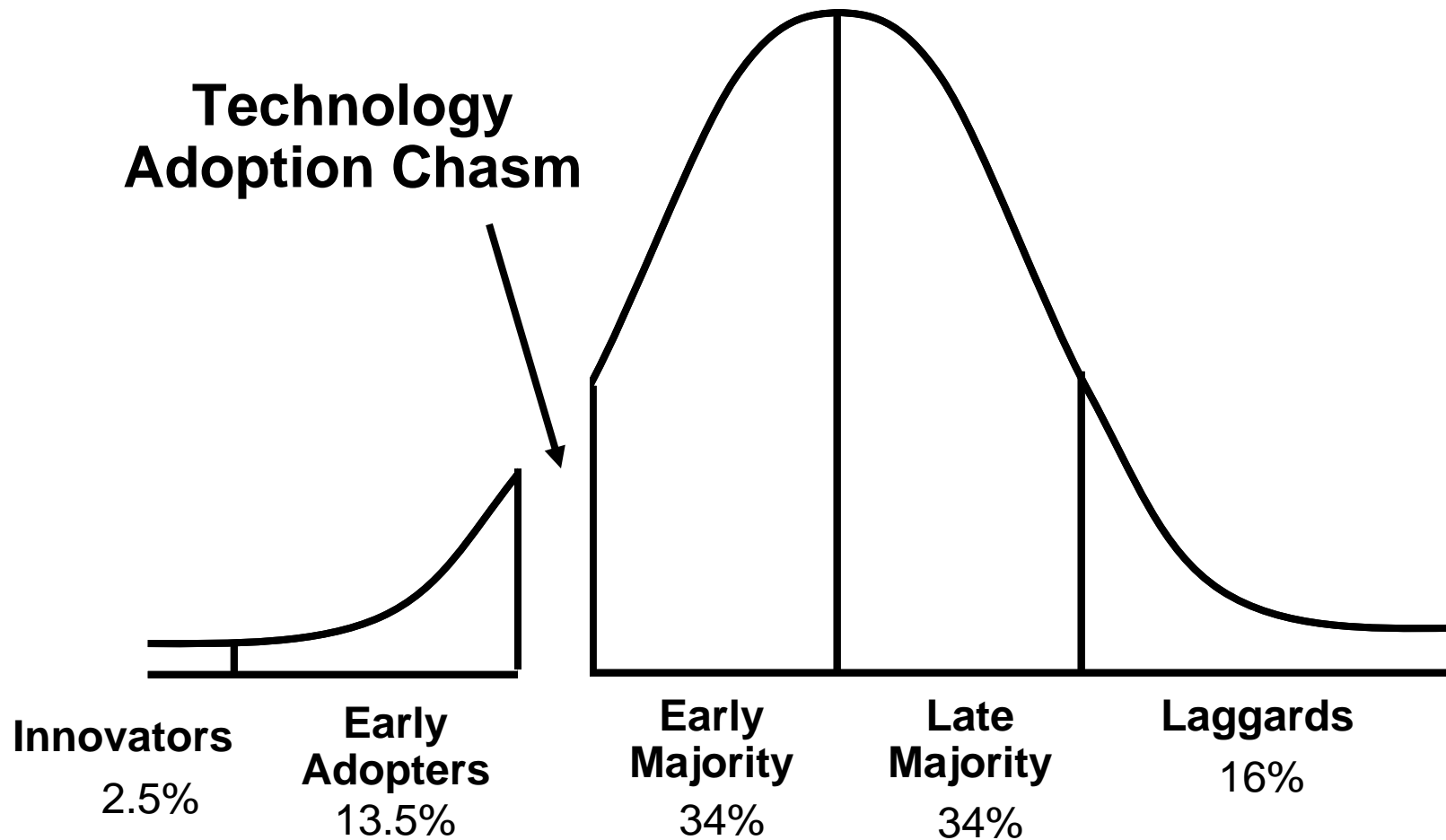
- **Externalities**
- **Network Externalities**
(Direct and Indirect)
- **The Telephone**
- **VHS versus Beta VCRs**
- **TAL and The Chasm**



Technology Adoption Life Cycle (TAL)



Technology Adoption Life Cycle (TAL)



2. Complicated

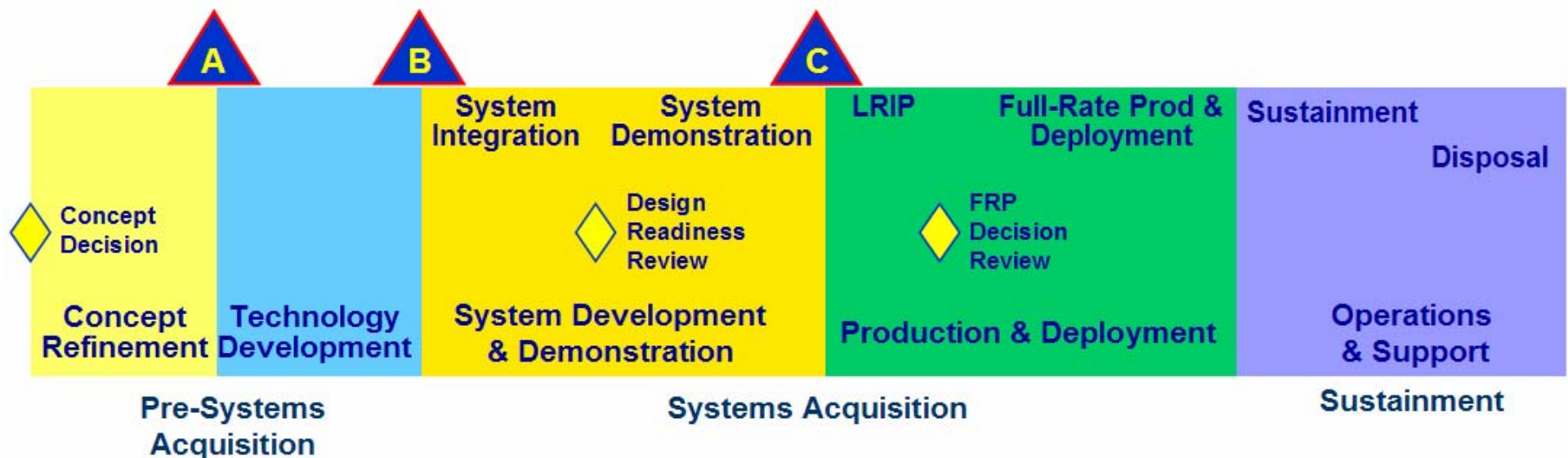
- **Decision-Maker / Buyer / End-User Chain**
- **Benefits > Costs ???**
- **DoD Acquisition Process**
- **AS&C Office**
- **JCTD Program**



The Defense Acquisition Management Framework

Technology Opportunities & User Needs

- Process entry at Milestones A, B, or C
- Entrance criteria met before entering phases
- Evolutionary Acquisition or Single Step to Full Capability



Initial Capabilities Document (ICD)

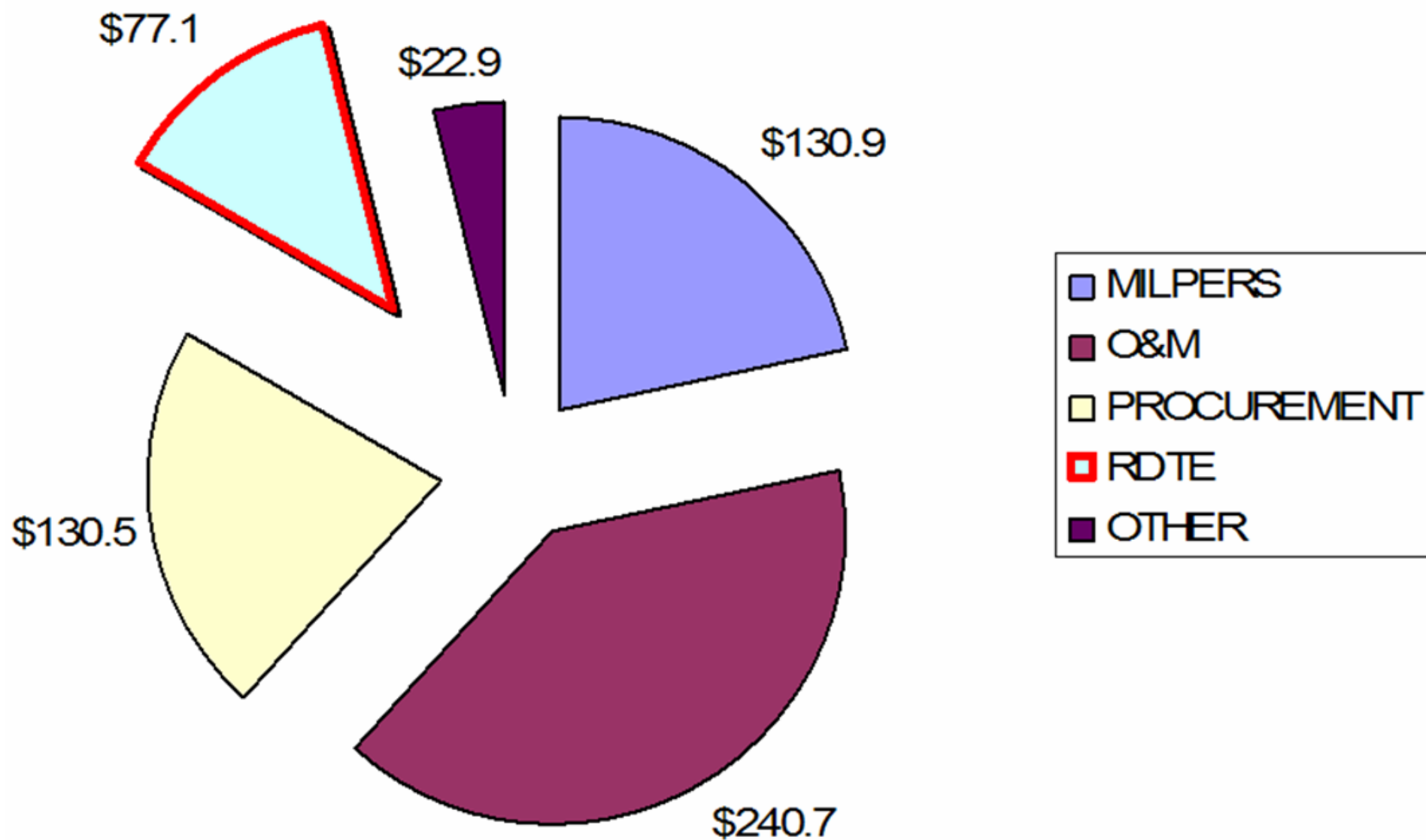
Capability Development Document (CDD)

Capability Production Document (CPD)

Validated & approved by requirements Validation Authority

Relationship to Joint Capabilities Integration & Development System

President's DoD Budget Authority FY07 (\$601.9B)



FY 2007 RDT&E President's Budget Request

DDR&E/AS&C Transition Programs are Highly Leveraged across Service and Agency Budgets
Less than 1% of RDT&E each year

Components (All RDT&E)	\$B
USA	10.9
USAF	24.4
USN/USMC	16.9
Def Agency & SOCOM	20.8

(BA6 + BA7 = \$27.23B)

Development
(BA4 + BA5 = \$34.66B)

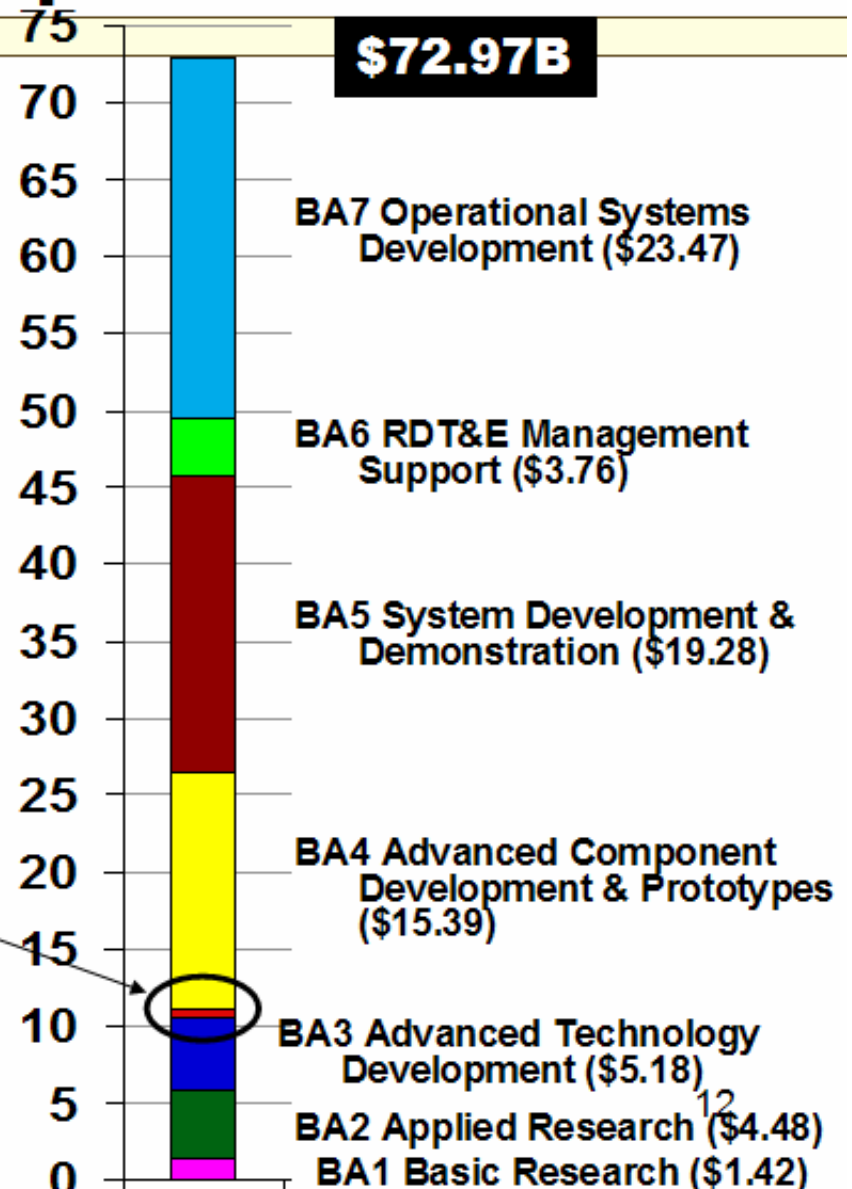
DDR&E/AS&C Total is \$0.553 B

(Includes USJFCOM \$0.220B)

Technology Base
(BA1 + 2) = \$5.90B

Science and Technology
(BA1 + BA2 + BA3 = \$11.08B)

15% of RDT&E

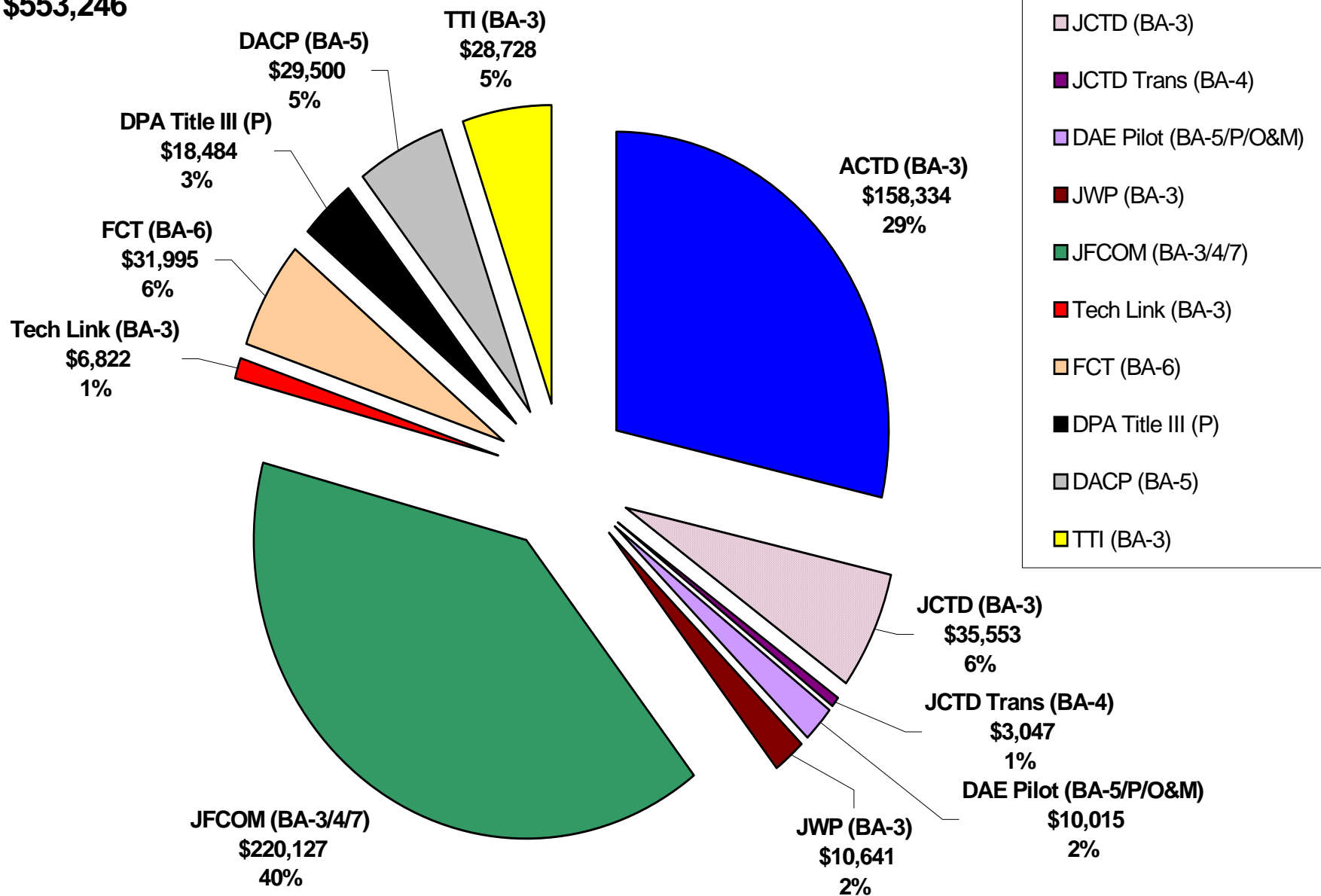


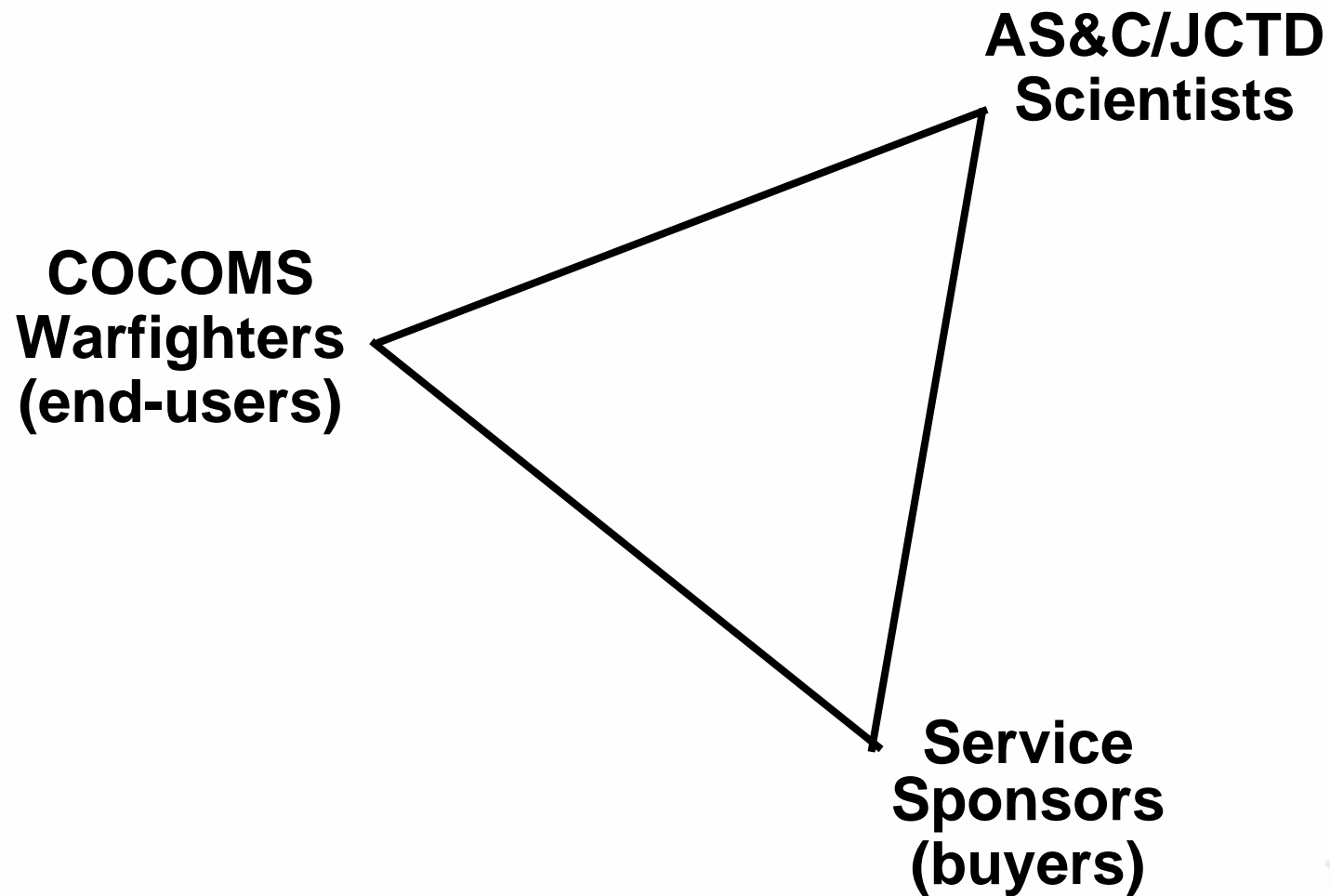
FY 2007 AS&C Direct Resource Oversight

Total PresBud (\$000)

\$553,246

FY 2007 PBR (Feb 2006)





UNIFIED COMMAND PLAN

THE WORLD WITH COMMANDERS' AREAS OF RESPONSIBILITY



3. C2?

- **Command and Control solution?**
- **Aligning incentives**
- **End-user issues**



4. End-User Issues

- **control**
- **mission and pressures**
- **misaligned incentives**
- **management commitment**
- **technology champion**
- **complementary goods**



5. Case Studies

- **Civilian**

- CASE (technology with org externalities)
- HTAs (technology with org externalities)
- QWERTY (indirect network technology)
- **RFID (direct and indirect network technology with org ext)**

- **Military**

- NMCI (direct network technology with org ext)
- **RFID (direct and indirect network technology with org ext)**



6. Graphs

(1) Situation One

- there are no externalities to complicate the situation
- buyer is the same as the end-user

(2) Situation Two

- there are organizational externalities involved
- each end-user's benefit is determined only by his/her own adoption decision, but some external benefits accrue to the organization as more end-users adopt

(3) Situation Three

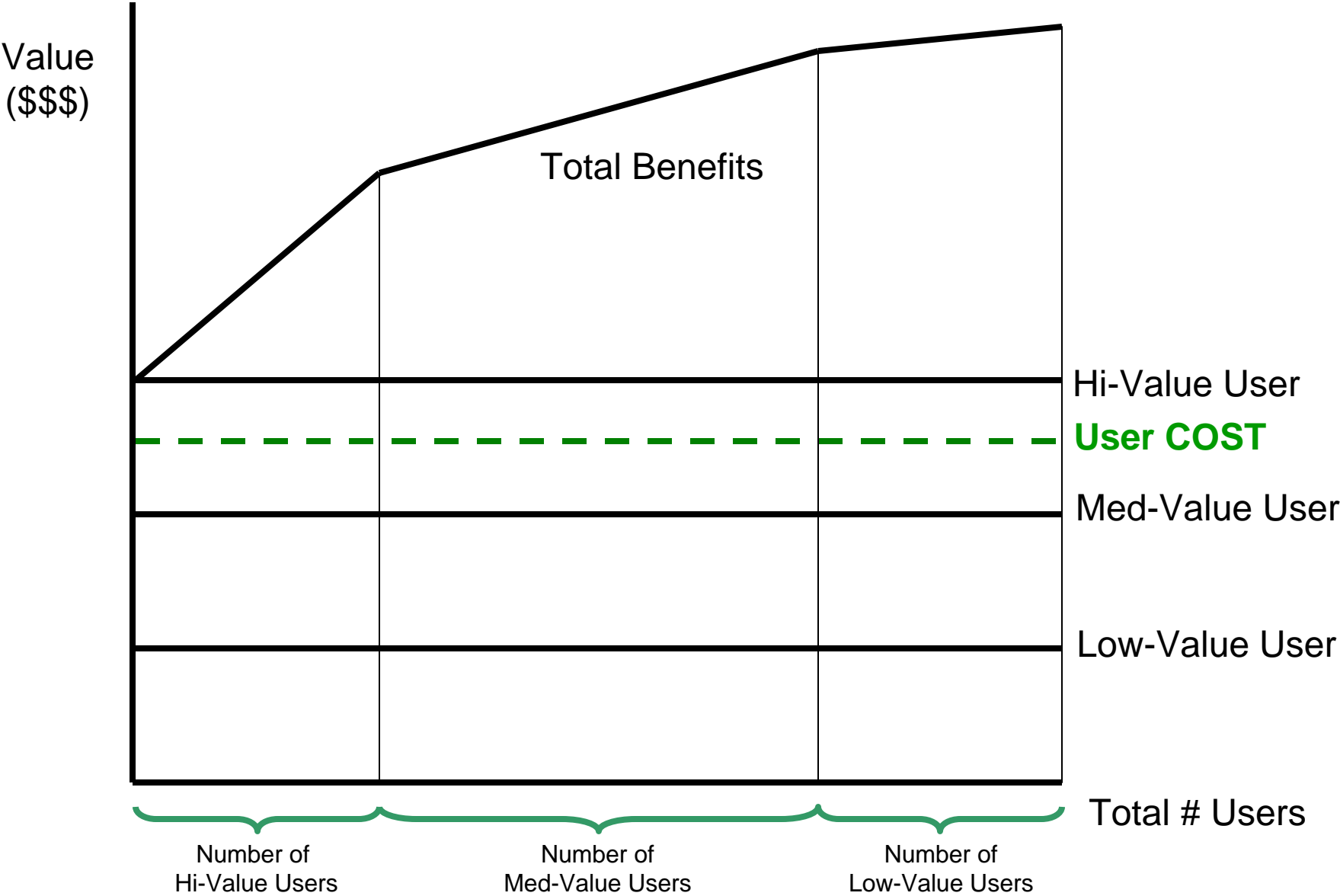
- there are direct network externalities involved (value depends on size of user-base)
- buyer and the end-user are different entities

(4) Situation Four

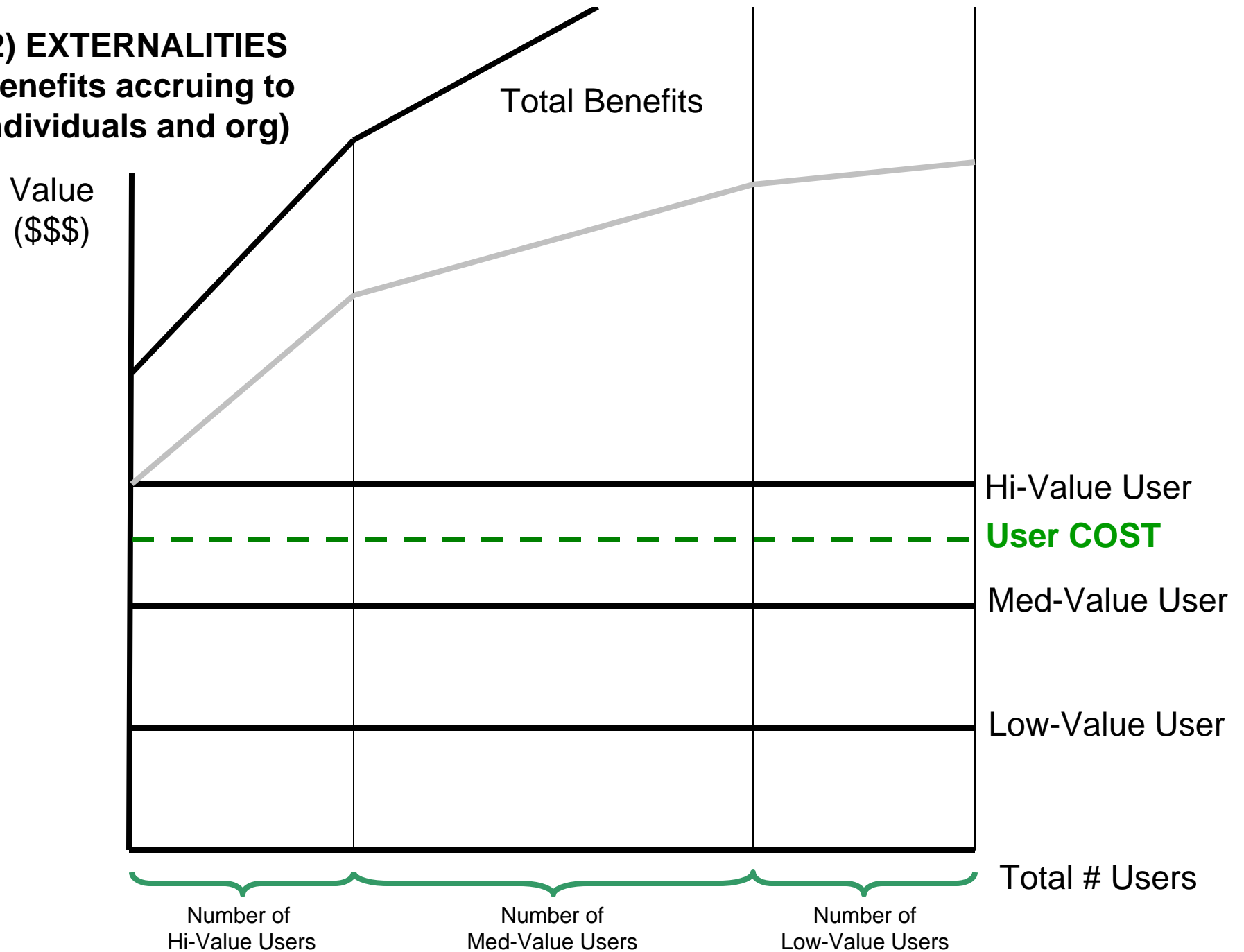
- there are indirect network externalities involved (value depends on number of complementary goods available which affects the size of the user-base)
- buyer and the end-user are different entities



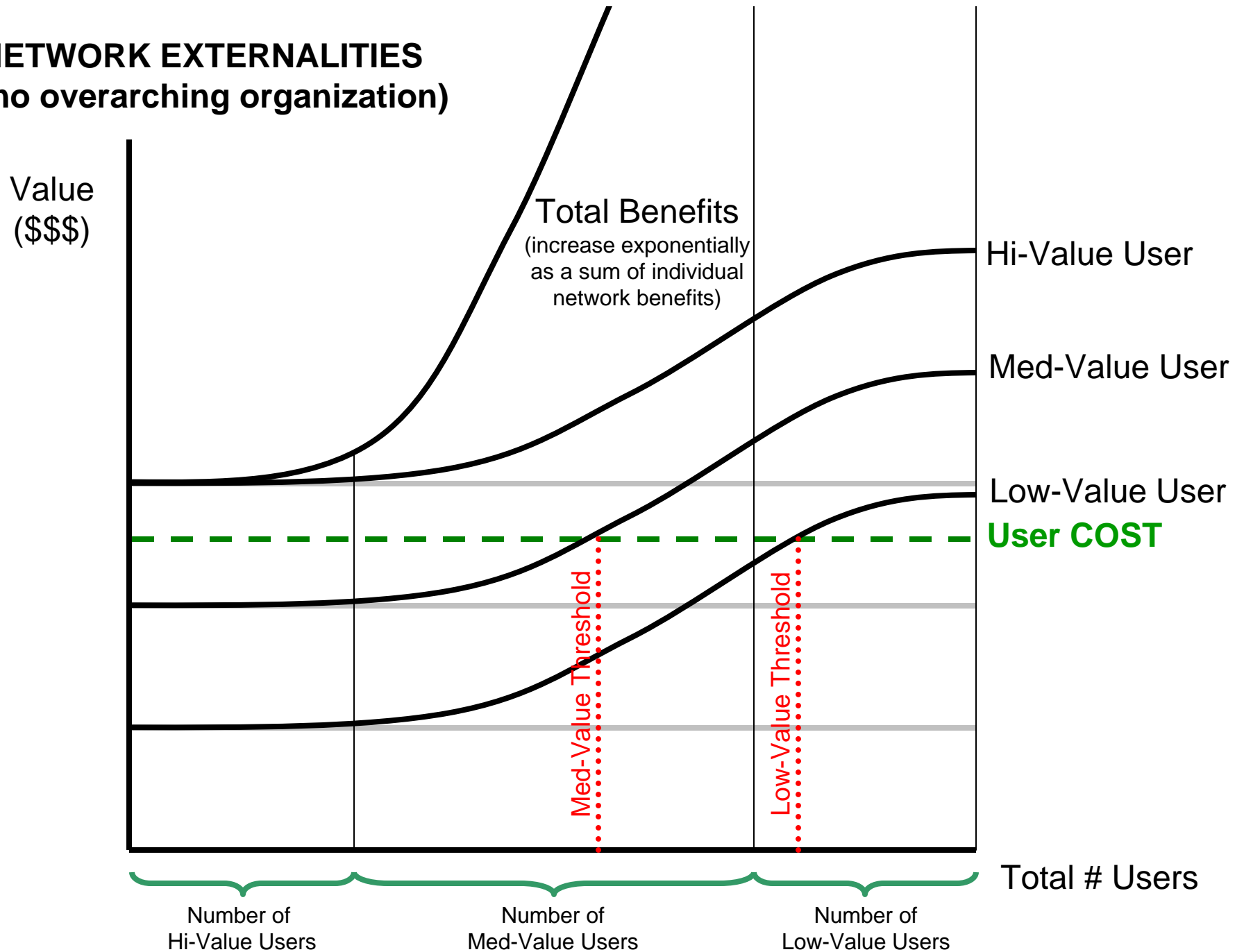
(1) NO EXTERNALITIES



(2) EXTERNALITIES
(benefits accruing to
individuals and org)

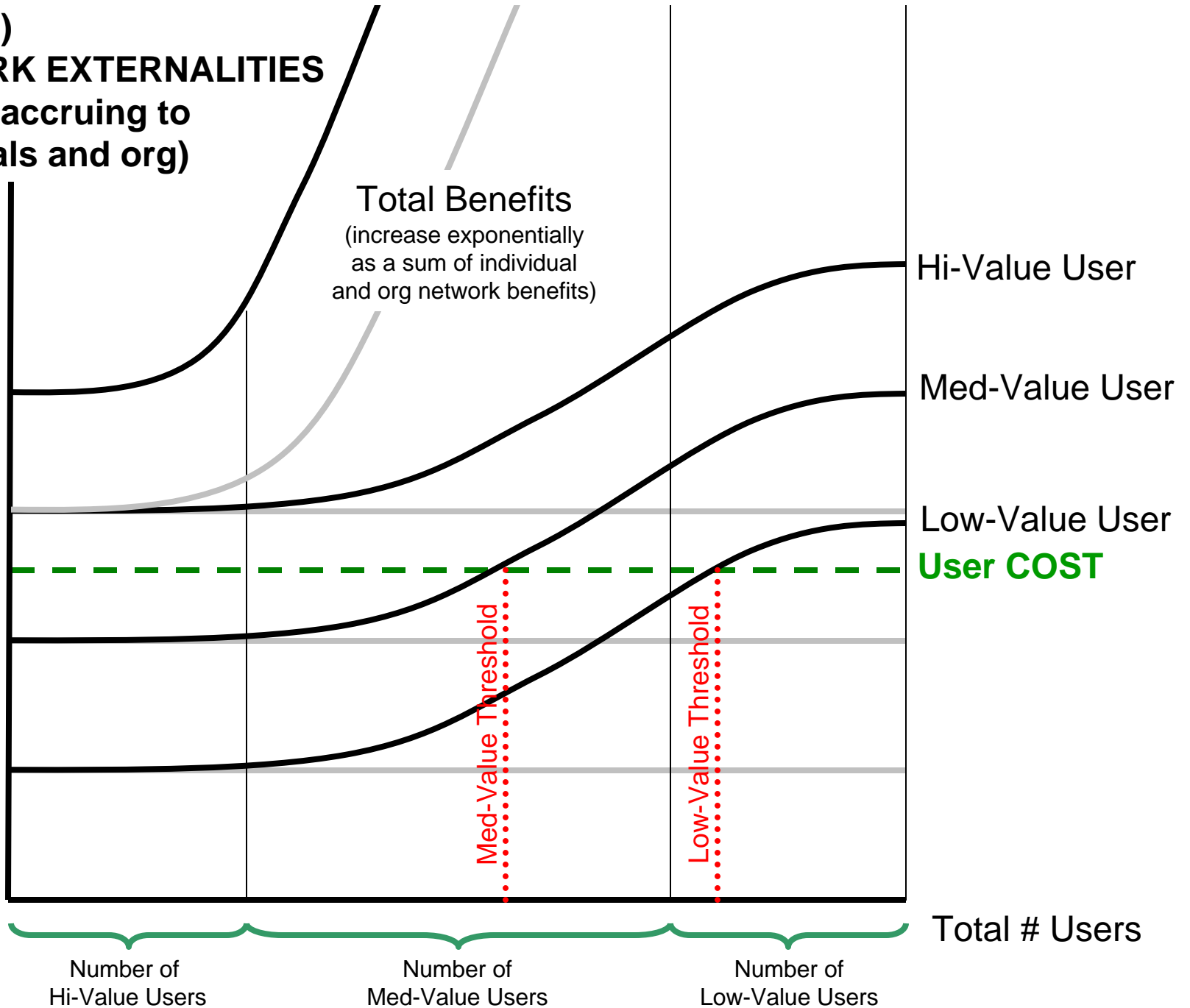


NETWORK EXTERNALITIES (no overarching organization)



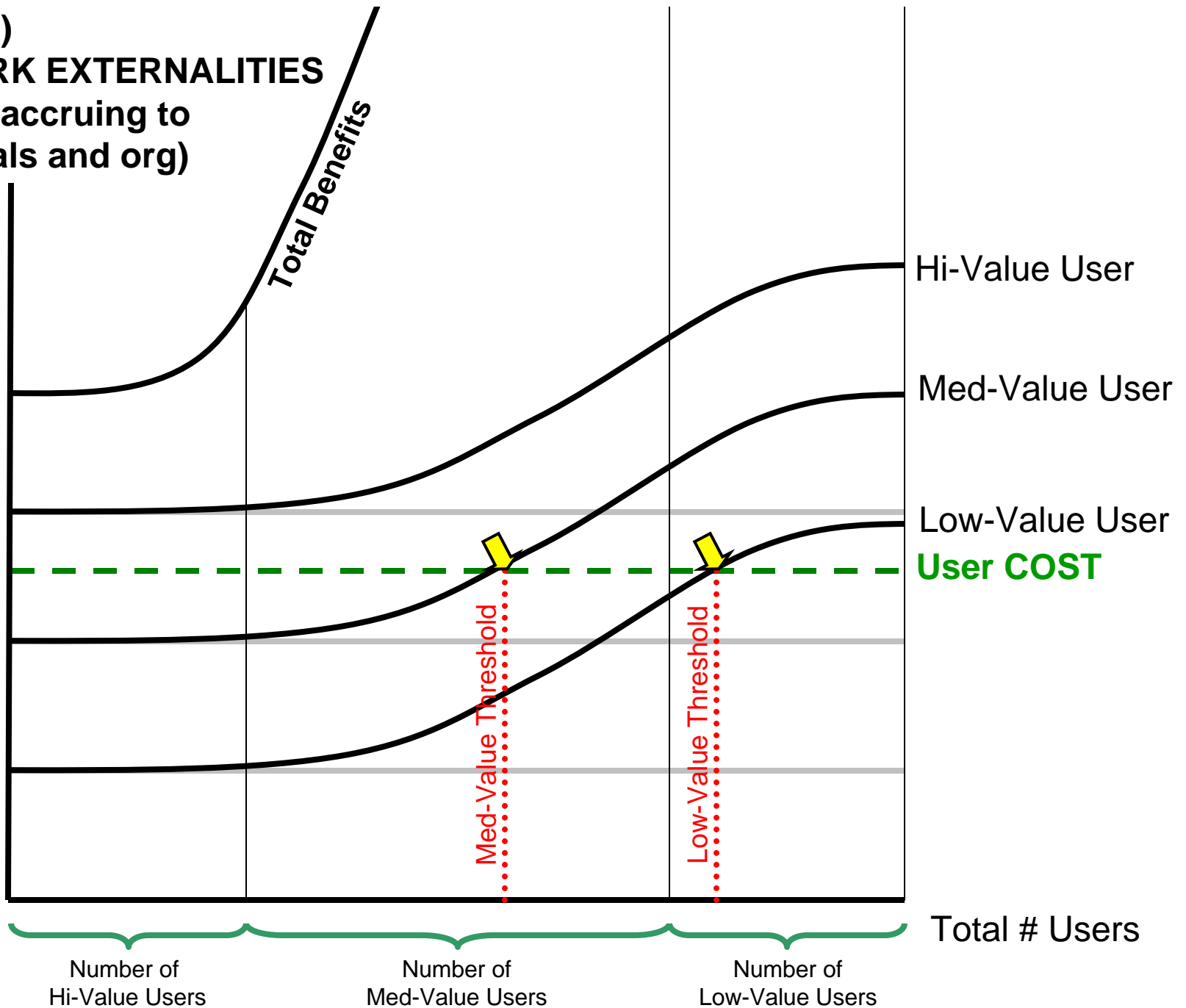
(3) and (4)
NETWORK EXTERNALITIES
(benefits accruing to
individuals and org)

Value
(\$\$\$)



(3) and (4)
NETWORK EXTERNALITIES
(benefits accruing to
individuals and org)

Value
(\$\$\$)



Recap: End-User Issues

- **control**
- **mission and pressures**
- **misaligned incentives**
- **management commitment**
- **technology champion**
- **complementary goods**



Conclusion

- 1. Coordination**
- 2. Complications**
- 3. Command and Control?**
- 4. End-User Issues**
- 5. Case studies**
- 6. Graphs**





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Questions?