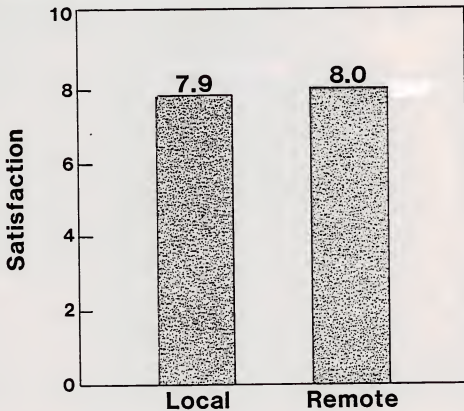# SOFTWARE ANALYST SKILL LEVELS

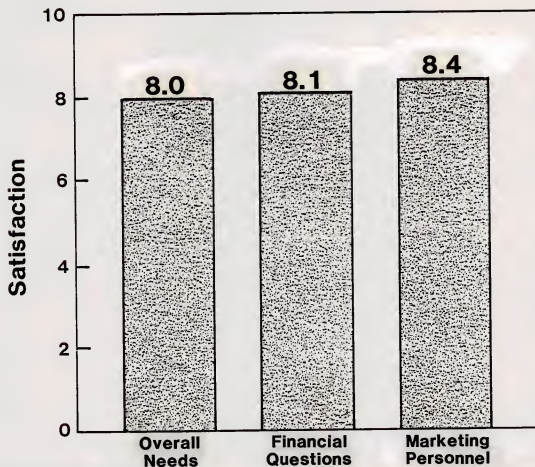

Q16: OS Skill Level Ratings

	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases	Description
All	LOCAL	7.9	4	10	1.6	28	Local On-site SW
	REMOTE	8	5	10	1.4	21	Remote (Dist., Reg., HQ)

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CRI RESPONSIVENESS

Q21A,B,C: CRI Responsiveness

	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases	Description
All	ALL	8	3	10	1.8	44	To Overall Needs
	FIN	8.1	3	10	2	41	To Financial Quest.
	MKTG	8.4	5	10	1.5	41	Marketing Person-nel Helpfulness

CRAY

CUSTOMER SATISFACTION SURVEY

EXECUTIVE COMMITTEE
REPORT OF FINDINGS

SEPTEMBER 3, 1986

by

Jack Keen, Project Manager

INPUT

1943 Landings Drive
Mountain View, CA 94043

(415) 960-3990

INPUT

CONTENTS

o Objectives and Methodology

o Analysis of Findings

   - Overall Attitudes, Decision Criteria

   - Hardware Reliability/Support

   - Software Reliability/Support

   - CRI Marketing and Management

o Recommendations/Summary

o Sample Questionnaire

SUMMARY

o User Expectations are Changing and Increasing

o Customers Are Loyal, Want CRI to Prosper

o Government/Commercial Distinctions Becoming
  Apparent

o Customers Concerned CRI Is Underestimating
  Importance of Total Computing Solution Strategy

o Result: Loyalty to CRI Will Diminish as Competition
  Grows

o Opportunity: Demonstrate CRI Can Respond to
  these Changing Customer Needs

ZCRY EC 45

INTRODUCTION

Cray Research has commissioned INPUT to conduct a national customer satisfaction survey of all Cray computer users. The purpose of the survey is to help Cray identify opportunities to best serve you and others in the future.

INPUT is an independent international market research and consulting firm that specializes in the computer industry.

Cray has specifically asked us to interview you. Your opinions and suggestions are very important to Cray. We would like to get your candid responses at this time. If you wish any of your answers to be treated anonymously, please let us know.

SYSTEM PROFILE

1. To begin with we would like a quick profile of your current Cray computer system(s).

	System #1	System #2	System #3
a. Model Type	_____	_____	_____
b. Date of Installation	_____	_____	_____
c. Operating System	_____	_____	_____
d. Maint. Contract Type	_____	_____	_____
e. Maint. Service Since (Month/Year)	_____	_____	_____
f. Type of processing for majority of work: (Circle answer)	PRODUCTION	PRODUCTION	PRODUCTION
	RESEARCH	RESEARCH	RESEARCH

Definition: "Production" processing directly serves the organization's primary operational mission and is characterized most often by repetitive tasks that are frequently time critical. In contrast, "Research" processing usually involves projects dealing with investigations of scientific-related phenonemena, and is typically less time critical than production tasks.

DECISION CRITERIA

2. If your organization were to purchase a supercomputer today,
how important would each of these factors be in the purchase
decision process (scale of 1 to 10, with 1 = very low and 10 =
very high importance).   Rating
                                                    (1 to 10)

    a. Overall system performance   _____

    b. System reliability   _____

    c. Availability of systems software   _____

    d. Availability of applications software _____

    e. Vendor reputation for maintenance   _____

    f. Overall system price   _____

    g. Maintenance price   _____

PERFORMANCE

3. How many hours per week is your system currently scheduled to
operate? _____ HOURS

4. What is your percentage of utilization of the system during
the past month, i.e. what portion of the time is the system
actually being used, expressed as a percentage of the time the
system is available for use. (Excluded from available time is
downtime due to preventive maintenance and non-problem related
software update time.) _____%

5. What percent utilization (on average over the past 6 months)
are you currently experiencing with the entire system?
_____%

6. How many hardware or software-caused system interruptions per
system do you have monthly (on average over the past 6
months)?_____
    a. What percent are hardware related?   _____

    b. What percent are software related?   _____

    c. What percent are "other" (environment, etc.)? _____

                              TOTAL   =   100%

HARDWARE

7. On the average how long does it take Cray to respond once you have placed a maintenance request:

  a. during regular maintenance availability time?   _____minutes

  b. during off-hours?   _____minutes

8. On the average how long does it take your Cray customer engineer to repair routine hardware problems once work has begun? _____hours

9. On a scale of 1 to 10, how satisfied are you with Cray's:

		Rating (1 to 10)
a.	Mainframe availability/reliability	_____
b.	Peripheral availability/reliability (e.g. disks, tapes, I/O subsystem)	_____
c.	Hardware maintenance response time	_____
d.	Hardware maintenance repair time	_____

10a. On a scale of 1 to 10, in your opinion what is the level of quality of the diagnostic procedures currently being used by Cray? _____

  10b. What factors influenced your rating?_____

    _____

    _____

    _____

11. Please rate on a scale of 1 to 10 your requirements for the
following hardware goods and services, as well as your current
level of satisfaction.

		Requirement? (YES/NO)	Satisfaction (1 to 10)
a.	Hardware installation consulting	_____	_____
b.	Hardware documentation	_____	_____
c.	Parts availability	_____	_____
d.	Cray's escalation procedures		_____
e.	Cray ON-SITE customer engineer skill level		_____
f.	Cray FIELD hardware technical support personnel skill level (i.e. region or headquarters -based people)		_____

SOFTWARE

12. For which of the following types of systems software are you
    currently receiving support (check all that apply)?

        COS_____   CTSS_____   UNICOS_____

        FORTRAN_____   STATION_____

	Operating System	FORTRAN	STATION
13. On average, how long does it take Cray to RESPOND to a systems software problem? (in hours)..........	_____	_____	_____
14. On average, how long does it take Cray to RESOLVE a systems software problem? (in hours).........	_____	_____	_____

	Operating System	FORTRAN	STATION
15. How satisfied are you (1 to 10, 10 = highest) with:			
a. Systems software availability/reliability..	_____	_____	_____
b. Systems software maintenance RESPONSE time..	_____	_____	_____
c. Systems software maintenance REPAIR time..	_____	_____	_____
16. How satisfied are you with the different methods of software support, as provided by:			
a. Cray's ON-SITE software analyst?	_____	_____	_____
b. Cray FIELD software technical support personnel (region or headquarter-based)?	_____	_____	_____

17. Would you be willing to participate in systems software support maintenance by any of the following methods?

	Doing Now? (YES/NO)	Would Consider Doing? (YES/NO)	Expect Maintenance Discount? (YES/NO) How Much?	
a. Working with a support center to diagnose a problem.	_____	_____	_____	_____
b. Installing patches or modifications developed by Cray.	_____	_____	_____	_____
c. Installing new releases received from Cray.	_____	_____	_____	_____

18. Please rate on a scale of 1 to 10 your requirements for the
following systems software goods and services, as well as your
current level of satisfaction:

S A T I S F A C T I O N (1 TO 10)

	Operating System	FORTRAN	STATION
a. Systems software documentation	_____	_____	_____
b. Systems software training at your site	_____	_____	_____
c. Systems software training at Cray headquarters	_____	_____	_____
d. Systems software consulting	_____	_____	_____
e. Systems software escalation	_____	_____	_____

GENERAL

19a. On a scale of 1 to 10, how satisfied were you with the
hardware installation service provided by Cray?_____

    19b. What factors influenced your installation satisfaction
    rating above?_____

    _____

    _____

    _____

    _____

    _____

    _____

20a. Would you like to see Cray become more active in the use of remote diagnostics?

　　　　　YES____　　　　　　NO____

　　　20b.Why or why not?_____

　　　　　　　_____

　　　　　　　_____

　　　　　　　_____

　　　　　　　_____

21. The following questions relate to how well you like doing business with Cray. Please respond on a scale of 1 to 10 with 1 being not satisfied and 10 being extremely satisfied.

Satisfaction
(1 to 10)

　　a. Extent Cray is responsive to your
　　　 organization's overall needs　　　　　　　　　　_____

　　b. Cray's responses to your financial questions　_____

　　c. Helpfulness of Cray marketing personnel　　　 _____

　　In regards to your Cray marketing representative:

　　　　d. On the average, how frequently have you seen that person face to face during the past six months?

　　　　　　　ABOUT ONCE PER WEEK　　　　　　_____

　　　　　　　ABOUT 2 TO 3 TIMES PER MONTH _____

　　　　　　　ABOUT ONCE PER MONTH　　　　　_____

　　　　　　　OTHER　　　　　　　　　　　　_____

　　　　　　　　(Specify frequency)_____

　　　e. How many working days has it been since you last you
　　　　 last received a visit from that person?

　　　　　　　DAYS SINCE LAST VISIT_____

22. On a scale of 1 to 10 (10 = high) please rate Cray in the following categories:

Satisfaction
(1 to 10)

a. Overall satisfaction with Cray's
   maintenance service   _____

b. Price of maintenance service   _____

c. Frequency. of interaction with Cray
   executive and senior management
   personnel   _____

23. What suggestions do you have concerning how interaction could be improved between Cray executives and Cray customers?

_____

_____

_____

_____

_____

24. On a scale of 1 to 10, how well is your Cray system living up to your expectations:

Expectation
Level
(1 to 10)

a. When you first acquired it?   _____

b. Currently?   _____

25. In addition to what has been discussed above, is there anything Cray could do to further improve your satisfaction with them?

_____

_____

_____

_____

_____

_____

_____

_____

26a. All things considered, if tomorrow morning you were to suddenly receive funding approval for acquiring additional supercomputer capability, would you buy from Cray?

        YES____   NO____

   26b. Why or why not?_____

        _____

        _____

        _____

        _____

27. Do you have any other suggestions or comments that you would like to pass along to Cray concerning any aspect of their business? If YES, what are they?_____

   _____

   _____

   _____

   _____

   _____

ADDITIONAL NOTES

_____

_____

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_____

_____

THANK YOU VERY MUCH FOR YOUR TIME

CRI OBJECTIVE

- Maintain CRI as the Standard of Value

- Further Strengthen CRI by:

  Using Customer Satisfaction as a
  Primary Competitive Edge

- Method:

  Conduct Customer Satisfaction Survey
  to Understand Attitudes/Concerns

- Outcome:

  Identify Steps to Enhance Customer
  Satisfaction

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METHODOLOGY

- U.S.A. Customer's Only

- 42 Sites

- 45 Interviews

- 18 On-Site Interviews

- 27 Telephone Interviews

- Respondents: Person(s) Most Likely to:

  - Influence Next Supercomputer
    Acquisition

  - Be Most Knowledgeable of CRI
    Performance

- Standard Questionnaire

- Comments Actively Encouraged

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RATING SCALES

- Respondents Often Asked to Rate
  Their Attitudes on a Scale of 1 to 10

       1   – Low

       10 – High

- Respondents Given No Further
  Description of Rating Values

- Generally Consider Evaluating
  Responses as Follows:

       9 – 10   Excellent

       7 – 8   Good

       5 – 6   Fair

       1 – 4   Poor

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CRAY SYSTEM
MEETING EXPECTATIONS
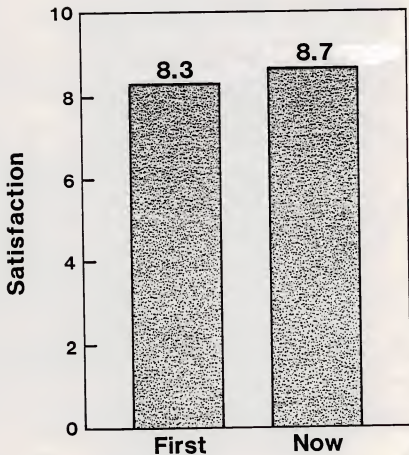
Q24: Extent Living up to Expectations

	Code	Mean	Min.	Max.	Std. Dev.	Cases
All	First	8.3	1	10	2	45
	Now	8.7	5	10	1.3	45
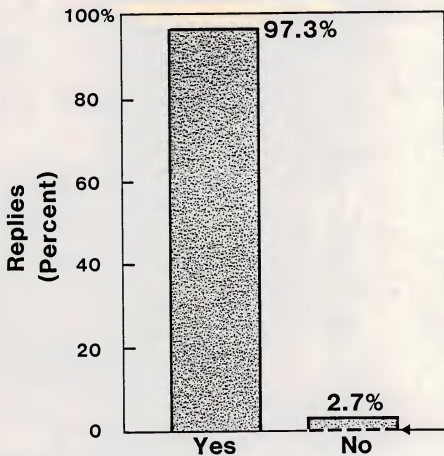
BUY CRAY TOMORROW?

Q26: Buy Cray Tomorrow?

	Rating	Percent Total	Number of Cases
All	Yes	97.3	36
	No	2.7	1
	Total	100	37

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HARDWARE INSTALLATION
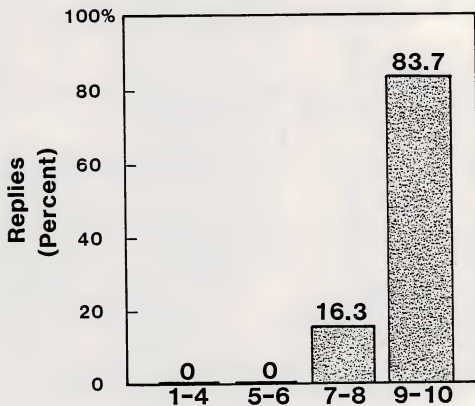
Q19: Hardware Installation

	Rating	Percent Total	Number of Cases	Mean	Min.	Max.	Std. Dev.
	1-4	0	0				
	5-6	0	0				
	7-8	16.3	7				
	9-10	83.7	36				
All	Total	100.0	43	9.4	7	10	.9
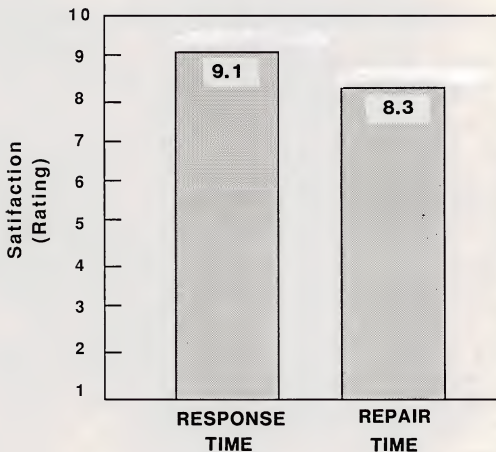
HARDWARE MAINTENANCE SATISFACTION

Q9C,D: Hardware Maintenance Response/Repair Time

	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases
All	RESPONSE	9.1	5	10	1.1	38
	REPAIR	8.3	2	10	1.7	37

CE SKILL LEVEL

Q11E,F: Customer Engineer Skill Level Ratings

	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases
All	LOC	8.3	5	10	1.1	37
	REM	8.6	7	10	.9	23

DIAGNOSTICS

Q10A: Diagnostics Quality

	Rating	Percent Total	Number of Cases	Mean	Min.	Max.	Std. Dev.
	1-4	20	6				
	5-6	26.7	8				
	7-8	33.3	10				
	9-10	20	6				
All	Total	100.0	30	6.5	2	10	2.3

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CRI'S MARKET POSITION

- To Date: Only Game in Town

- Very Soon: Significant Competition
  That Has Less Fast Hardware, But:

  - More Reliable Hardware

  - Better Systems Software

  - More Flexible Business Policies

  - Better End User Empathy, Support

SUMMARY: CUSTOMER ATTITUDES

- CRI Is a Very Impressive Company

- But Competitive Threat Is Greater Than CRI Realizes

- Customers Are Very Worried CRI is Insensitive to Need for a Total Computing Solution Strategy

- CRI Is Changing Too Slowly Regarding:

    - Role of Software
    - Reasonable Policies
    - Support After the Sale
    - Respect for the Customer

- Customers Like CRI and Want to Win

SAMPLE
QUESTIONNAIRE

CUSTOMER SUGGESTIONS

DECISION CRITERIA TODAY

Bar values:
- PER: 9.2
- REL: 8.5
- SSW: 8.0
- SPR: 7.7
- MPR: 7.2
- ASW: 6.4
- REP: 5.8

Q2: Decision Criteria

	Code	Mean	Min.	Max.	Std. Dev.	Description
All	PER	9.2	6.0	10.0	1.1	Overall System Perform.
	REL	8.5	3.0	10.0	1.6	System Reliability
	SSW	8.0	1.0	10.0	2.0	Availability of Sys. SW
	REP	5.8	1.0	10.0	3.0	Vendor Maint. Rep.
	SPR	7.7	4.0	10.0	1.6	Overall System Price
	MPR	7.2	3.0	10.0	1.8	Maintenance Price
	ASW	6.4	3.0	10.0	1.8	Avail. of Appl. SW

HARDWARE SATISFACTION
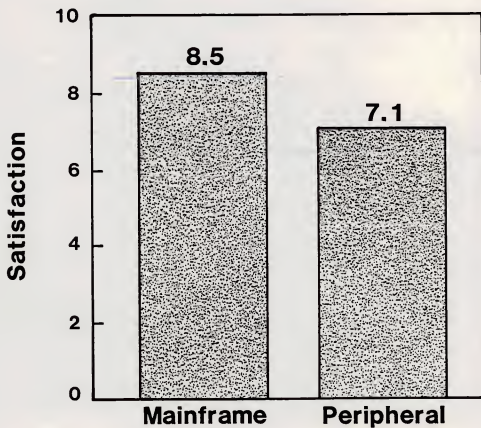
Q9: Mainframe Availability/Reliability

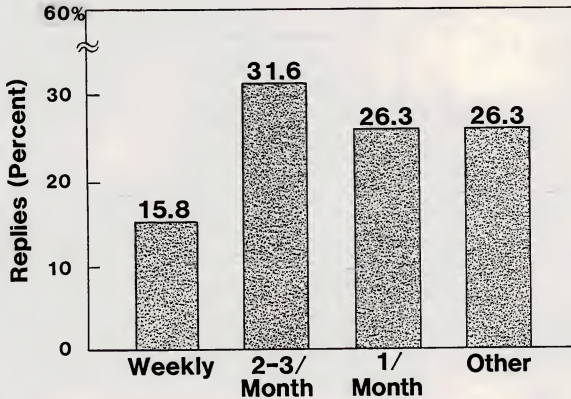|	Code	Mean	Min.	Max.	Std. Dev.	Cases	Description
All	MF	8.5	2	10	1.8	44	Mainframe Avail./Reliability
	PER	7.1	2	10	1.8	42	Peripheral Avail./Reliability

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FORTRAN RATINGS

Q15. Fortran Ratings (Q15)

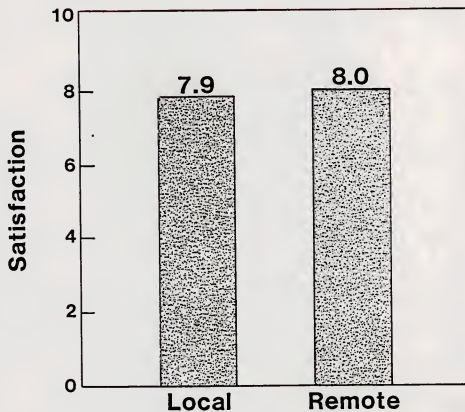|	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases	Description
All	AVAIL	6.9	2	10	1.8		Fortran Avail./Rel.
	RESP	7.1	2	10	2		Fortran Maint. Resp. Time
	REPR	6.6	2	9	1.8		Fortran Maint. Repair Time

FREQUENCY OF SALES VISITS

Q21D: Frequency of CRI Marketing Rep. Visits

	Class	Percent Total	Number of Cases	Description
All	Weekly	15.8	6	Once per Week
	2-3/Mo.	31.6	12	2 to 3 Times per Month
	1/Mo.	26.3	10	About once per Month
	Other	26.3	10	Other
	Total	100	38	

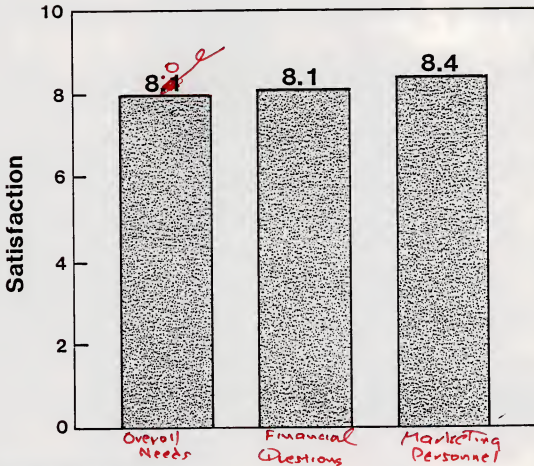**SOFTWARE ANALYST SKILL LEVELS**

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CRAY

CUSTOMER SATISFACTION SURVEY
EXECUTIVE COMMITTEE
REPORT OF FINDINGS

move
and
center

SEPTEMBER 3, 1986

by

Jack Keen, Project Manager

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Mountain View, CA 94043

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CONTENTS

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  - Software Reliability/Support

  - CRI Marketing and **Management**   *should not be BOLD*

- Recommendations/Summary

- Sample Questionnaire

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SUMMARY

- User Expectations Are Changing and Increasing

- Customers Are Loyal, Want CRI to Prosper

- Government/Commercial Distinctions Becoming Apparent

- Customers Concerned CRI Is Underestimating Importance of Total Computing Solution Strategy

- Result: Loyalty to CRI Will Diminish as **Competition Grows**   *not sold*

- Opportunity: Demonstrate CRI Can Respond to these **Changing Customer Needs**

61ZCRY-2

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e. Maint. Service Since (Month/Year)	_____	_____	_____
f. Type of processing for majority of work: (Circle answer)	PRODUCTION	PRODUCTION	PRODUCTION
	RESEARCH	RESEARCH	RESEARCH

    Definition: "Production" processing directly serves the
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DECISION CRITERIA

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                                                       (1 to 10)

   a. Overall system performance   _____

   b. System reliability   _____

   c. Availability of systems software   _____

   d. Availability of applications software _____

   e. Vendor reputation for maintenance   _____

   f. Overall system price   _____

   g. Maintenance price   _____

PERFORMANCE

3. How many hours per week is your system currently scheduled to operate? _____ HOURS

4. What is your percentage of utilization of the system during the past month, i.e. what portion of the time is the system actually being used, expressed as a percentage of the time the system is available for use. (Excluded from available time is downtime due to preventive maintenance and non-problem related software update time.) _____%

5. What percent utilization (on average over the past 6 months) are you currently experiencing with the entire system? _____%

6. How many hardware or software-caused system interruptions per system do you have monthly (on average over the past 6 months)?_____
   a. What percent are hardware related?   _____

   b. What percent are software related?   _____

   c. What percent are "other" (environment, etc.)? _____

                               TOTAL   =   100%

HARDWARE

7. On the average how long does it take Cray to respond once you have placed a maintenance request:

   a. during regular maintenance availability time? _____minutes

   b. during off-hours? _____minutes

8. On the average how long does it take your Cray customer engineer to repair routine hardware problems once work has begun? _____hours

9. On a scale of 1 to 10, how satisfied are you with Cray's:

		Rating (1 to 10)
a.	Mainframe availability/reliability	_____
b.	Peripheral availability/reliability (e.g. disks, tapes, I/O subsystem)	_____
c.	Hardware maintenance response time	_____
d.	Hardware maintenance repair time	_____

10a. On a scale of 1 to 10, in your opinion what is the level of quality of the diagnostic procedures currently being used by Cray? _____

   10b. What factors influenced your rating?_____

   _____

   _____

   _____

11. Please rate on a scale of 1 to 10 your requirements for the
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level of satisfaction.

		Requirement? (YES/NO)	Satisfaction (1 to 10)
a.	Hardware installation consulting	_____	_____
b.	Hardware documentation	_____	_____
c.	Parts availability	_____	_____
d.	Cray's escalation procedures		_____
e.	Cray ON-SITE customer engineer skill level		_____
f.	Cray FIELD hardware technical support personnel skill level (i.e. region or headquarters -based people)		_____

SOFTWARE

12. For which of the following types of systems software are you
    currently receiving support (check all that apply)?

    COS_____   CTSS_____   UNICOS_____

    FORTRAN_____   STATION_____

	Operating System	FORTRAN	STATION
13. On average, how long does it take Cray to RESPOND to a systems software problem? (in hours)..........	_____	_____	_____
14. On average, how long does it take Cray to RESOLVE a systems software problem? (in hours).........	_____	_____	_____

	Operating System	FORTRAN	STATION
15. How satisfied are you (1 to 10, 10 = highest) with:			
a. Systems software availability/reliability..	_____	_____	_____
b. Systems software maintenance RESPONSE time..	_____	_____	_____
c. Systems software maintenance REPAIR time..	_____	_____	_____
16. How satisfied are you with the different methods of software support, as provided by:			
a. Cray's ON-SITE software analyst?	_____	_____	_____
b. Cray FIELD software technical support personnel (region or headquarter-based)?	_____	_____	_____

17. Would you be willing to participate in systems software support maintenance by any of the following methods?

	Doing Now? (YES/NO)	Would Consider Doing? (YES/NO)	Expect Maintenance Discount? (YES/NO)	How Much?
a. Working with a support center to diagnose a problem.	_____	_____	_____	_____
b. Installing patches or modifications developed by Cray.	_____	_____	_____	_____
c. Installing new releases received from Cray.	_____	_____	_____	_____

18. Please rate on a scale of 1 to 10 your requirements for the following systems software goods and services, as well as your current level of satisfaction:

S A T I S F A C T I O N (1 TO 10)

	Operating System	FORTRAN	STATION
a. Systems software documentation	_____	_____	_____
b. Systems software training at your site	_____	_____	_____
c. Systems software training at Cray headquarters	_____	_____	_____
d. Systems software consulting	_____	_____	_____
e. Systems software escalation	_____	_____	_____

GENERAL

19a. On a scale of 1 to 10, how satisfied were you with the hardware installation service provided by Cray?_____

19b. What factors influenced your installation satisfaction rating above?_____

_____

_____

_____

_____

_____

_____

20a. Would you like to see Cray become more active in the use of remote diagnostics?

      YES_____   NO_____

    20b.Why or why not?_____

      _____

      _____

      _____

      _____

21. The following questions relate to how well you like doing business with Cray. Please respond on a scale of 1 to 10 with 1 being not satisfied and 10 being extremely satisfied.

                                      Satisfaction
                                      (1 to 10)

    a. Extent Cray is responsive to your
       organization's overall needs   _____

    b. Cray's responses to your financial questions   _____

    c. Helpfulness of Cray marketing personnel   _____

    In regards to your Cray marketing representative:

        d. On the average, how frequently have you seen that
person face to face during the past six months?

                ABOUT ONCE PER WEEK   _____

                ABOUT 2 TO 3 TIMES PER MONTH _____

                ABOUT ONCE PER MONTH   _____

                OTHER   _____

                  (Specify frequency)_____

    e. How many working days has it been since you last you
       last received a visit from that person?

                DAYS SINCE LAST VISIT_____

22. On a scale of 1 to 10 (10 = high) please rate Cray in the
following categories:

                                              Satisfaction
                                                (1 to 10)

   a. Overall satisfaction with Cray's
      maintenance service   _____

   b. Price of maintenance service   _____

   c. Frequency of interaction with Cray
      executive and senior management
      personnel   _____

23. What suggestions do you have concerning how interaction could
be improved between Cray executives and Cray customers?

_____

_____

_____

_____

_____

24. On a scale of 1 to 10, how well is your Cray system living
up to your expectations:

                                          Expectation
                                             Level
                                          (1 to 10)

   a. When you first acquired it?   _____

   b. Currently?   _____

25. In addition to what has been discussed above, is there anything Cray could do to further improve your satisfaction with them?

_____

_____

_____

_____

_____

_____

_____

_____

26a. All things considered, if tomorrow morning you were to suddenly receive funding approval for acquiring additional supercomputer capability, would you buy from Cray?

        YES____   NO____

   26b. Why or why not?_____

        _____

        _____

        _____

        _____

27. Do you have any other suggestions or comments that you would like to pass along to Cray concerning any aspect of their business? If YES, what are they?_____

_____

_____

_____

_____

_____

SSN

ADDITIONAL NOTES

_____
_____
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THANK YOU VERY MUCH FOR YOUR TIME

CRI OBJECTIVE

- Maintain CRI as the Standard of Value

- Further Strengthen CRI by:
  Using Customer Satisfaction as a
  Primary Competitive Edge

- Method:
  Conduct Customer Satisfaction Survey
  to Understand Attitudes/Concerns

- Outcome:
  Identify Steps to Enhance Customer
  Satisfaction

INPUT

METHODOLOGY

- U.S.A. Customer's Only

- 42 Sites

- 45 Interviews

- 18 On-Site Interviews

- 27 Telephone Interviews

- Respondents: Person(s) Most Likely to:

  - Influence Next Supercomputer Acquisition

  - Be Most Knowledgeable of CRI Performance

- Standard Questionnaire

- Comments Actively Encouraged

RATING SCALES

- **Respondents Often Asked to Rate Their Attitudes on a Scale of 1 to 10**

    1 – Low

    10 – High

- **Respondents Given No Further Description of Rating Values**

- **Generally Consider Evaluating Responses as Follows:**

    9 – 10   Excellent

    7 – 8   Good

    5 – 6   Fair

    1 – 4   Poor

CRAY SYSTEM
MEETING EXPECTATIONS

Q24: Extent Living up to Expectations

	Code	Mean	Min.	Max.	Std. Dev.	Cases
All	First	8.3	1	10	2	45
	Now	8.7	5	10	1.3	45

BUY CRAY TOMORROW?

Bar chart titled "BUY CRAY TOMORROW?" showing Replies (Percent) on the Y-axis (0 to 100%) with two bars: "Yes" at 97.3% and "No" at 2.7%.

Q26: Buy Cray Tomorrow?

	Rating	Percent Total	Number of Cases
All	Yes	97.3	36
	No	2.7	1
	Total	100	37

INPUT

HARDWARE INSTALLATION

Q19: Hardware Installation

		Percent Total	Number of Cases	Mean	Min.	Max.	Std. Dev.
	Rating						
	1-4	0	0				
	5-6	0	0				
	7-8	16.3	7				
	9-10	83.7	36				
All	Total	100.0	43	9.4	7	10	.9

HARDWARE MAINTENANCE SATISFACTION

Q9C,D: Hardware Maintenance Response/Repair Time

	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases
All	RESPONSE	9.1	5	10	1.1	38
	REPAIR	8.3	2	10	1.7	37

INPUT

CE SKILL LEVEL

Q11E.F: Customer Engineer Skill Level Ratings

	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases
All	LOC	8.3	5	10	1.1	37
	REM	8.6	7	10	.9	23

INPUT

DIAGNOSTICS

Q10A: Diagnostics Quality

	Rating	Percent Total	Number of Cases	Mean	Min.	Max.	Std. Dev.
	1-4	20	6				
	5-6	26.7	8				
	7-8	33.3	10				
	9-10	20	6				
All	Total	100.0	30	6.5	2	10	2.3

CRI'S MARKET POSITION

- **To Date: Only Game in Town**

- **Very Soon: Significant Competition That Has Less Fast Hardware, But:**

    - **More Reliable Hardware**

    - **Better Systems Software**

    - **More Flexible Business Policies**

    - **Better End User Empathy, Support**

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SUMMARY: CUSTOMER ATTITUDES

- CRI Is a Very Impressive Company

- But Competitive Threat Is Greater Than CRI Realizes

- Customers Are Very Worried CRI is Insensitive to Need for a Total Computing Solution Strategy

- CRI Is Changing Too Slowly Regarding:

  - Role of Software
  - Reasonable Policies
  - Support After the Sale
  - Respect for the Customer

- Customers Like CRI and Want to Win

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SAMPLE
QUESTIONNAIRE

INPUT

CUSTOMER
SUGGESTIONS

DECISION CRITERIA TODAY

	Code	Mean	Min.	Max.	Std. Dev.	Description
All	PER	9.2	6.0	10.0	1.1	Overall System Perform.
	REL	8.5	3.0	10.0	1.6	System Reliability
	SSW	8.0	1.0	10.0	2.0	Availability of Sys. SW
	REP	5.8	1.0	10.0	3.0	Vendor Maint. Rep.
	SPR	7.7	4.0	10.0	1.6	Overall System Price
	MPR	7.2	3.0	10.0	1.8	Maintenance Price
	ASW	6.4	3.0	10.0	1.8	Avail. of Appl. SW

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HARDWARE SATISFACTION

Q9: Mainframe Availability/Reliability

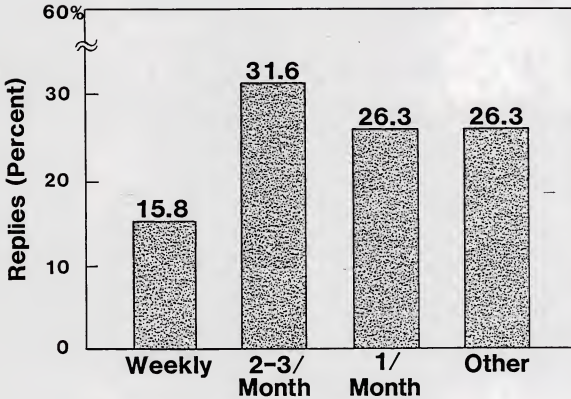|	Code	Mean	Min.	Max.	Std. Dev.	Cases	Description
All	MF	8.5	2	10	1.8	44	Mainframe Avail./Reliability
	PER	7.1	2	10	1.8	42	Peripheral Avail./Reliability

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(14N) ✗

FORTRAN RATINGS

Q15, Fortran Ratings (Q15)

	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases	Description
All	AVAIL	6.9	2	10	1.8		Fortran Avail./Rel.
	RESP	7.1	2	10	2		Fortran Maint. Resp. Time
	REPR	6.6	2	9	1.8		Fortran Maint. Repair Time

FREQUENCY OF SALES VISITS

Q21D: Frequency of CRI Marketing Rep. Visits

	Class	Percent Total	Number of Cases	Description
All	Weekly	15.8	6	Once per Week
	2-3/Mo.	31.6	12	2 to 3 Times per Month
	1/Mo.	26.3	10	About once per Month
	Other	26.3	10	Other
	Total	100	38	

SUMMARY

- User Expectations Are Changing and Increasiing

- Customers Are Loyal, Want CRI to Prosper

- Government/Commercial Distinctions Becoming .Apparent

- Customers Concerned CRI Is Underestimating Importance of Total Computing Solution Strategy

- Result: Loyalty to CRI Will Diminish as Competition Grows

- Opportunity: Demonstrate CRI Can Respond to these Changiing Customer Needs

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CONTENTS

- Objectives and Methodology

- Analysis of Findings

  - Overall Attitudes, Decision Criteria

  - Hardware Reliability/Support

  - Software Reliability/Support

  - CRI Marketing and Hardware ~~Management~~ Management

- Recommendations/Summary

- Sample Questionnaire

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CRAY

CUSTOMER SATISFACTION SURVEY

WESTERN REGION

REPORT OF FINDINGS

JUNE 9, 1986

by

Jack Keen, Project Manager

INPUT

1943 Landings Drive

Mountain View, CA 94303

(415) 960-3990
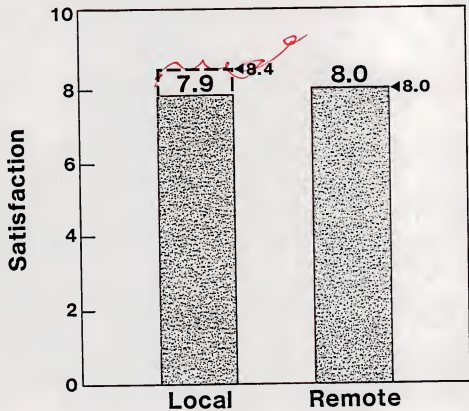
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CRI RESPONSIVENESS
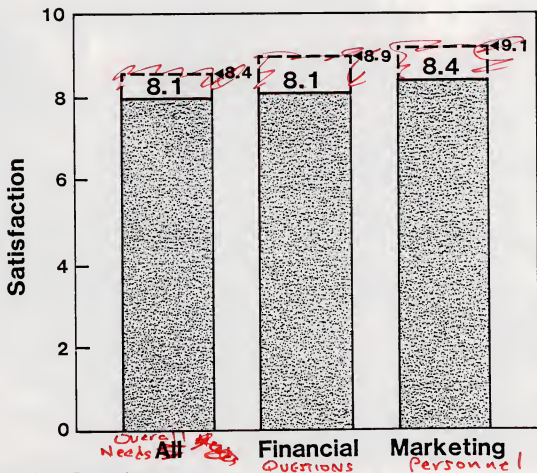
Q21A,B,C: CRI Responsiveness

	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases	Description
All	ALL	8	3	10	1.8	44	To Overall Needs
	FIN	8.1	3	10	2	41	To Financial Quest.
	MKTG	8.4	5	10	1.5	41	Marketing Personnel Helpfulness
West	ALL	8.4	6	10	1.4	14	
	FIN	8.9	6	10	1.2	14	
	MKTG	9.1	7	10	1.1	13	

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38ZCRY-2

OS SKILL LEVELS

SOFTWARE ANALYST (handwritten)

Chart — Satisfaction (y-axis 0–10) for Local and Remote:
- Local: 7.9 (handwritten annotation: 8.4)
- Remote: 8.0 (handwritten annotation: 8.0)

Q16: OS Skill Level Ratings

	Code	Mean	Min.	Max.	Std. Dev.	Number of Cases	Description
All	LOCAL	7.9	4	10	1.6	28	Local On-site SW
	REMOTE	8	5	10	1.4	21	Remote (Dist., Reg., HQ)
West	LOCAL	8.4	8	10	0.8	7	
	REMOTE	8.0	7	9	1.0	5	

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