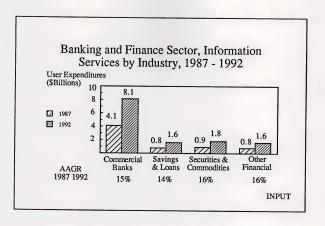
MTECH

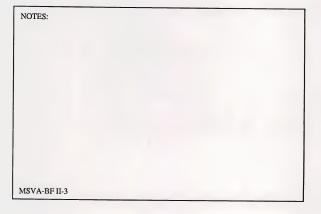
Solutions 88 Users Conference

Peter Cunningham President INPUT

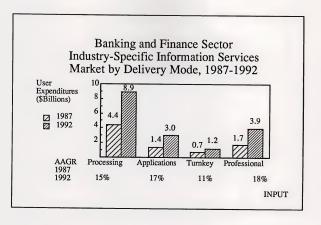
NOTES:			
ZTEC-PAC			

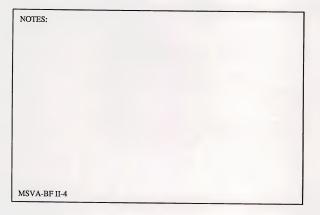




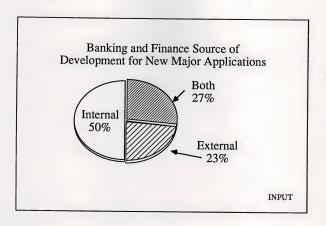


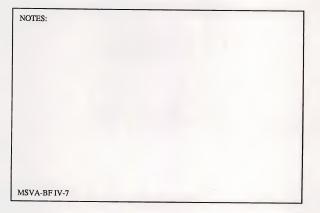




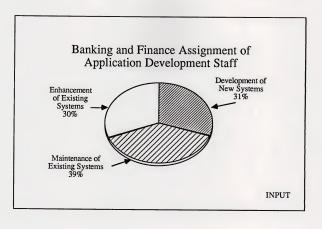


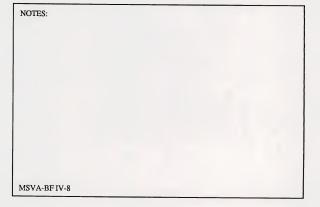




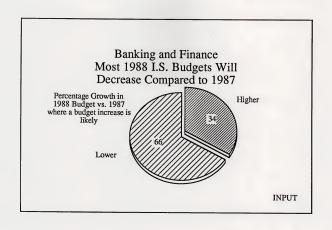






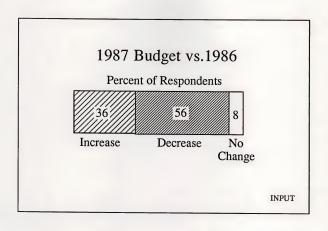


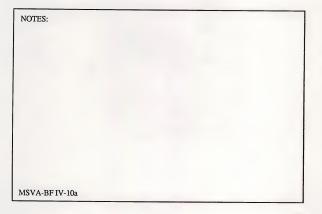




NOTES:	
MSVA-BF IV-10	









Banking and Finance Factors Contributing to Increased 1987 I.S. Budgets

(In Order of Frequency of Mentions)

- Personnel Expense
- Hardware Purchases
- Software Purchases
 Handanan Maintanan

NOTE

- · Hardware Maintenance
- · Facility Expansion/Enhancement
- · Disaster Recovery Services
- Supplies Expense

NOTES;	
MOMA DE IM 11	
MSVA-BF IV-11	



Banking and Finance Factors Contributing to Increased 1988 I.S. Budgets

(In Order of Frequency of Mentions)

- · Personnel Expense
- · Hardware Purchases
- Facility Expansion or ChangeHardware Maintenance
- · Communications Costs

NOTES:		
MSVA-BF IV-12		



Leading Industry-Specific Application Software for the Banking and Finance Industry

NOTES:			
MSVA-BF V-4			



Top 10 Minicomputer Software Applications

- 1. Word Processing
- 2. General Ledger
- 3. Funds Transfer
- Asset/Liability Management
 Savings/DDA
- Mortgage Loan Processing
 Checking/DDA
 Commercial/Installment Loan

- Trust Management
 Teller/Branch Automation

NOTES:	
MSVA-BF V-4a	



Top 10 Microcomputer Software Applications

- Spreadsheets
 Word Processing
 Financial Planning
 Asset/Liability Management
 Graphics
- 6. Data Base Management7. Strategic Planning/Decision Support8. Loan Origination9. Funds Transfer
- 10. Customer Information File

NOTES:		
MSVA-BF V-4b		



Top 10 Mainframe Software Applications

- Checking/DDA
 Savings/DDA
 Certificates of Deposit
 General Ledger
 Commercial/Installment Loans
- 6. Customer Information File
- 7. ATMs
- 8 Mortgage Loan Processing 9. Teller/Branch Automation 10. Payroll Processing

NOTES:	
MSVA-BF V-4c	



MTECH

Solutions 88 Users Conference

Peter Cunningham President INPUT

NOTES:		
ZTEC-PAC		



KEY EVENTS

- Processing Services
 FCC Local Access Charge
- Software Products
 - Distribution: Telemarketing
 IBM Actions
 SAA
 ASD

NOTES:	
MPRE-4	



KEY EVENTS (Continued)

- Professional Services - Systems Integration
- Turnkey Systems
 Direct Sales by Manufacturer
- Market - Mergers/Acquisitions/Alliances

NOTES:	
MPRE-5	



MACRO ISSUES INFORMATION SERVICES

- Focusing on End User Needs (Vertical)
- · Complexity Begets Customization
- Implementation Skill Mix Shortfall Begets Professional Services Boom
- Competitive Advantage Fuels Systems Integration
- Alliance Selection and Formation

NOTES:			
MPRE-6			



IBM STATUS

IN INFORMATION SERVICES INDUSTRY

- Processing Services
 Information Network/SIS (EDI)
- · Software Products

 - System Application Architecture Applications System Division

NOTES:		
MPRE-7		



IBM STATUS

INFORMATION SERVICES INDUSTRY (Continued)

- Professional Services - Systems Integration - Segment Focus
- Turnkey Systems
 Serious Evaluation!

NOTES:			
MPRE-8			



IBM AND DEC: ANALYSIS AND OPPORTUNITIES

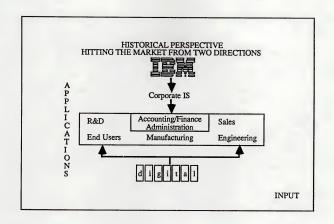
MPRE-23	



IBM VERSUS DEC | Impact on Services | Opportunities | Third Party Roles INPUT

NOTES:		
MPRE-24		





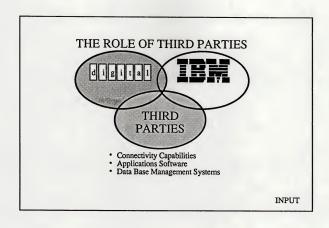
NOTES:		
	• "	
MPRE-25		



INPUT'S VIEWS (Continued) digital THEIR STRATEGIES WILL MOVE THEM CLOSER Processing Capability Connectivity Software & Service Offerings

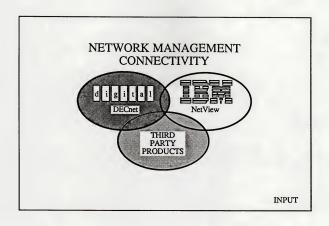
NOTES:			
MPRE-26			





NOTES:	
MPRE-27	





NOTES:		
MPRE-28		
MPRE-28		



THE IMPACT OF THIRD PARTIES

- · What IBM & DEC Don't Do, Third Parties Will
- · The Three Biggest Areas in Software:
 - Connectivity Software
 - Applications Software
 - Fourth Generation Languages, Data Base and Distributed DB Systems
- · Significant Products Are Available for DEC & IBM

NOTES:	
MPRE 20	
MPRE-29	



KEY PRODUCTS AND ARCHITECTURES

IBM	9370, 3090/Summit, PS/2, Silverlake Systems Applications Architecture Systems Network Architecture	
DEC	VAX/VMS Product Line DECNET Network Management	

NOTES:	
MPRE-30	



KEY FUTURE BUSINESS STRATEGIES

	Focus on Product Integration
IBM	Open Communications
	Cooperative Development
	Continue Unified Product Architecture
DEC	Upward Expansion of VAX/VMS
	Re-entry into Micro
DOTTI	Software and Services
вотн	Systems Integration Services



IBM REVENUE GROWTH

	(Percent)				
SOURCE	1983	1984	1985	1986	1987
Sales	38.4	27.8	15.6	(0.6)	5.8
Services	19.4	25.1	20.1	28.0	14.3
Rentals	(17.0)	(28.7)	(37.4)	(25.5)	(20.7)
Total Revenue	16.9	14.3	9.0	2.4	5.8

Net of Currency Gains for 1987: (1.0)

NOTES:	
MPRE-32	



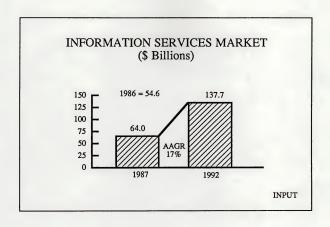
IBM GROSS PROFIT GROWTH

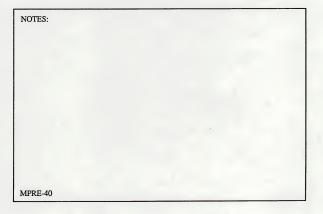
		(Percent)				
	SOURCE	1983	1984	1985	1986	1987
	Sales	33.5	28.5	12.2	(7.3)	5.2
-	Services	23.3	26.1	30.2	28.7	9.3
	Rentals	(15.0)	(28.1)	(40.3)	(29.1)	(31.0)
	Gross Profit	15.0	13.6	7.2	(1.4)	3.7

Net of Currency Gains for 1987: 1.6

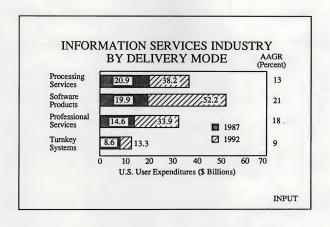
NOTES:		
MPRE-33		











NOTES:	
MPRE-41	



"HOT" VERTICALS BY AAGR: USER EXPENDITURES

MARKET	\$ BILLIONS			AAGR
	1986	1987	1992	(PERCENT)
Telecommunications	0.7	0.9	2.0	19
Transportation	0.5	0.6	1.4	17
State and Local Gov't	0.6	0.8	1.6	15

NOTES:	
MPRE-42	



"HOT" VERTICALS BY SIZE: USER EXPENDITURES

	T				
MARKET	\$ BILLIONS			AAGR	
	1986	1987	1992	(PERCENT)	
Banking/Finance	5.6	6.5	13.1	15	
Discrete Manufacturing	3.3	3.8	6.9	13	
Medical	2.1	2.5	5.1	15	

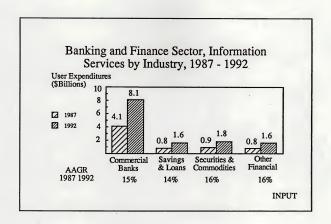
NOTES:	
MPRE-43	

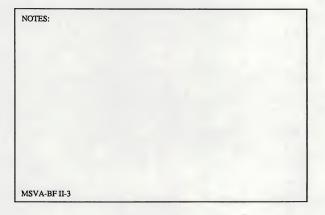


BANKING AND **FINANCE** INPUT NOTES:

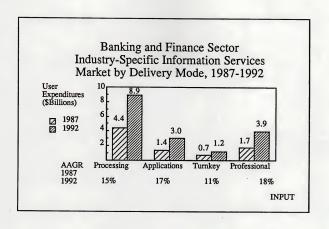
MPRE-44

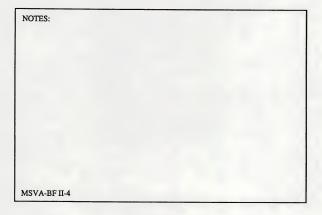














BANKING AND FINANCE DRIVING FORCES

☐ Loan Portfolio Risk
☐ Cost Reduction
☐ Merger and Acquisition
☐ Product Opportunities
☐ Use of Technology/Conversion from Paper
☐ Deregulation

NOTES:	
MPRE-45	



BANKING AND FINANCE ISSUES

- □ New Services or Product Requirements,
 Particularly for New Revenue Opportunities
 Cannot Be Met Rapidly Enough.
- ☐ Need for an Integrated Information Architecture.

NOTES:		
MPRE-46A	 	



BANKING AND FINANCE ISSUES (Cont.)

- ☐ Growing Demand for Electronic Information Delivery Systems.
- Merger Acquisition Activity that Favors
 Consolidation of Data Centers, Software,
 and IS Staff within Affected Institutions.

NOTES:	
MPRE-46B	



BANKING AND FINANCE ISSUES (Cont.)

- ☐ The Creation of Overcapacity in a Desire to Upgrade Systems.
- Possible Decrease of Costs through a Shift of Work to External or Shared Processing Facilities.
- ☐ Growing Importance of Computer System Security.

NOTES:		
MPRE-46C		



BANKING AND FINANCE OBJECTIVES

- ☐ Cost Containment.
- ☐ Handle Expanding or Changing System Requirements for Products more Rapidly
- ☐ Improve Information Delivery within Institutions and to Customers.
- ☐ Respond to Regulatory Requirements.

NOTES:	
	*
MPRE-47	



BANKING AND FINANCE IMPACT OF TECHNOLOGY

	IMPACT	COMMENTS
End-User Computing	Medium	Growing in Larger Banks.
Departmental Processing	Medium	Applications and OA are now Being Done on Departmental Computing Systems in Large Banks.

NOTES:	
MPRE-48A	



BANKING AND FINANCE IMPACT OF TECHNOLOGY (Cont.)

The state of the s			
	IMPACT	COMMENTS	
Connectivity	High	Connectivity Required to Serve Marketing, Contact and Planning Needs.	
Relational Data Bases	Low	Larger Banks are Interested.	

NOTES:	
MPRE-48B	



BANKING AND FINANCE IMPACT OF TECHNOLOGY (Cont.)

	IMPACT	COMMENTS
Voice/Data Integration	Medium	While Viewed as Important, Connectivity Outranks Voice/Data Integration Needs.
LANs	Medium	Usage has Grown.

NOTES:	
MPRE-48C	



BANKING AND FINANCE IMPACT OF TECHNOLOGY (Cont.)

	IMPACT	COMMENTS
CD-ROM	Low	Will be Introduced for Storage of Data for Occasional Retrieval.
Use of AI	Low	Will be Introduced in Credit and Investment Evaluation and in ATM Interaction.

NOTES:	
MPRE-48D	



BANKING AND FINANCE AREAS OF NEW TECHNOLOGY INTEREST

- □ Connectivity
 - Wide Area Networks
 - Medium Area Networks
 - Control of Shared Data

NOTES:	
MPRE-49A	



BANKING AND FINANCE AREAS OF

NEW TECHNOLOGY INTEREST (Cont.)

- ☐ End-User Computing
 Interaction with Corporate Data Base through Microcomputers and Distributed Minicomputers
 - Data Integrity
 - Data Security
 - Utilization of CASE
- ☐ Use of AI in Credit, Investment and ATM Interfaces

NOTES:	
MPRE-49B	
IVIT NE-47D	



BANKING AND FINANCE EMPHASIS IN 1987

- ☐ International Lending, Foreign Exchange Trading and Foreign Debt Monitoring and Restructuring
- ☐ Integrated Retail and Wholesale Deposit System

NOTES:		
MPRE-50A		

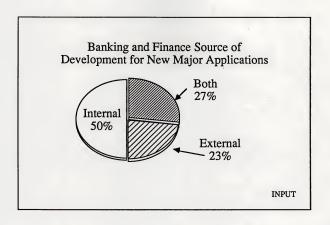


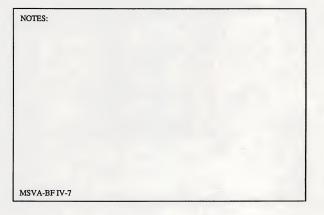
BANKING AND FINANCE EMPHASIS IN 1987 (Cont.)

- ☐ Securities Processing and Analysis for Trading Puposes and Portfolio Management
- ☐ Converting Central Files to Data Base Management System
- ☐ Electronic Data Interchange and Distribution

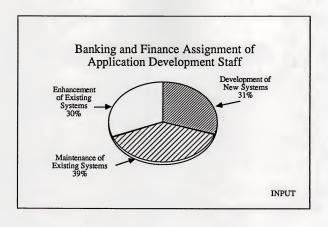
NOTES:			
	-		
MPRE-50B			

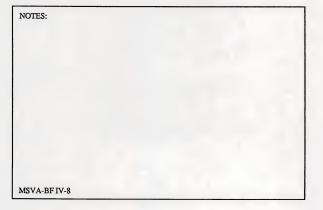




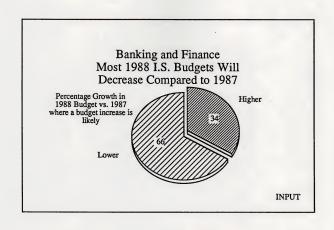






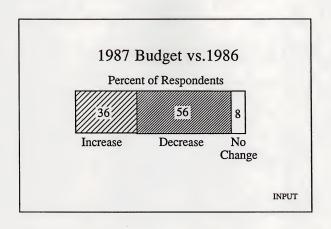






NOTES:	
MSVA-BF IV-10	





NOTES:	
MSVA-BF IV-10a	



Banking and Finance Factors Contributing to Increased 1987 I.S. Budgets

(In Order of Frequency of Mentions)

- Personnel Expense
- Hardware Purchases
- Software Purchases
- · Hardware Maintenance
- · Facility Expansion/Enhancement
- · Disaster Recovery Services
- · Supplies Expense

NOTES:		
		15
MSVA-BF IV-11		



Banking and Finance Factors Contributing to Increased 1988 I.S. Budgets

(In Order of Frequency of Mentions)

- · Personnel Expense
- Hardware Purchases
- · Facility Expansion or Change
- · Hardware Maintenance
- · Communications Costs

NOTES:		
MSVA-BF IV-12	-	



Leading Industry-Specific Application Software for the Banking and Finance Industry

NOTES:		
		-
MSVA-BF V-4		



Top 10 Minicomputer Software Applications

- 1. Word Processing

- General Ledger
 Funds Transfer
 Asset/Liability Management
- 5. Savings/DDA
- Mortgage Loan Processing
 Checking/DDA
 Commercial/Installment Loan

- 9. Trust Management
- 10. Teller/Branch Automation

NOTES:	
MSVA-BF V-4a	



Top 10 Microcomputer Software Applications

- Spreadsheets
 Word Processing
 Financial Planning
 Asset/Liability Management
 Graphics

- Data Base Management
 Strategic Planning/Decision Support
 Loan Origination
 Funds Transfer

- 10. Customer Information File

NOTES:	
MSVA-BF V-4b	



Top 10 Mainframe Software Applications

- Checking/DDA
 Savings/DDA
 Certificates of Deposit
 General Ledger
 Commercial/Installment Loans
- 6. Customer Information File
- 7. ATMs
- 8 Mortgage Loan Processing 9. Teller/Branch Automation
- 10. Payroll Processing

NOTES:		
MSVA-BF V-4c		

