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COMMAND, CONTROL, COMMUNICATIONS AND INTELLIGENCE
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November 14, 1992

To: Duane Andrews
From: Paul A. Strassmann
Subject: DMRD 918 Savings

DPI's

Enclosed is a summary of documented examples of achievable DPI cost reductions. This is the best I could obtain in the limited time.

You have seen the back-up for each case except for Texas Instruments, which was delivered today. The TI consolidation is an interesting case because it establishes a high-performance CONUS-based capability for globally distributed applications.

The DII/DPI 30% target cost reductions for DMRD 918 are substandard as compared with commercial experience. The DoD cost reduction targets should be actually higher than comparable commercial achievements:

- Cost reductions for the commercial cases are additive to ongoing cuts in prior years because cost reductions are always a priority matter.
- The computer response time and network service availability for commercial cases is generally higher than for DoD. High performance is very costly, which makes the cost reduction tasks in the commercial sector more difficult.

CDA's

So far we have examined 1,174 legacy applications. This is about $\frac{1}{10}$ of the estimated population. The migration systems identified so far show the potential of eliminating about 90% of existing applications as being functionally redundant [e.g. from 625 to 66 applications]. There are reasons to believe that the remaining applications will have similar characteristics. If that's the case, then our seven year minimum potential is approximately a 45% net productivity gain through consolidation, another 20% through business process redesign and a further 30% from technology adoption of open systems and software reuse – a very safe projection. This suggests a minimum compound CDA cost reduction of 70%. This schema is illustrated in an attached diagram.

I trust the above summary is helpful in suggesting that the maximum projected savings for DMRD 918 are conservative estimates.

Paul

cc: D.Brown, Cavallini, DDI Staff, Jeffcoat, Oxley, Lt.Gen.A.Short

Seven Year Data Center Cost Reductions*

DoD Targets (Basis of Computation)	
Army (7 yr Target)	–30%
Navy (7 yr Target)	–22%
Air Force (7 yr Target)	–38%
DLA (7 yr Target)	–24%
DISA/DITSO (3 yr Target)	–56%
DII (7 yr target)	–30%

Commercial Experience (Basis of Computation)	
Xerox (7 yr Actual)	–81%
TI (6 yr Actual)	–54%
EDS-Champus (4 yr Actual)	–73%
EDS-Eligibility (4 yr Actual)	–42%
EDS-Batch Update (4 yr Actual)	–74%
EDS-Batch Reports (4 yr Actual)	–69%
Karastan-Bigelow (3 yr Actual)	–61%
EDP Analyzer (3 yr Actual)	–62%
GTE (3 yr Actual)	–75%
Peat, Marwick (4 year Actual)	–65%

* All cost reduction percentage numbers normalized to an equivalent seven year Actual or Target number

Information Systems & Services
TEXAS INSTRUMENTS

Mainframe Data Centers

1987 Versus Today

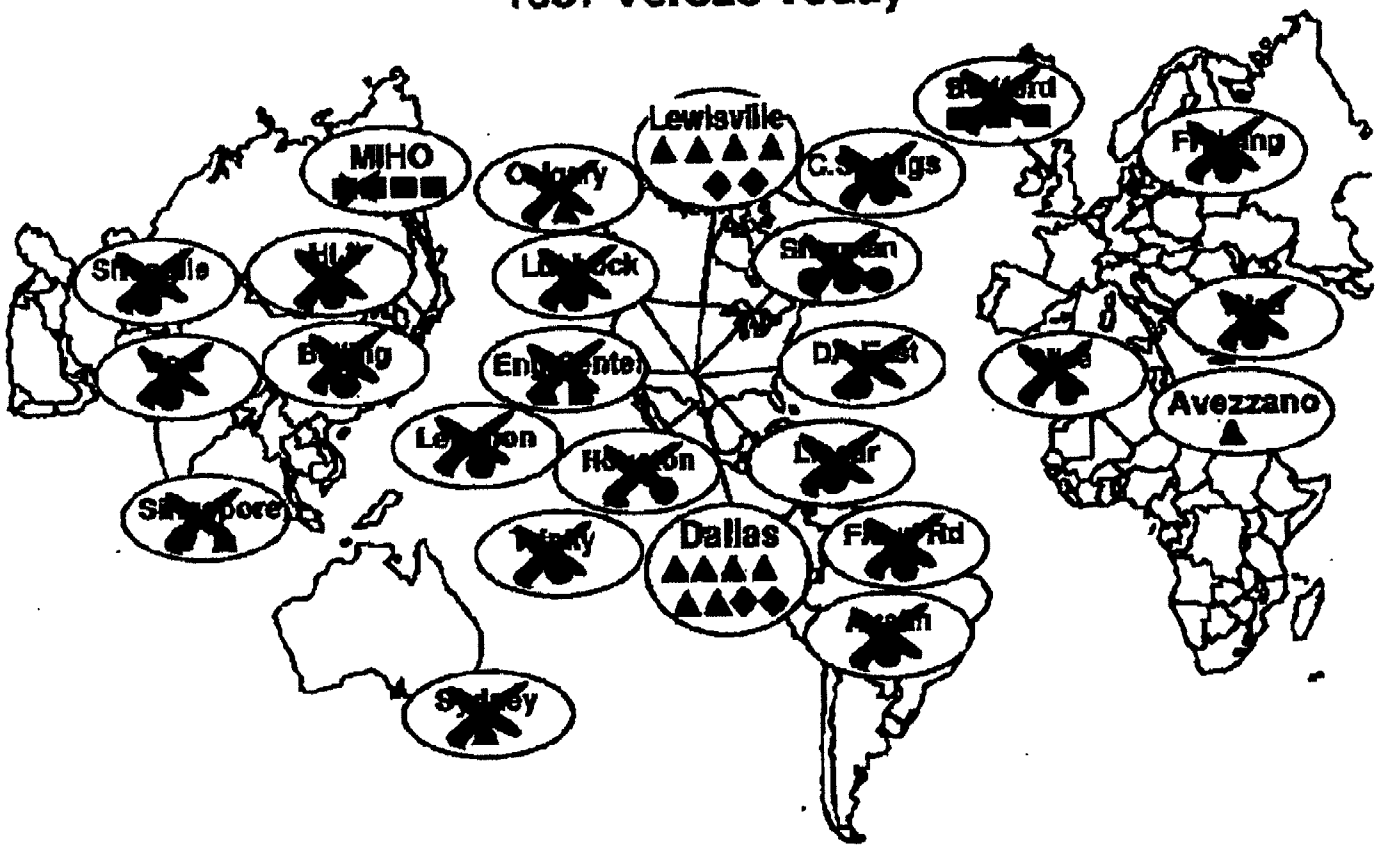


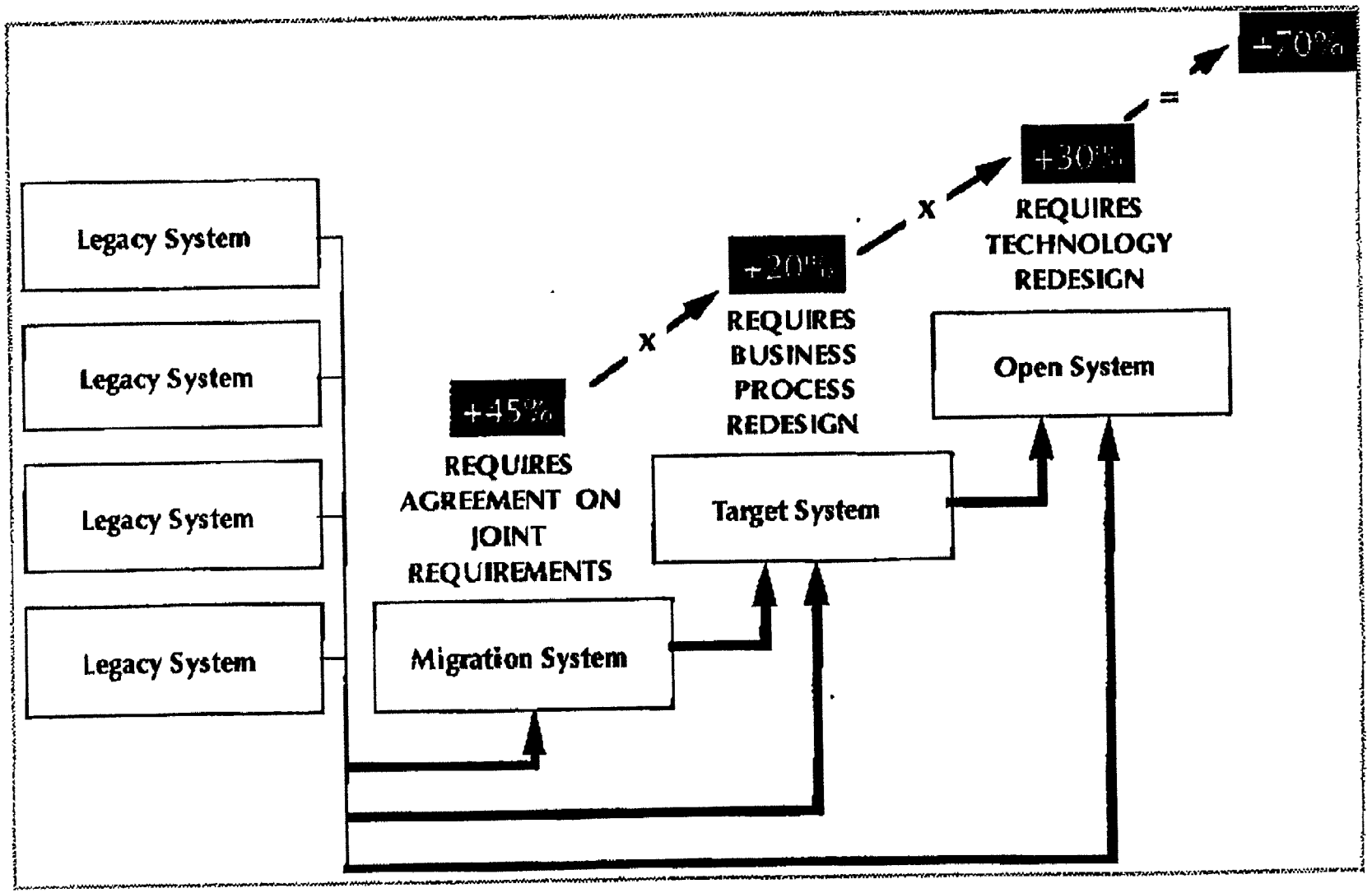
FIGURE A

Texas Instruments Five Year Consolidation Program

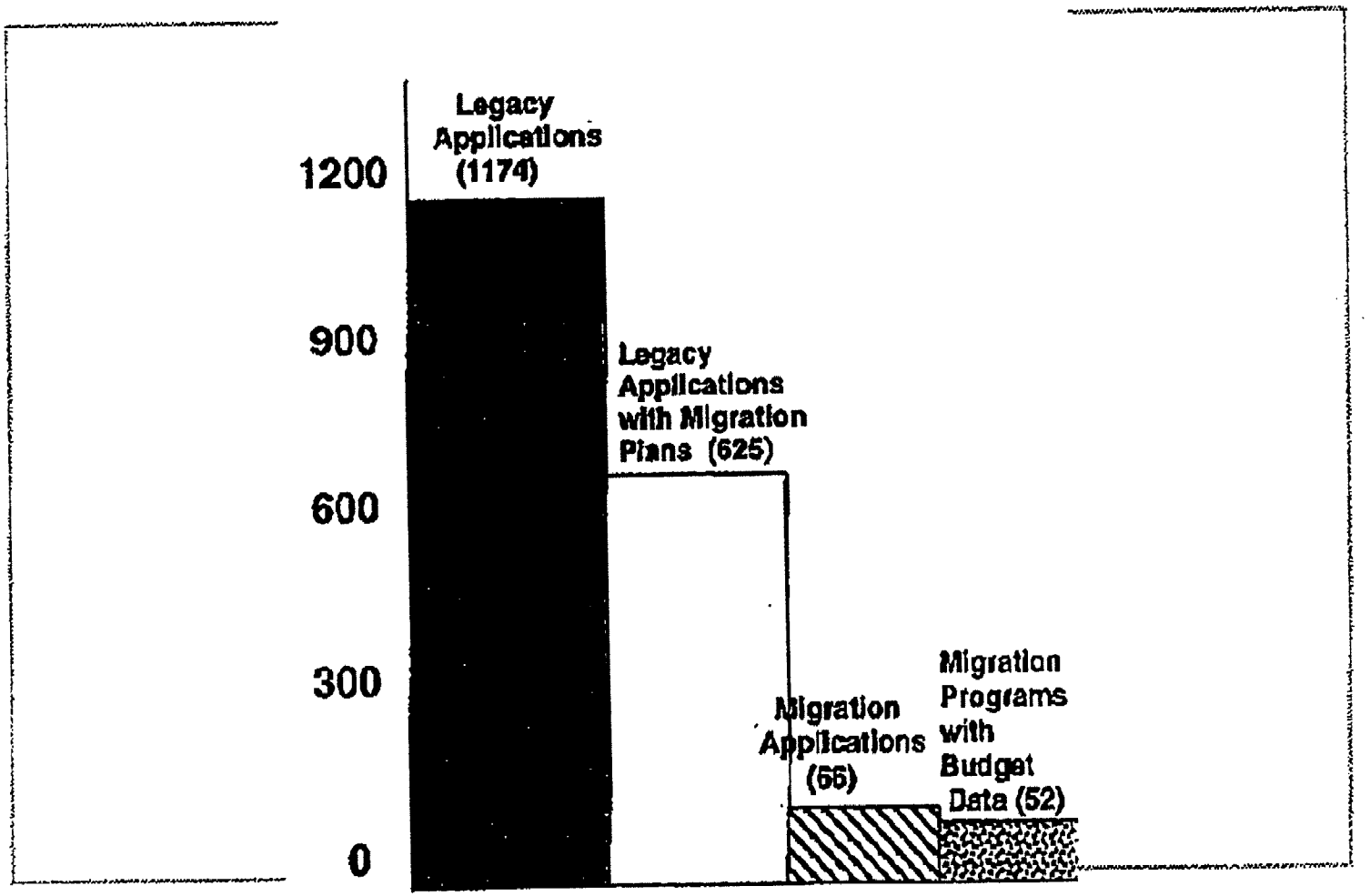
Consolidation of 36 Data Centers into 4 Megacenters:

- 50% reduction in price per work unit.
- Systems availability increased from 98.6% to 99.7%
- Transaction processing response time from 1.8 to 0.9 seconds
- On-time computer delivery increased from 97.6% to 99.1%

1993-1999 Productivity Gain Estimates for CIM Applications



Current Status of Application Migration Planning



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