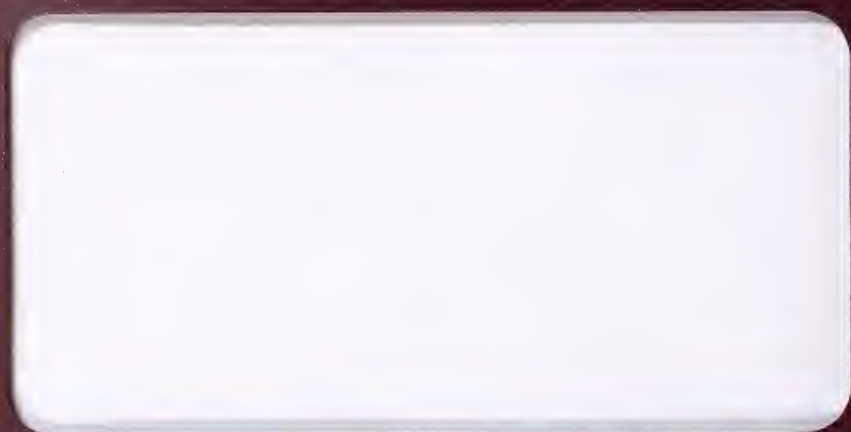


Client/Server

The New IT Environment

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Client/Server  
The New IT Environment

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Prepared by  
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U.S.A.

***Client/Server—The New IT Environment***

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Notes:

# Client/Server

## The New IT Environment

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MC3-PAC-1

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# Peter Cunningham

President  
INPUT

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## Topics

- Introduction
  - IT Revolutions
  - Client/Server Computing
- Client/Server User Implementation
- Vendor Strategies
- Conclusion

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Notes:

# Introduction

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# Revolutions

- Downsizing
- Outsourcing
- Re-engineering
- Networking

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IS-94a

# IS Environment

"Old" Traditional	"New" Downsized
Mainframe	Client/server
Shared	Dedicated
Remote	Local
IS operated	User operated

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ID-96

# Client/Server Computing Description

- Server computer provides information, software and/or resources to client computers to enable applications processing

IJN-PC-1

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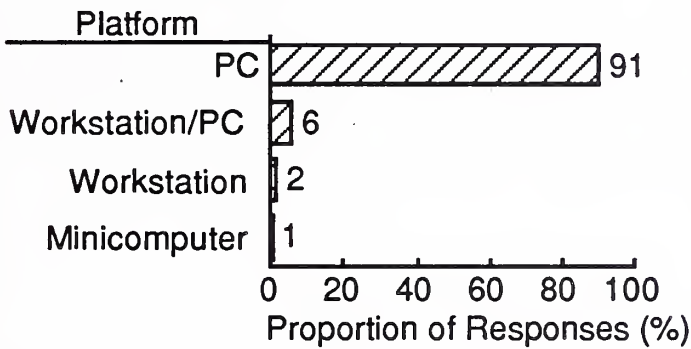
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# Distribution of Client Hardware Platforms



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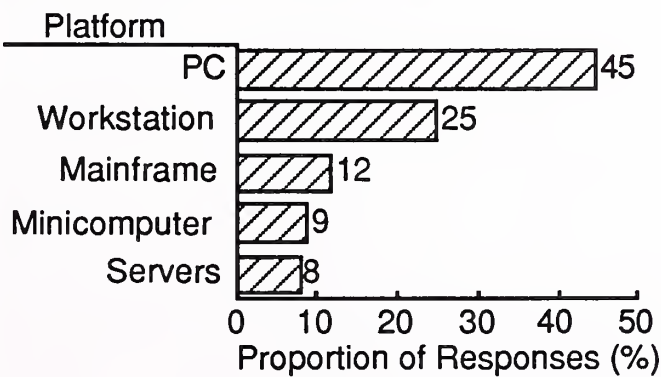
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# Distribution of Server Platforms



IJN-PC-3

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## Client/Server Computing Description

- Concept involves
  - Sharing of responsibility; client and server necessary for applications result
  - 'Action' on the part of both client and server computers to achieve result

MC3-PAC-27

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## Client/Server User Implementation

MC3-PAC-3

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## Equipment Selection Reasons

Reason	Proportion of Mentions (%)	
	Client	Server
In-Place	33	31
Price-Performance	25	22
Standards	18	11
Other	23	35

MC3-PAC-6

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Notes:

## NT

- Too big?
- Too slow?
- Too late?

IJN-PC-7

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## NT

- But...  
Provides OS for desktop RISC

IJN-PC-9

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## Distribution of Operating Systems

OS	Proportion of Mentions (%)	
	Client	Server
DOS	73	38
UNIX	7	32
OS2	14	13
Other	7	17

MC3-PAC-8

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Notes:

## Distribution of Network Operating Systems

OS	Proportion of Responses (%)
Netware	74
LAN Manager	8
LAN Server	7
TCP	6
Other	10

MC3-PAC-9

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## Operating Systems Selection Reasons

Reason	Proportion of Mentions (%)		
	COS	SOS	NOS
In-Place	27	12	25
Capabilities	11	21	14
Standards	18	5	16

MC3-PAC-10a

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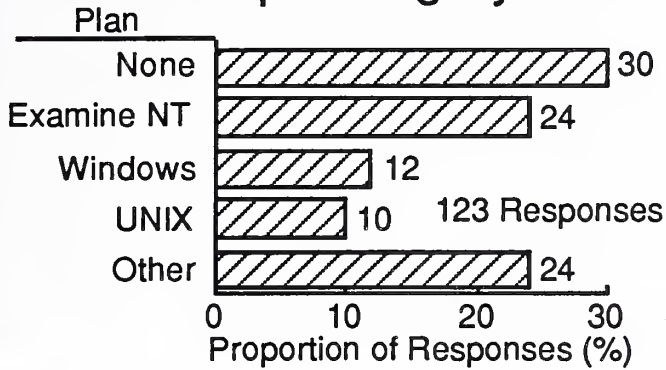
## Operating Systems Selection Reasons

Reason	Proportion of Mentions (%)		
	COS	SOS	NOS
Compatibility	6	14	17
Other	38	48	28

MC3-PAC-10b

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## Future Plans—C/S and Network Operating Systems



MC3-PAC-11

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## Conclusions Operating Systems

- Dislocation between client and server OS
  - Clients, DOS is 'there'
  - Servers, selection is open
- Novell dominates NOS—No change expected
- NT is not penetrating rapidly

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MC3-PAC-12

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## DBMS

- Hierarchy growing
  - Non-programmable: Q&A, Approach, etc.
  - Programmable: Access, FoxPro, PARADOX
  - “Heavyweight”: Ingres, Informix, Oracle, Sybase
  - Large: ADABAS, DB2, IMS
  - New: Object-oriented—OOPS

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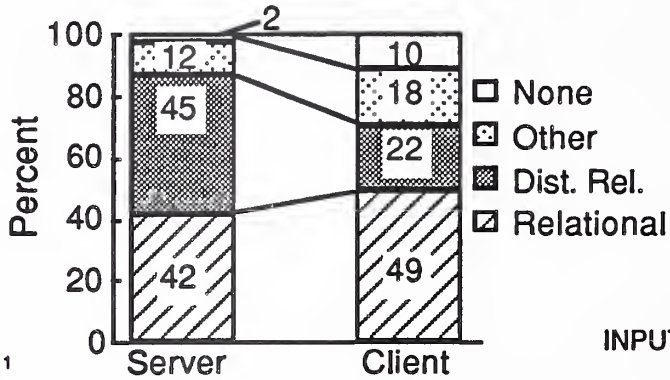
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## Proportion of Data Base Types—Servers and Clients



IJN-PC-11

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## Case for Client/Server

- Microsoft tools
  - Object-oriented
  - Internal/external
  - Working with Intersolv and LBMS
  - Cross platform portability—Wings
  - Configuration management—Delta

IJN-PC-12

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## Distribution of DBMS Vendors

DBMS	Proportion of Mentions (%)	
	Client	Server
Oracle	17	26
Sybase	7	18
FoxPro	14	8

MC3-PAC-13a

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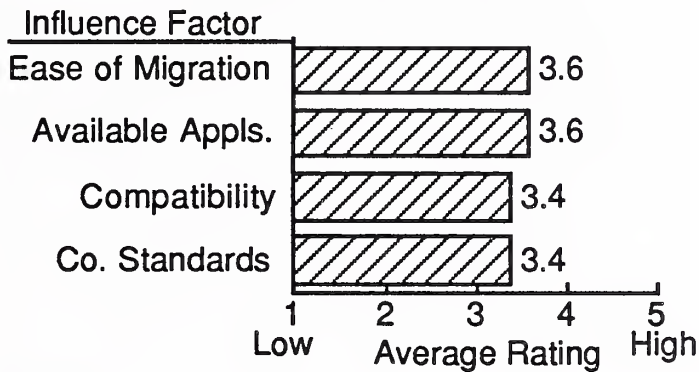
## Distribution of DBMS Vendors

DBMS	Proportion of Mentions (%)	
	Client	Server
DB2	5	9
Access	15	-
Other	43	38

MC3-PAC-13b

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## Rating of Factors Influencing DBMS Selection



MC3-PAC-14a

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## Conclusions on DBMS

- Oracle is well positioned on both C and S
- Microsoft gaining ground fast
  - FoxPro on both C and S
  - Access on clients

MC3-PAC-15a

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Notes:

## Conclusions on DBMS

- Data base systems may be increasingly unnecessary on clients
  - 'Run-time' versions with data
  - No need for data management
- Variety of data base combinations exploding

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MC3-PAC-15b

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## Vendor Strategies

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MC3-PAC-16

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## Vendor Strategies Systems Companies

- Establishing C/S units
  - IBM            - Data General
  - Tandem       - Amdahl
- Generally attacking market
  - DEC

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MC3-PAC-17a

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## Vendor Strategies Systems Companies

- “Cosmetic” approach in many cases
- Attempting to ‘co-opt’ the market
- Supported by consultants/IS managers

MC3-PAC-17b

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## Vendor Strategies—Software Products Companies

- Running scared/hard
- High-end products
  - Downsizing products
  - Choosing ADEs difficult
  - Dramatically reduced pricing
  - Costly process

MC3-PAC-18a

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## Vendor Strategies—Software Products Companies

- Low-end products
  - Adding features/functions
  - Potential for network distribution
  - Slowing client growth
  - Server pricing difficult

MC3-PAC-18b

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## Vendor Strategies Services Companies

- Integrators leveraging knowledge
  - Andersen, CSC, Systemhouse, TRW
- Professional services companies switching skills
  - CGS, CTG, IMI

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MC3-PAC-19a

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## Vendor Strategies

- Developing software for multiple platforms
- Acquiring/developing C/S skills
- Establishing technology centers
- Struggling with marketing/sales
- Stepping across boundaries

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MC3-PAC-20

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## Conclusions

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MC3-PAC-21

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Notes:

## Conclusions

- Data supports:
  - Movement to users
  - Fragmentation
  - Movement away from “standards”
  - Movement towards interoperability

MC3-PAC-22

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## Conclusions

- C/S accelerates impact of price performance improvements
- Network products/services prime opportunities
- Internet is the network model of the future
- Small (“piggyback”) networks will multiply

MC3-PAC-24

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## Successful Products and Services—Marketing

- Win “beauty contests”
- Influence the influencers
- Price properly

MC3-PAC-26

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# Client/Server Strategy

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Tandem

## Client/Server Strategy

- Fault tolerance and high availability for client/server (Himalaya Range)
- "Instant Information Everywhere"
- Client/Server as a customer service/customer delivery tool
- Shift away from proprietary systems

MC3-DR-1

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Tandem

## INPUT Analysis

- Fierce market → forced layoffs, hurt profits (Q3,'93)
- Himalaya Range must succeed
- UNIX-based OLTP focus for client/server strategically wise

MC3-DR-2

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GUPTA

## Client/Server Strategy

- Develop/market easy-to-use, scalable, open software
- Build on success in comprehensive PC-based systems
- Enhance compatibility through alliance programs (ISV, NCP)

MC3-DR-3

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Notes:

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GUPTA

## INPUT Analysis

- Good products, smart market focus, successful results
- Support and marketing need improvement
- Comprehensive vision faces competition (Powersoft, KnowledgeWare)

MC3-DR-4

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Andersen

## Client/Server Strategy

- Business Integration (BI) philosophy
- Strategic partnering (BIP program)
- Comprehensive software/service provisions

MC3-DR-5

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Andersen

## INPUT Analysis

- Powerful, dynamic tools (Foundation)
- Business Integration=intelligent, successful strategy
- Well positioned, focused for client/server

MC3-DR-6

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EDS

## Client/Server Strategy

- Match technology to customer business needs
- Help customers define/implement client/server solutions (Right Step Program)
- Explore/develop new client/server technology

MC3-DR-7

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EDS

## INPUT Analysis

- Multi-platform, multi-application expertise
- Deep understanding of business/industry needs
- Substantial experience and resources

MC3-DR-8

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Notes:

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OpenVision

## Client/Server Strategy

- Offer all-encompassing client/server system (OpenV\*OPSS)
- “Customer-centric” service
- Strategic acquisition/alliance practices

MC3-DR-9

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OpenVision

## INPUT Analysis

- Young company, old experience (Mike Fields, Oracle)
- OpenV\*OPSS not a “make-or-break” product
- Successful integration/development of acquired products

MC3-DR-10

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Microsoft

## Client/Server Strategy

- Windows=fundamental client/server structure
- Develop and market for low-through high-end users
- Continuous development, end-user focus (Hermes, Cairo)

MC3-DR-11

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Microsoft

## INPUT Analysis

- Position=top end-user GUI vendor
- NT is ambitious, but not proven
- NT, HERMES focus of extreme competition

MC3-DR-12

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Digital

## Client Server Strategy

- Integrate technology, expertise, and industry focus
- New, comprehensive client/server services and business practices
- October 12, 1993—Over 170 new, C/S-focused products (Largest product announcement in Digital's history)

MC3-DR-13

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Digital

## INPUT Analysis

- Acting on the need to change
- Positioned to provide client/server to installed base, and new customers
- Intriguing, strategic product direction

MC3-DR-14

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Intersolv

## Client/Server Strategy

- Open applications development, regardless of platform mixture
- “Mix and match” hardware, networks, and software development
- Fast, cost-effective development to give customers competitive advantages

MC3-DR-15

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Intersolv

## INPUT Analysis

- Competitive player in applications development market
- Strategic alliances (ex. Powersoft, Digitalk) bolstering market presence, installed base
- Modular product strategy—avoiding problems of being “all encompassing” solutions vendor

MC3-DR-16

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Powersoft

## Client/Server Strategy

- LAN-focused applications development
- Client/Server Open Development Environment (CODE) partner program of alliances
- “Object Easy, SQL Smart, Windows Rich, MIS Friendly” product design

MC3-DR-17

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Powersoft

# INPUT Analysis

- One product company—risky position
- Strong competition—Gupta, KnowledgeWare, Microsoft
- PowerBuilder successful, but still evolving
- CODE program serving well

MC3-DR-18

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Research-based reports on trends, etc.  
(Over 100 in-depth reports a year)

Frequent bulletins on events, issues, etc.

5-year market forecasts

Competitive analysis

Access to experienced consultants

Immediate answers to questions

## DATA BASES

- Software and Services Market Forecasts
- Software and Services Vendors
- U.S. Federal Government
  - Procurement Plans (PAR)
  - Forecasts
  - Awards (FAIT)
- Commercial Application LEADS

## CUSTOM PROJECTS

For Vendors—analyze:

- Market strategies
- Product/service opportunities
- Customer satisfaction levels
- Competitive position
- Acquisition targets

For Buyers—evaluate:

- Specific vendors
- Outsourcing options
- Market opportunities
- Systems plans
- Peer position

## OTHER SERVICES

Presentations to user groups, planning meetings, etc.

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