DARPA

DARPATech

2002 Symposium

Transforming Fantasy

DARPA

Anthony J. Tether

Director,

Defense Advanced
Research Projects Agency

Transforming Fantasy

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Director, Tony Tether

Information Exploitation
Richard Wishner
Steven Welby
Robert Tenney

Tactical Technology
Allen Adler
Art Morrish

Special Projects
Amy Alving
Joe Guerci

Advanced Technology
Tom Meyer

Information Awareness
John Poindexter
Robert Popp

Defense Sciences
Michael Goldblatt
Steven Wax

Information Processing Technology
Ron Brachman
Zach Lemnios

Microsystems Technology
Robert Leheny
Dave Honey

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After Four Years at DARPA

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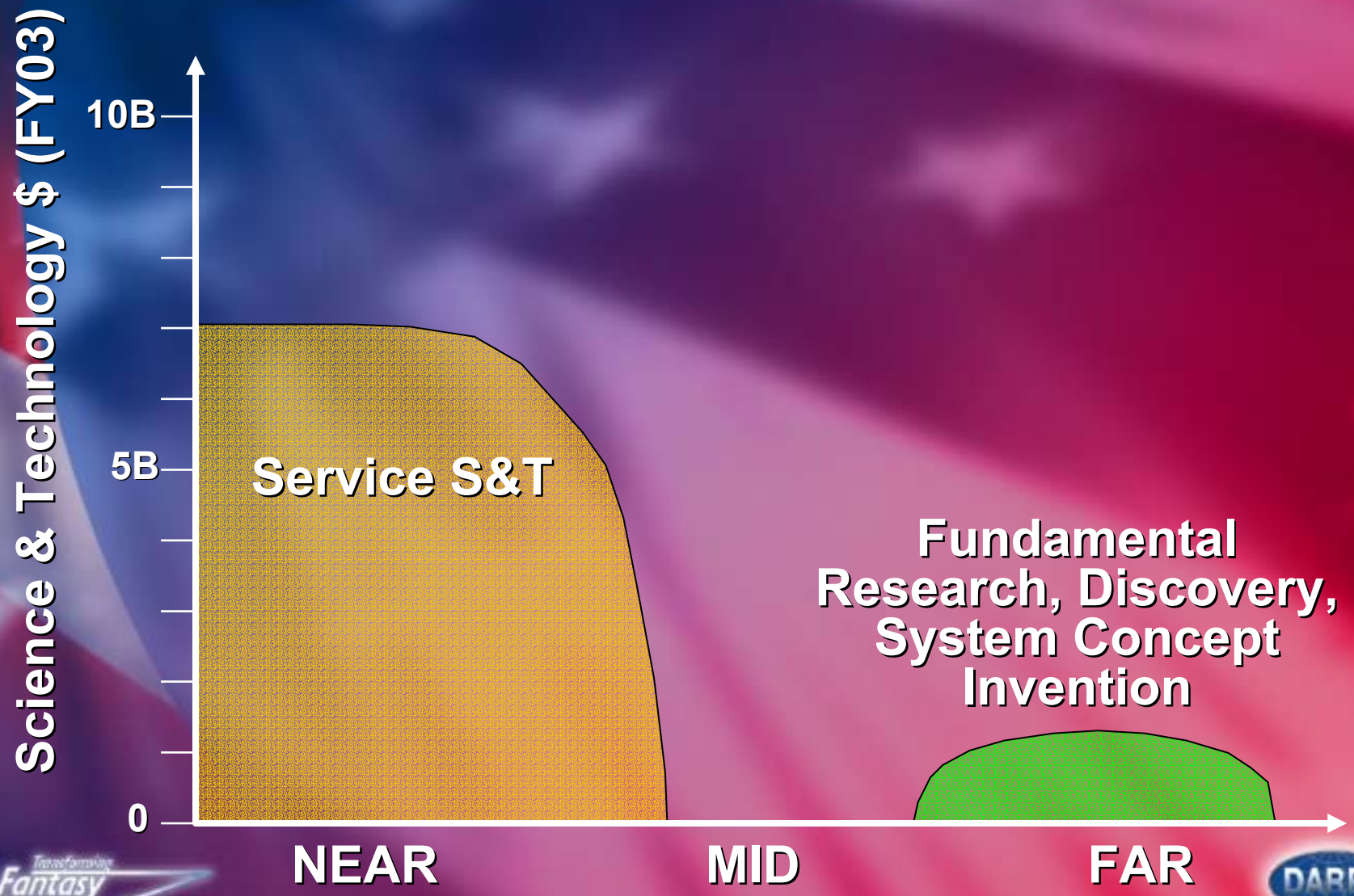
DARPA Role in Science & Technology



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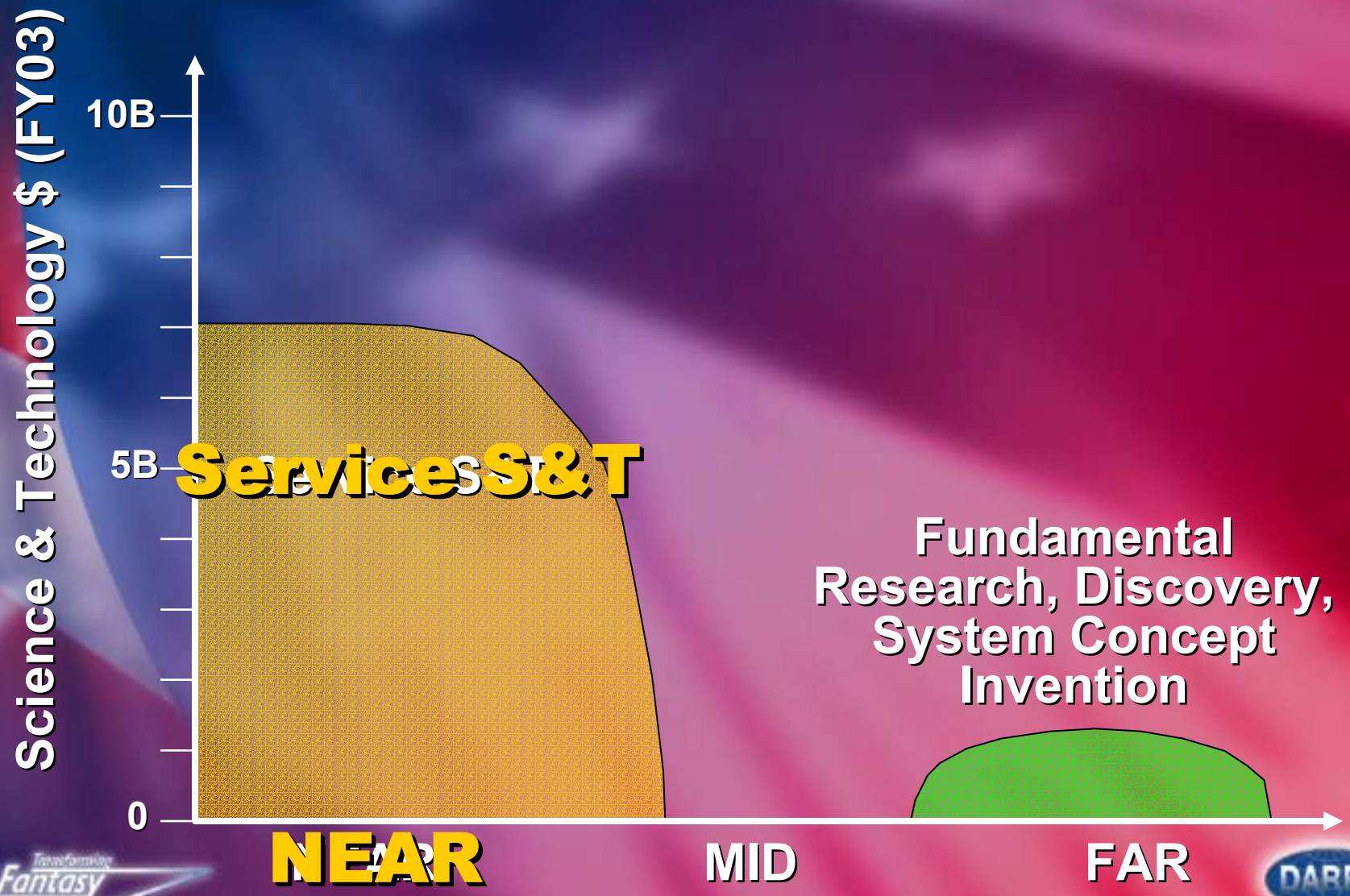

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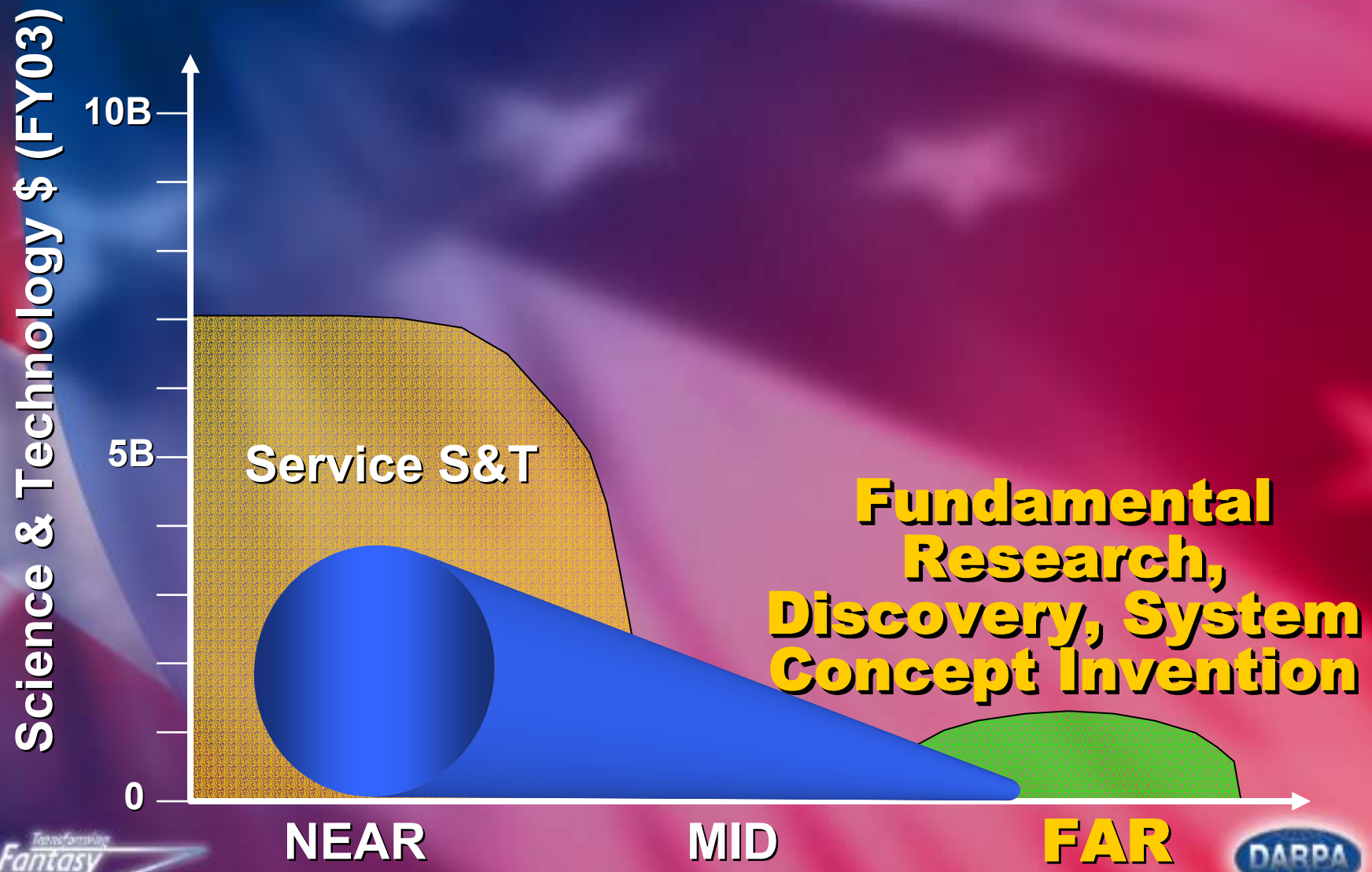

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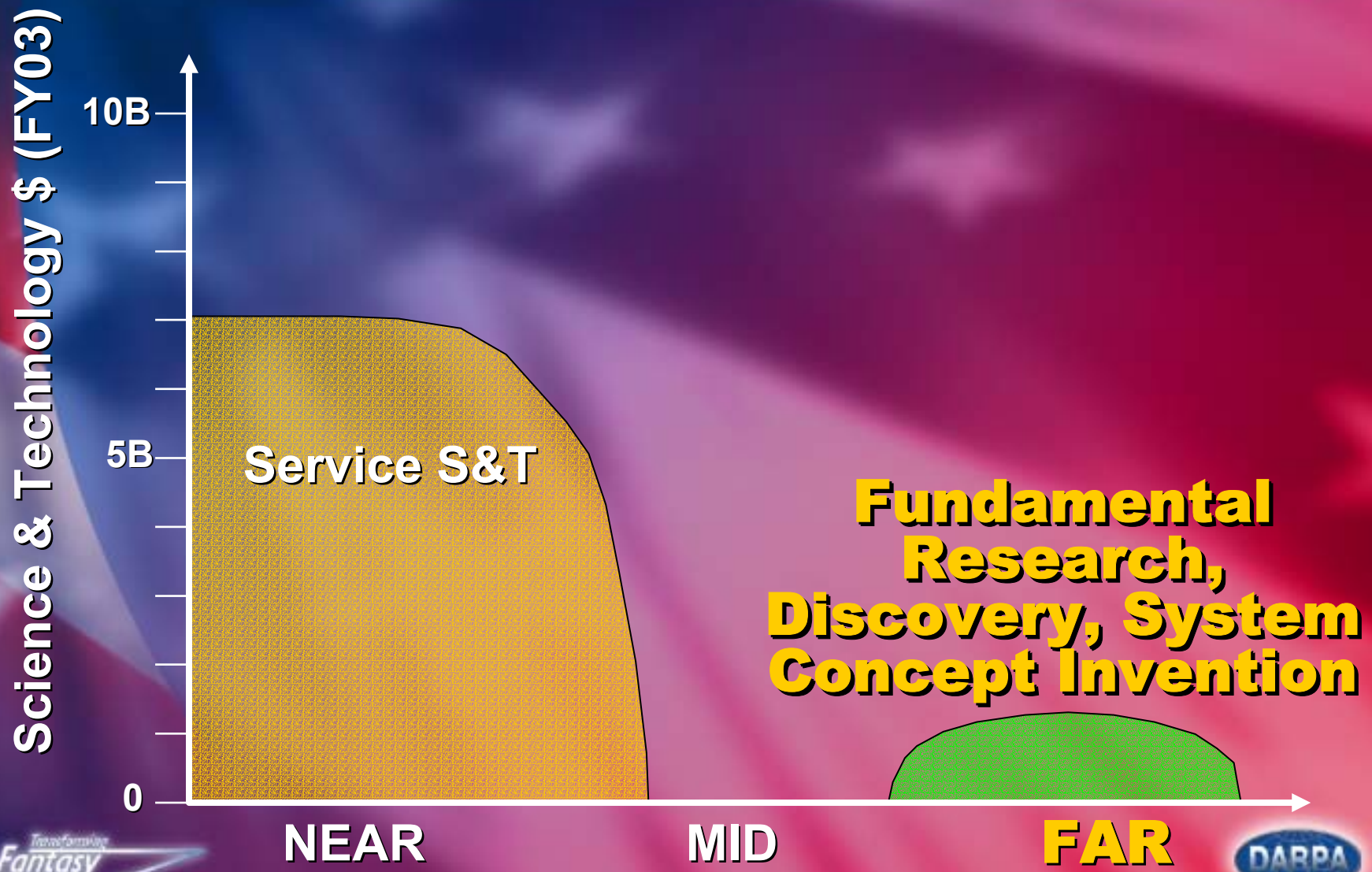

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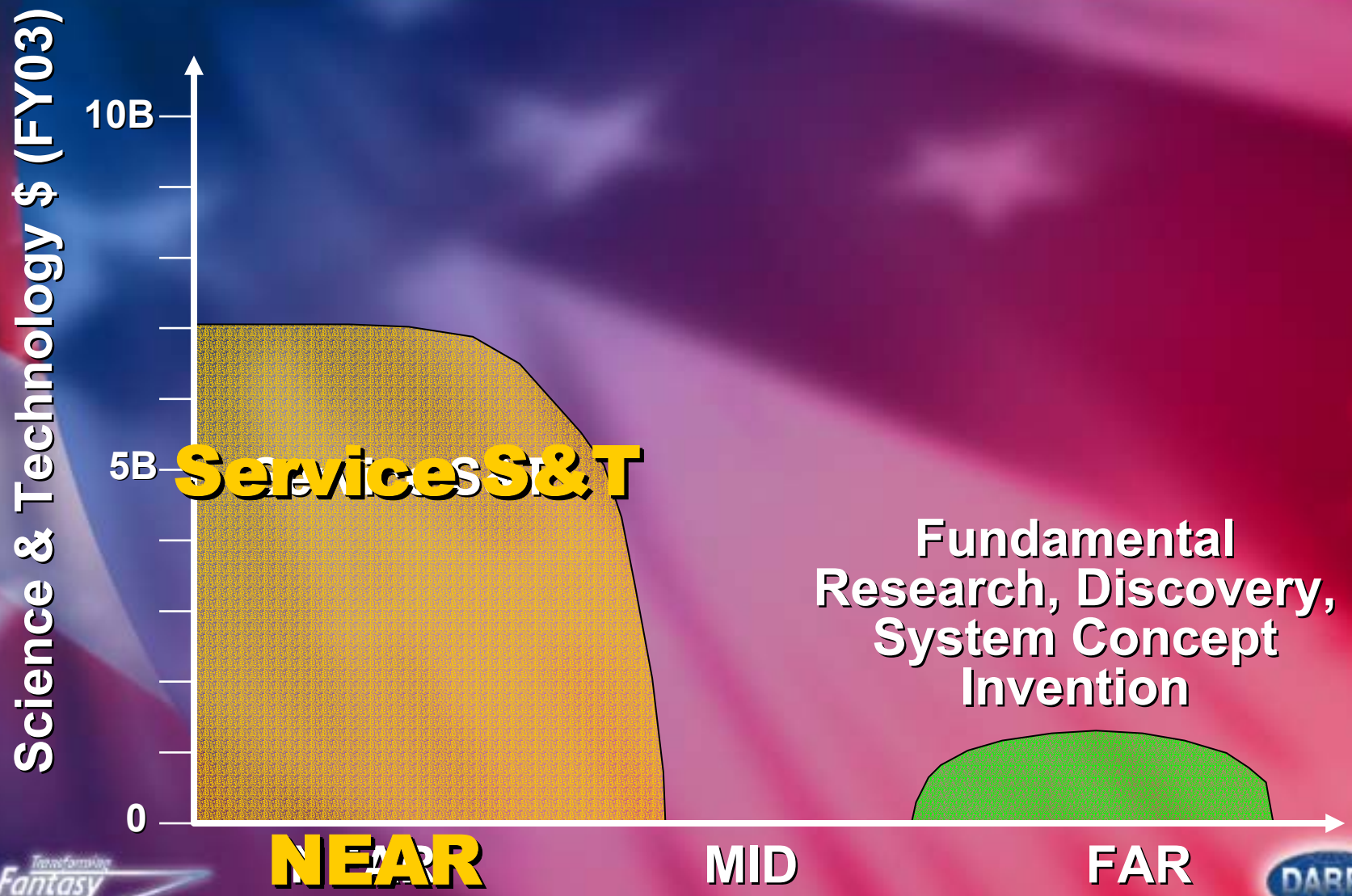

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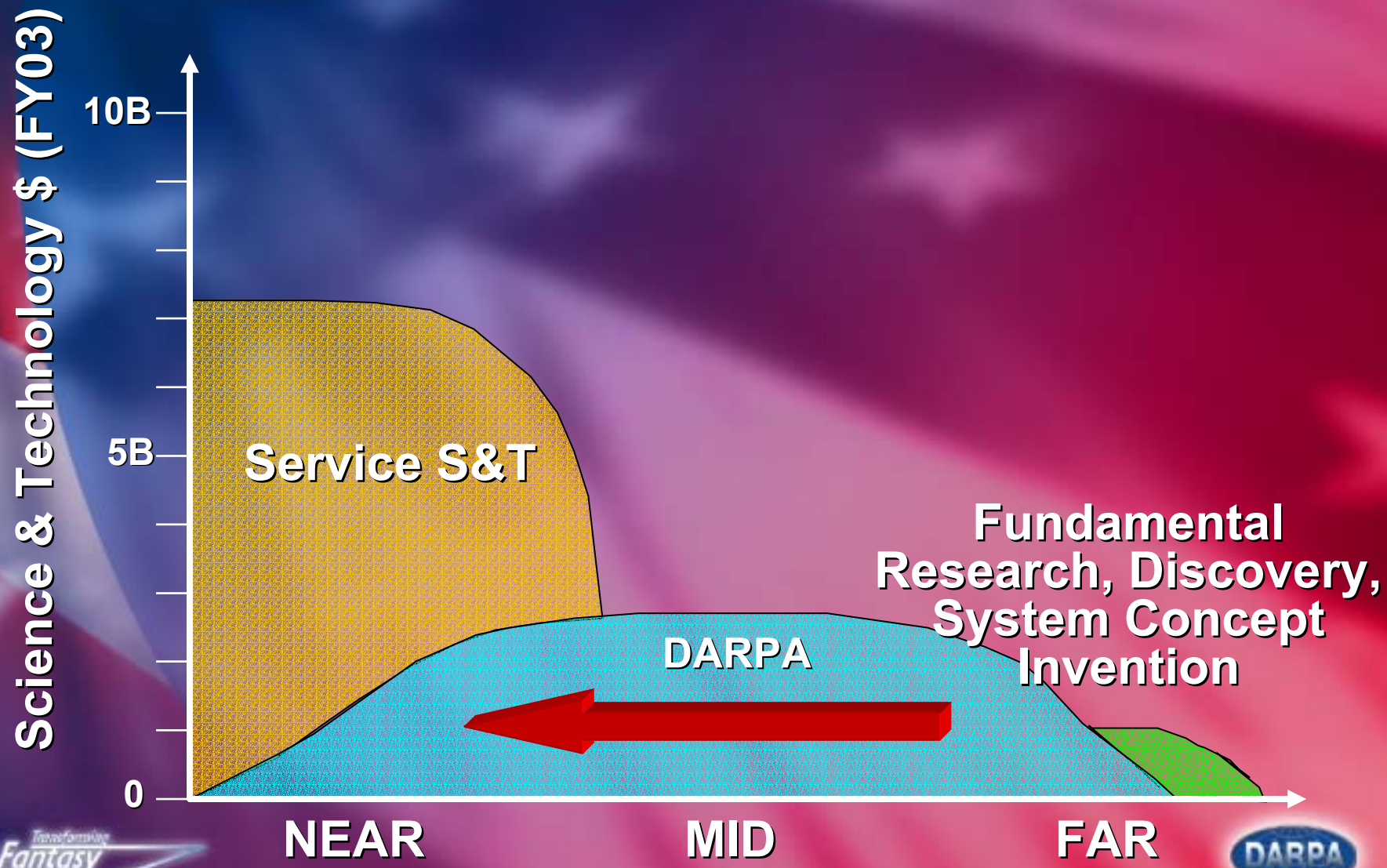

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DARPA Accomplishments

Saturn

Ground Surveillance Radar

M-16 Rifle

Stealth Fighter

Sea Shadow

1960

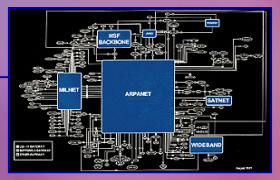
1970

1980

Vela

ATACMS

JSTARS


Arpanet

GPS

Global Hawk

TMR

JSF

Uncooled IR

Taurus Launch Vehicle

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UCAV

MEMS

MALD

BAT

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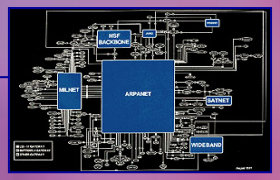
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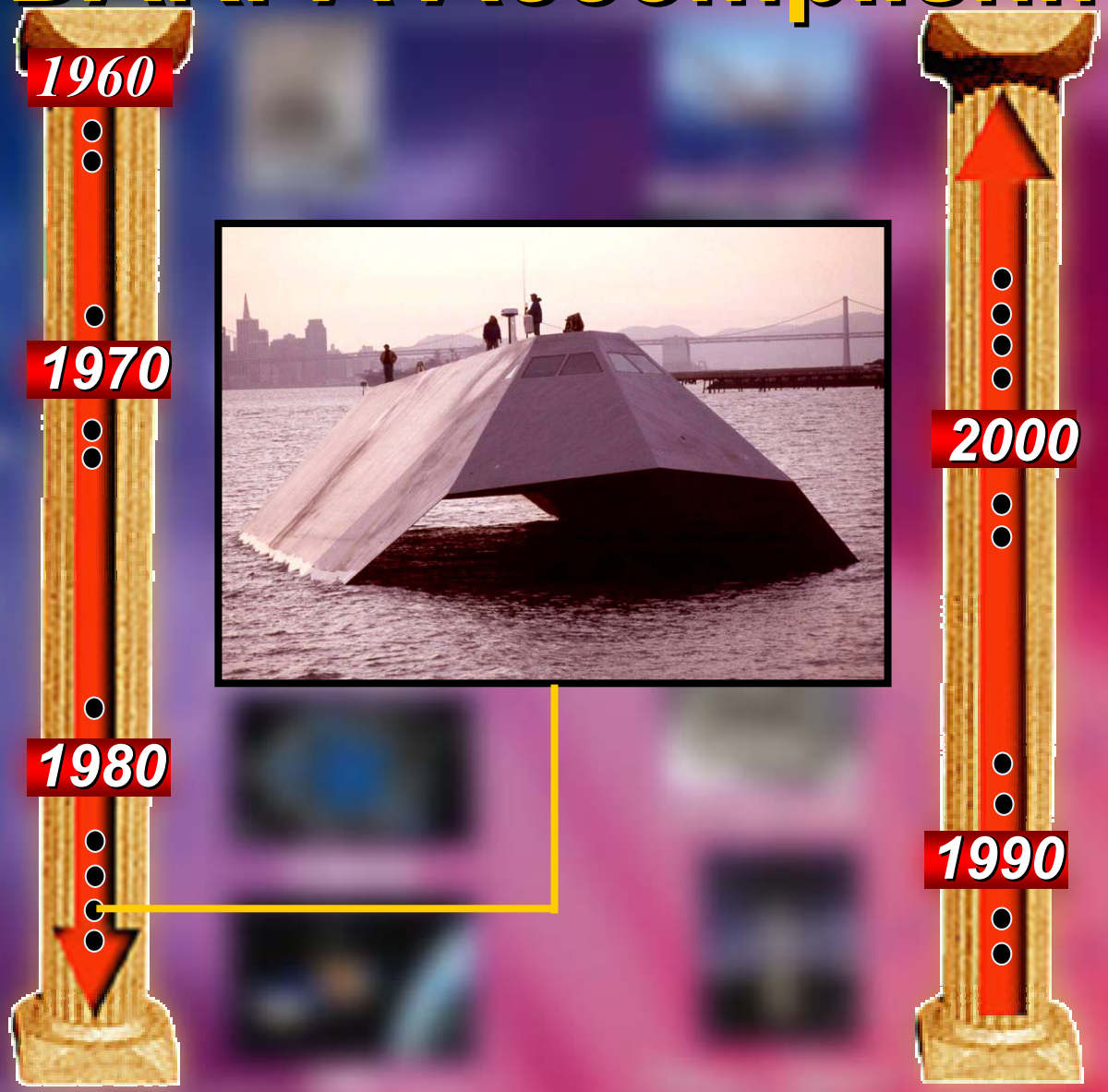

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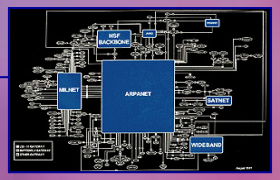
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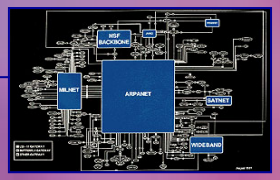
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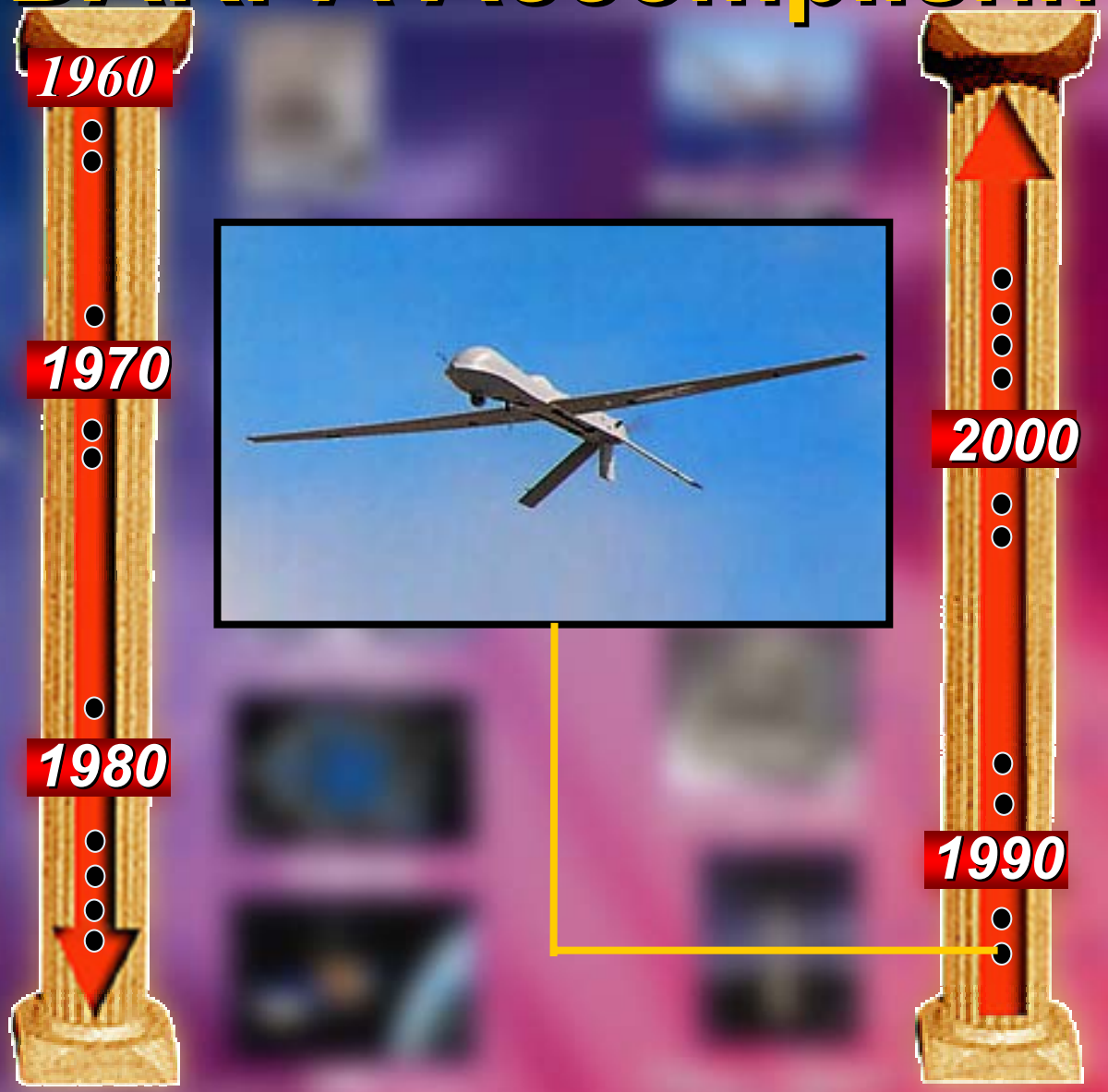

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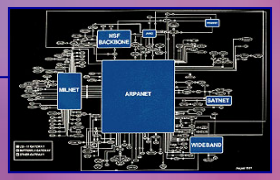
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DARPA Transition Paths

Components, tech base

DARPA → Industry Develops Products → Service Production

Components, small systems

DARPA → Svc S&T → Concept Exp → Progr Defin & Risk Red → EMD → Production

Other systems innovations

DARPA → [redacted] EMD → Service Production

POM submit

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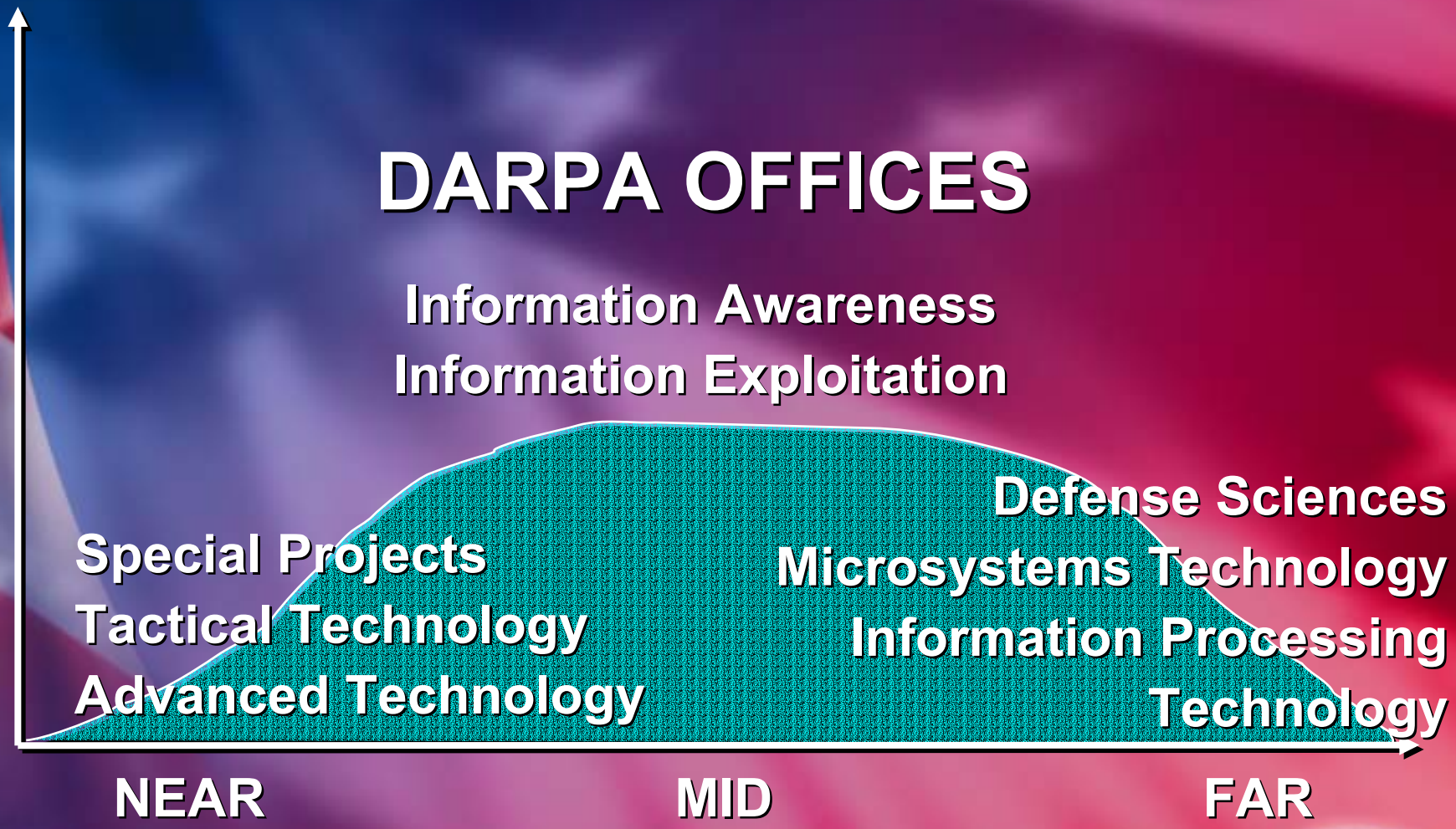
Internal Technology Flow



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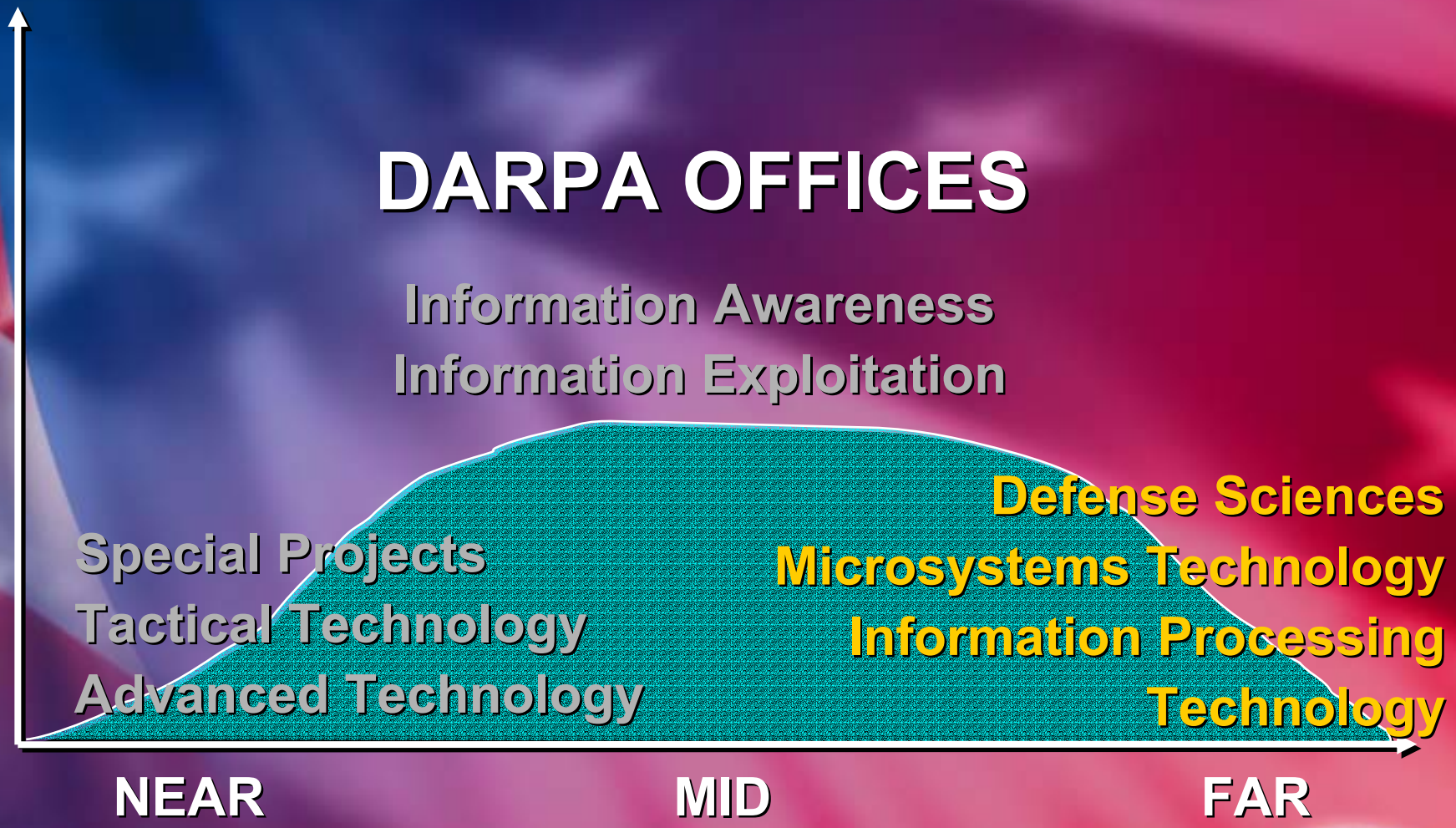

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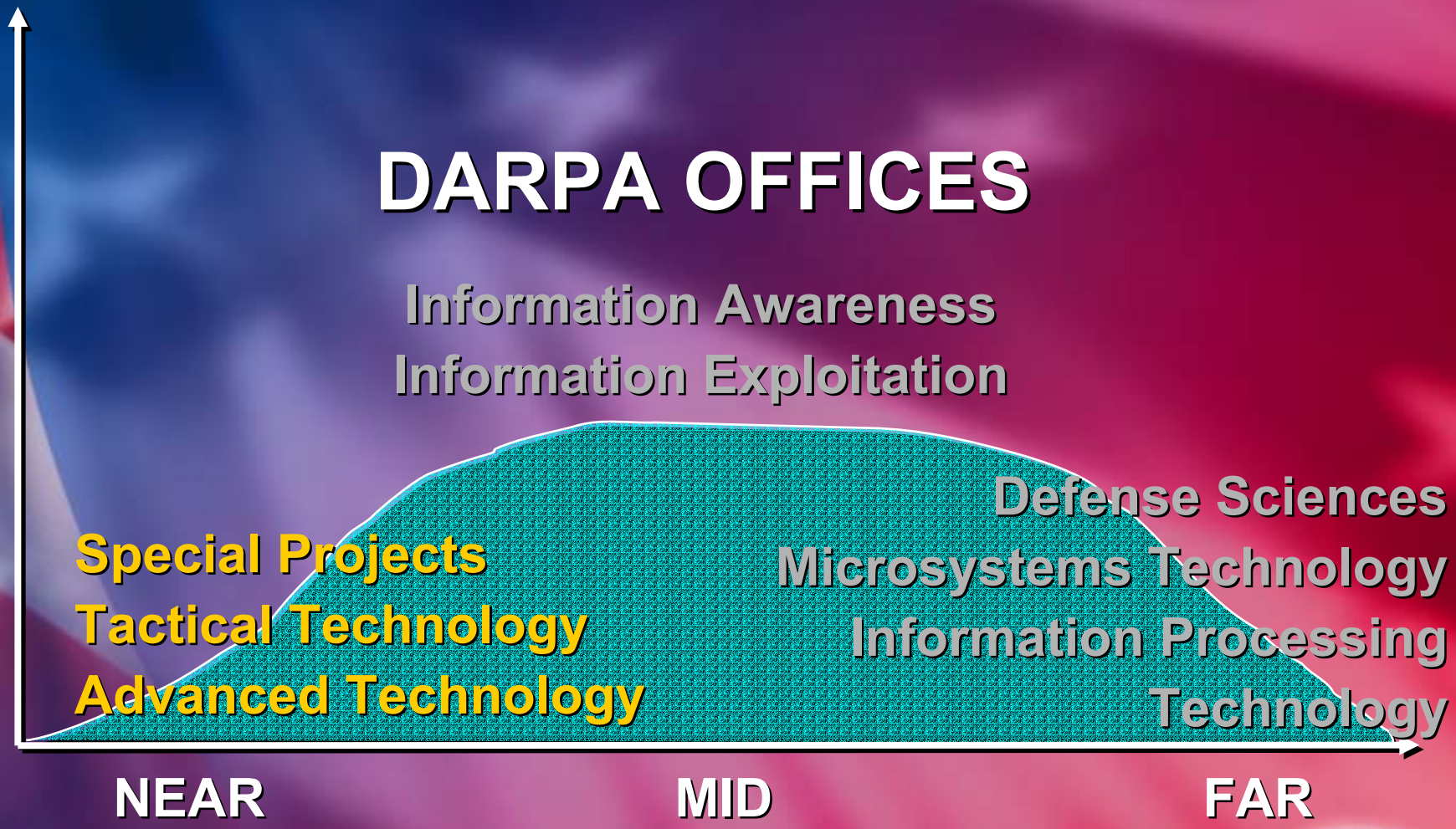

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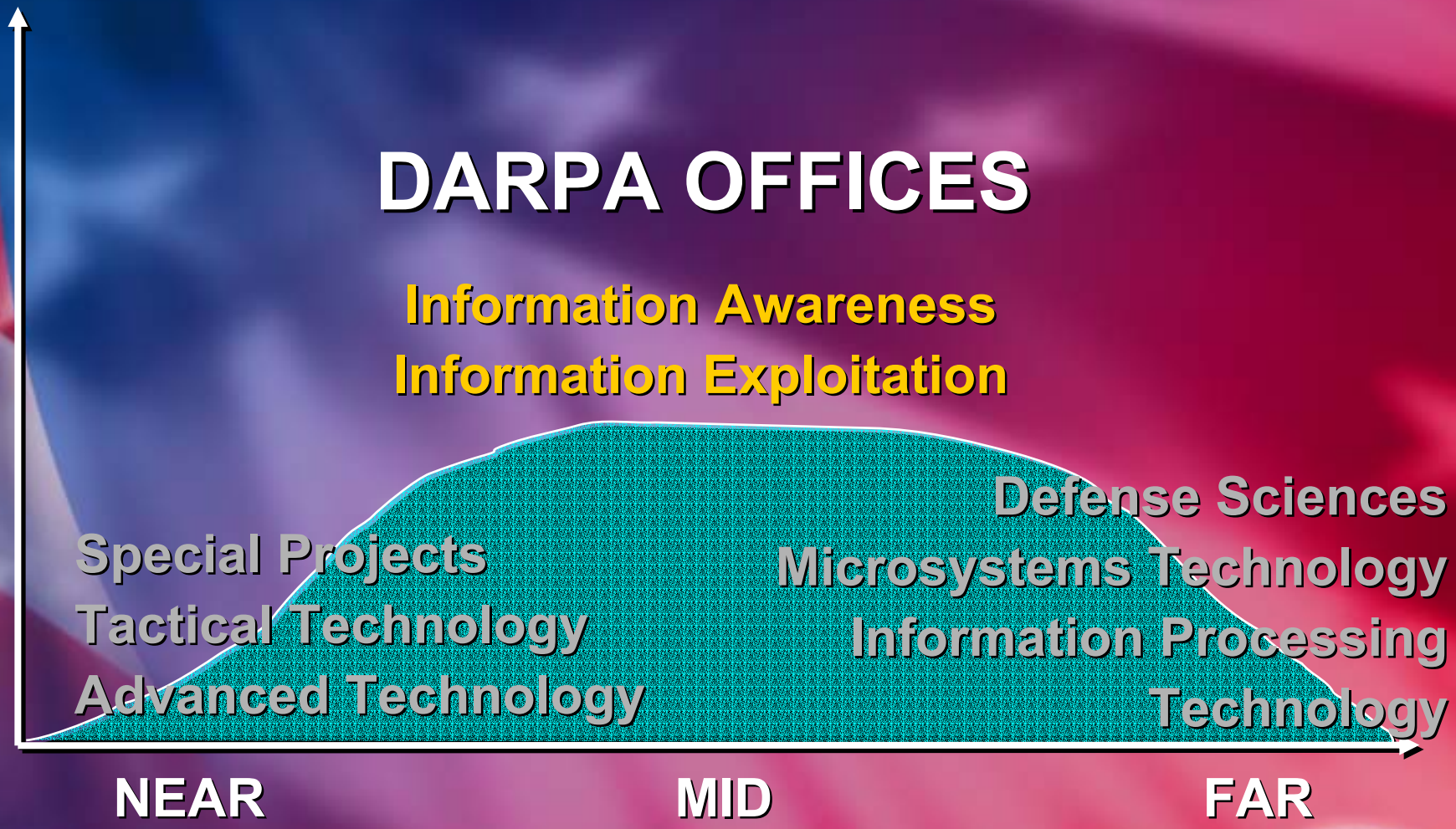

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New Initiative Process

Industry
Government
Universities

Program Manager

Office Director

Seedling
6-12
Months

Yes/No

Phase I
Brief

Permission
to issue
BAA

90 Days

Phase II Brief

Choose
Performers
and Define
Milestones

3-5 Yrs
Start Program

DIRO, Program Mgr
Office Director,Comptroller

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Seedling 6-12 Months

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6-12
Months

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Phase I
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90 Days

Phase II Brief

Choose
Performers
and Define
Milestones

3-5 Yrs
Start Program

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Investments Today for Future Capabilities

- Detect & Defeat Terrorist Networks
- Detection, Precision ID, Tracking, and Destruction of Elusive Surface Targets
- Characterization of Underground Structures
- Networked Manned & Unmanned Systems
- Robust, Secure Self-Forming Tactical Networks
- Cognitive Systems
- Assured Use of Space
- Bio Revolution

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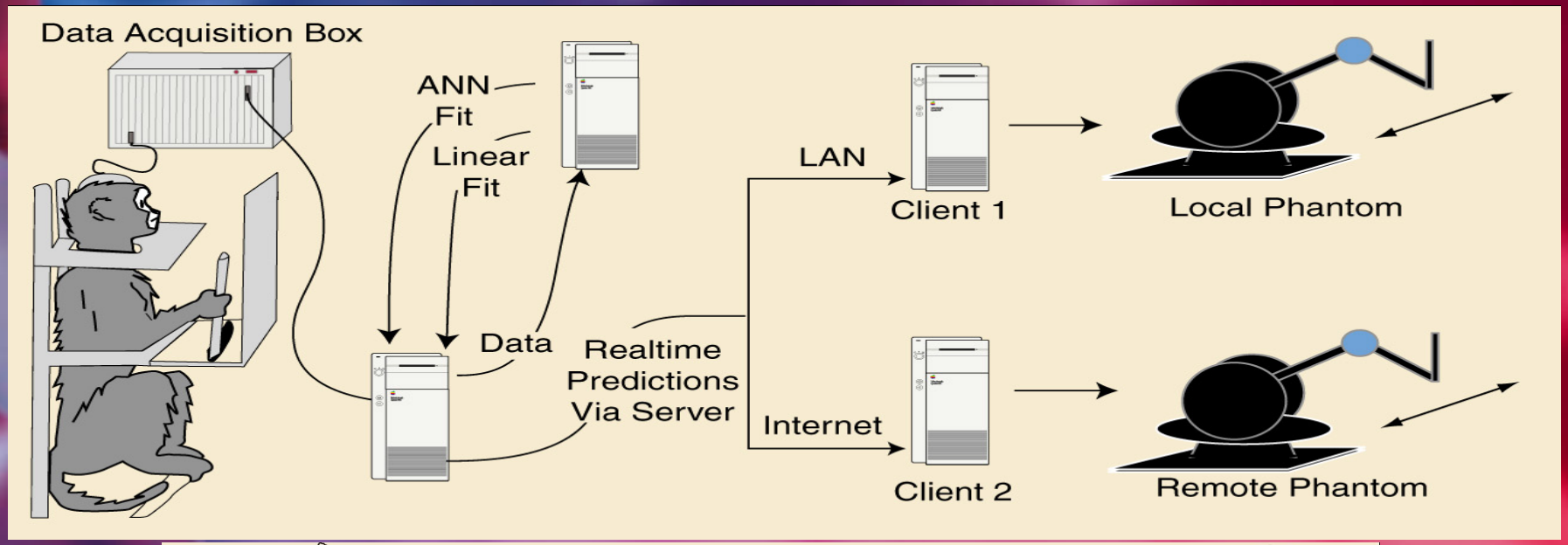
Brain Machine Interface

Direct brain signals to control devices & machines in real time from remote locations.



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Conclusion

- DoD Science & Technology Funds Increasing
  - **Administration Goal is 3% Reinvestment of DoD Top Line**
- DARPA Always Interested in Good Ideas
  - Engage Program Managers
  - Become a Program Manager

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