

Support in the 1990's: Where We are Heading

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President, INPUT

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Notes



Support?
or
Services?
or
Support Services?

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Notes

Support

- Maintenance
- Training (multilevel)
- Documentation
- Clarification (hotline)

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Notes

Services

- Education
- Enhancement
- Logistics
- Optimization
- Consulting
- Customization
- Installation/conversion
- Customer interaction

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Notes

Software Changing from a Product to a Service

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Notes

Characteristics of Service

- Recurring revenues
- Continuous use
- Pay by use

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Notes

U.S. Software Market Trends

- Targets
 - 1970s, products
 - 1980s, support
 - 1990s, services/solutions

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Notes

U.S. Software Market Trends

- Away from standard
 - Towards uniqueness
- Supported by standards

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Notes

Worldwide Software Products Markets

	1990	1995
Total	55	135

Market Size (\$ Billion)

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Notes

U.S. Software Products Markets

	1990	1995
Applications	17	33
Systems	17	35

Market Size (\$ Billion)

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Notes

Software Support Markets Europe

	1989	1994
Systems Products	13	20
Applications Products	12	16

Proportion of Market (Percent)

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Notes

Software Support Markets U.S.

	1989	1994
Systems Products	23	25
Applications Products	15	20

Proportion of Market (Percent)

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Notes

Problem Identification

- 63% "no problems"
- Response time
- Repair and fix times
- Software performance and functionality

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Notes

Software Support Ratings

Offering	User Rating *	Vendor Rating *
Centralized support	3.1	4.5
Free training	2.6	4.2
Purchased training	2.0	3.9
Custom software	2.1	4.2

* 1 = Least Value; 5 = Greatest Value

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Notes

Software Support Ratings

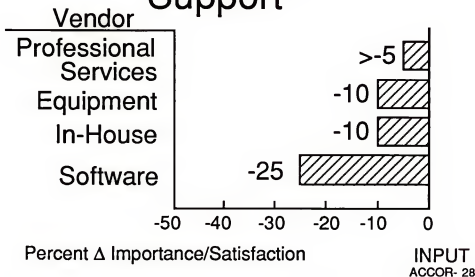
Offering	User Rating *	Vendor Rating *
Consulting	2.7	3.8
S/W fixes	3.3	4.6
Upgrades	3.6	4.5

* 1 = Least Value; 5 = Greatest Value

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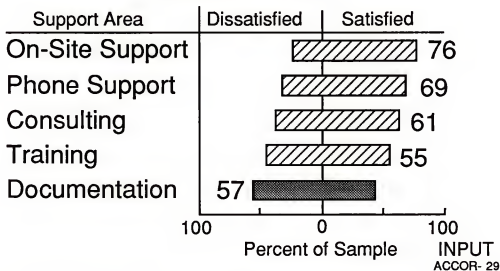
Notes

User Perception Application Support



Notes

Software Support Satisfaction by Support Area



Notes

User Training Requirements

- Increase
 - 47% of respondents
 - Software complexity/sophistication
 - Lack of in-house time or skills
 - Introduce new users

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Notes

User Training Requirements

- Remain the same
 - 36% of respondents
 - In-house support supplement
 - Third-party providers

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Notes

User Training Requirements

- Decrease
 - 17% of respondents
 - Better documentation
 - Software user-friendly qualities
 - Market training products
 - Third-party providers

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Notes

Futures

- Embedded diagnostics
- Problem/use data bases
- Expert system resolution
- CBT

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Notes

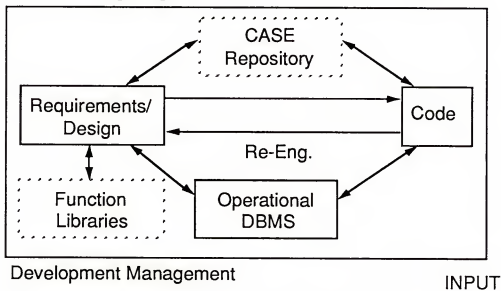
Services and Product Markets Blurring

- Professional services
use of
 - CASE
 - Kernels

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Notes

Emerging CASE Environment



Notes

Potentially, Biggest Impact Since System/360

- Repositioning of information systems departments within the corporation
- Rearrangement of vendors, products and strategies

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Notes

Applications Software Products Impact

- Build (rebuild) using standard CASE tools
- Potentially, continuum of totally *standard* to totally customized applications

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Applications Software Products Impact

- Customizing wide open
 - Software vendor
 - Systems integrator (may be identical)
 - In-house

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Notes

Less Differentiation in System Development

- Standard methodologies and tools reduce skill gaps:
 - In-house vs. vendor
 - Vendor A vs. vendor B
- Hardware/software without adequate CASE support may be much harder to justify

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Notes

Technology Application to Software Support/Services

- Networks
- Parallel view
- Expert systems
- Embedded documentation
- Embedded training
- Data/information bases

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Notes

Technology Application to Software Support/Services

- Embedded software
- Voice services
 - 800 numbers
 - 900 numbers
- Image/fax services
- Remote printing

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Notes

Contact Trends

- Bulletin boards
- Newsletters (electronic and paper)
- User meetings (electronic and physical)

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Notes

Support Pricing

- 'Bundling' with licenses
- 'Bundling' with systems maintenance

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Notes

Keys to Success

- Use of technology
- Pricing
- Customer sensitivity
- Services (solution) orientation
- Standards

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Notes

Customer Satisfaction

- Proactive not reactive
- Timely (event driven)
- Objective

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Notes

Proactive vs Reactive

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Notes

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SUPPORT IN THE 1990's!
WHERE ARE WE HEADING
PETER L. CUNNINGHAM
PRESIDENT, INPUT

②

SUPPORT ?
OR
SERVICES ?
OR
SUPPORT SERVICES ?

③

PROACTIVE VS REACTIVE.

⑦

SOFTWARE CHANGING FROM A
PRODUCT TO A SERVICE

④

CHARACTERISTICS OF SERVICE

- RECURRING REVENUES
- CONTINUOUS USE
- PAY BY USE.



SUPPORT

- MAINTENANCE
- TRAINING (MULTI-LEVEL)
- DOCUMENTATION
- CLARIFICATION (HOTLINE)

SERVICES

- EDUCATION
- ENHANCEMENTS
- CONSULTING
- CUSTOMER INTERACTION
- IMPLEMENTATION/COMMISSIONING
- INTEGRATION
- CUSTOMIZATION
- LOGISTICS
- OPTIMIZATION

USER GROUPS
BULLETIN BOARDS
900 SERVICES
800 SERVICES

US SOFTWARE MARKET TRENDS

- AWAY FROM STANDARDS
- TOWARDS UNIQUENESS.
- SUPPORTED BY STANDARDS

TECHNOLOGY MAKES POSSIBLE.

- NETWORKS
- PARALLEL VIEWS
- EXPERT SYSTEMS.
- EMBEDDED DOCUMENTATION
- DATA/INFORMATION BASES
- EMBEDDED SOFTWARE IN INFORMATION
- VOICE SERVICES
• 800 NUMBERS
• 900 NUMBERS
- IMAGE (FAX) SERVICES
- ELECTRONIC SERVICES



U.S. SOFTWARE MARKET TRENDS

8. TARGETS

- 1970s, PRODUCTS
- 1980s, SUPPORT
- 1990s, SERVICES/SOLUTIONS.

6. SERVICES.

- EDUCATION
- ENHANCEMENT
- ~~INSTALLATION/~~
- ~~CONVERSION~~
- LOGISTICS
 - ~~INSTALLATION/CONVERSION~~
 - CUSTOMER INTERACTION
- OPTIMIZATION
- CONSULTING
- CUSTOMIZATION
- ~~CONVERSION~~

~~SERVICES~~

- ~~CUSTOMER INTERACTION~~
- ~~USER GROUPS~~
- ~~BULLETIN BOARDS~~



WM-20.

~~MARKETS~~

U.S. SOFTWARE PRODUCTS MARKETS

MARKET SIZE (\$ BILLION)

1990 1995.

17 ~~6~~ 33 APPLICATIONS

17 35 SYSTEMS

(10)

WORLDWIDE SOFTWARE PRODUCTS MARKETS

MARKET SIZE \$ BILLION

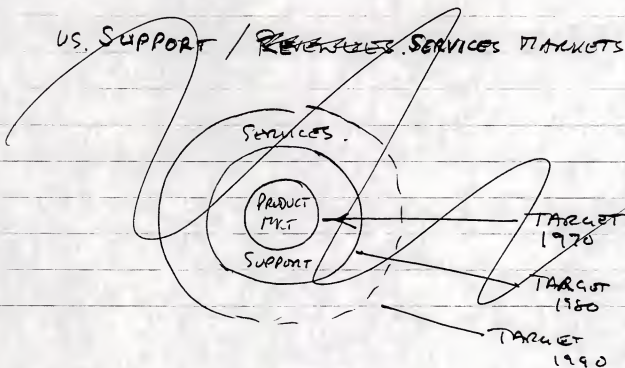
1990 1995

TOTAL ~~135~~ 55 135 ~~APPLICATIONS~~

SYSTEMS.

(11)

U.S. SUPPORT / ~~REVENUES~~ SERVICES MARKETS





TECHNOLOGY APPLICATION TO SOFTWARE SUPPORT/SERVICES

12

- NETWORKS
- EXPORT SYSTEMS
- EMBEDDED DOCUMENTATION
- EMBEDDED TRAINING
- DATA/INFORMATION BASES
- EMBEDDED SOFTWARE
- VOICE SERVICES

PARALLEL VIEW

~~ELECTRONIC SERVICES~~

Both

13

- 800 NUMBERS
- 900 NUMBERS
- IMAGE/FAX SERVICES
- REMOTE PRINTING.



(14)

- KEYS TO SUCCESS
- USE OF TECHNOLOGY
 - PRICING
 - CUSTOMER SENSITIVITY (SOLUTION)
 - SERVICES ORIENTATION.
 - ~~STANDARDS~~
 - ~~EVENT~~

(15)

- CUSTOMER SATISFACTION
- PROACTIVE NOT REACTIVE
 - TIMELY (EVENT DRIVEN)
 - OBJECTIVE.

SERVICES AND PRODUCT MARKETS BLURRING

(16)

- PROFESSIONAL SERVICES USE OF
- CASE
 - KERNELS.

AD45
 AD50, ST52
 AD54



①7

FUTURES

- EMBEDDED DIAGNOSTICS
- PROBLEM/USER DATA BASES
- EXPERT SYSTEM RESOLUTION
- CBT.



PROBLEM IDENTIFICATION

(19)

- C3: "NO PROBLEMS"
- RESPONSE TIME
- REPAIR AND FIX TIMES
- SOFTWARE PERFORMANCE & FUNCTIONALITY.

~~EUROPEAN SUPPORT MARKET~~

1989
 1.18 / 7.69 = \$87 SYSTEMS 3.83 / 15.85 = \$462
 0.65 / 4.73 = \$38 APPLICATIONS 2.34 / 12.98 = \$15.12

SUPPORT PRICING.

(18)

- 'BUNDLING' WITH LICENSES
- 'BUNDLING' WITH SYSTEMS MAINTENANCE

CONTACT TRENDS

(20)

- BULLETIN SERVICES
- NEWSLETTERS (ELECTRONIC & PAPER)
- USOX MEETINGS (ELECTRONIC & PHYSICAL)
- ~~• PROBLEM DATA BASES.~~



~~12~~
end

SOFTWARE SUPPORT MARKETS

EUROPE PROPORTION OF MARKET

	1984	1994	
	13%	20%	SYSTEMS PRODUCTS
	12%	16%	APPLICATIONS PRODUCTS

~~13~~
end

SOFTWARE SUPPORT MARKETS

U.S.

PROPORTION OF MARKET

	1984	1994	
	23%	25%	SYSTEMS PRODUCTS
	15%	20%	APPLICATIONS PRODUCTS

~~FMSLW - PB - 5-5~~



REPORTS { MPSC V-3, V-6 (3 CHANTS)
SMSE II-13 ✓
FMSW P8 II-3.

BIBLES { WM-20
AD 45
AD 50, 51, 52, 54

