

Equity Research
North America

Industry

Enterprise Software

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Industry Overview

October 11, 2002

Morgan Stanley CIO Survey Series: Release 3.7

MSCI SECTOR INFORMATION TECHNOLOGY

US Strategist Weight	12.7%
S&P 500 Weight	12.7%

RECENT REPORTS

Morgan Stanley CIO Survey Series: Release 3.6
August 29, 2002

Morgan Stanley CIO Survey Series: Release 3.5
July 11, 2002

Morgan Stanley CIO Survey Series: Release 3.4
June 14, 2002

Morgan Stanley CIO Survey Series: Release 3.3
May 20, 2002

Morgan Stanley CIO Survey Series: Release 3.2
April 18, 2002

Morgan Stanley CIO Survey Series: Release 3.1
March 21, 2002

Morgan Stanley CIO Survey Series: Release 3.0
February 11, 2002

Morgan Stanley CIO Survey Series: Release 2.9
December 6, 2001

Morgan Stanley CIO Survey Series: Release 2.8
November 1, 2001

Morgan Stanley CIO Survey Series: Release 2.7
October 2, 2001

Morgan Stanley CIO Survey Series: Release 2.6
September 19, 2001

Morgan Stanley CIO Survey Series: Release 2.5
August 15, 2001

In this survey of 225 CIOs:

- Year-end IT budget flush?**
 Twenty-two percent of respondents indicated they plan to spend more on technology products and services in 4Q than in 3Q. That's a lower percentage than in normal years (50-50%) but still suggests some mild budget flush at year-end.
- 2003 budgets — not bad at first blush**
 We have another *preliminary* read on IT decision-maker's initial thoughts on 2003 IT budgets. Budgets are still being formed, which is why many companies are seeing more RFPs. But we are early in the budget cycle, so it's too soon to pop any champagne corks.
- CIOs view of an economic recovery: 95% see it in 2003**
 CIOs continue to push back their expectations of economic recovery. Ninety-five percent expect the recovery in 2003, versus 52% of CIOs last June. Twelve percent expect a recovery in 1Q03, 37% in 2Q03, 24% in 3Q03, and 22% in 4Q02.
- Industry view is In-Line**
 Our thesis of an improving macroeconomic environment leading to an eventual upturn in capital spending results in our In-Line view of the Enterprise Software industry. We believe that software spending will continue to be constrained through 2002, followed by a modest recovery in 2003. We believe that overall tech spending should lag the pace of a general economic recovery due to cautious buying behavior and the lingering effects of overbuying in the past.



Previous releases of the Morgan Stanley CIO Survey Series, as well as other Morgan Stanley Enterprise Software research, can be viewed at: www.morganstanley.com/mrchuck. All of Morgan Stanley's equity research technology reports are available on the Internet through Client Link on www.morganstanley.com. If you wish to receive this service, please contact your institutional sales representative. Many reports can also be downloaded from www.morganstanley.com/institutional/techresearch/.

Please see the important disclosures at the end of this report.

Morgan Stanley CIO Survey Series: Release 3.7

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This report contains the latest results of our ongoing CIO Survey Series, which we have conducted in its current form since the beginning of 1999. The survey is conducted by telephone and uses a respondent base of 300 IT executives, of which 225 participate in the survey for each round of interviews. The survey is conducted 10 times per year.

The current survey was conducted from September 16 to September 27, 2002. All responses were collected in strict confidence and were used only in combination with all others in the survey sample. The survey yields a total of 225 responses from IT executives of the Fortune 1000. We present the results of the survey in the exhibits on the following pages.

Exhibit 1

Respondents — By Company Revenues

\$40 billion or more	14%
\$30 - \$39.9 billion	8
\$15 - \$29.9 billion	10
\$10 - \$14.9 billion	8
\$5 - \$9.9 billion	16
\$2 - \$4.9 billion	16
\$1 - \$1.9 billion	20
Under \$1 billion	7
Not sure/Not applicable	1

Source: Morgan Stanley CIO Survey, September 2002

Exhibit 2

Respondents — By Industry

Aerospace/Defense Contractor	4%
Communications	7
Education	2
Energy	3
Finance	12
Government: Federal (including Military)	1
Government: State or Local	2
Health Care/Pharmaceuticals/Medical Services	4
Insurance	7
Manufacturing	21
Printing/Publishing	2
Service Organizations	10
Technology	5
Transportation	4
Utilities	2
Wholesale/Retail Trade	12
Other	4

Source: Morgan Stanley CIO Survey, September 2002

Executive Summary

Slightly more CIOs have reevaluated their budget/spending plans in the last month. The percentage of CIOs indicating that the slowing economy has caused them to reevaluate IT budgets in the preceding month increased from 35% in July to 39% in September. In a separate question, 32% of respondents said they have revised their budget downward since the beginning of the year, compared to 38% in August.

Year-end IT budget flush? Twenty-two percent of respondents indicated they plan to spend more on technology products and services in 4Q than in 3Q. That's a lower percentage than in normal years (50-50%) but still suggests some mild budget flush at year-end.

Forty percent of respondents indicated they are seeing deeper discounts on software from vendors than they were three months ago.

2003 budgets — not bad at first blush. We have gotten another *preliminary* read on IT decision-maker's initial thoughts regarding 2003 IT budgets. Budgets are still being formed, which is why many companies are seeing an increase in RFPs. However, we are early in the budget cycle, so it's too soon to pop any champagne corks.

In June, 35% of respondents had not begun the budgeting process; in September, this percentage dropped to 12%. Twenty-two percent of respondents plan to have decreased budgets in 2003 versus 2002, 24% expect flat budgets, and 40% expect increased budgets. *At first blush, we think this is an encouraging sign, but we'll have to see if this holds through the budgeting cycle, which wraps up in December.*

Twenty percent of the respondents indicated they would spend less on network equipment in 2003 than 2002, 48% indicated they would spend the same in 2003 as 2002, and 31% indicated they would spend more in 2003 than 2002.

Thirty percent of respondents anticipate 2003 hardware spending will be flat to 2002. Forty-nine percent indicated it is likely to be up slightly or significantly, and 20% indicated hardware spending is likely to be down.

We saw similar trends in server spending plans for 2003, with 29% indicating less spend on servers in 2003, compared to 2002, 32% anticipating more spend in 2003, and 30% indicating the same amount spent in 2003 compared to 2002. The top three drivers for server

purchases next year are consolidation, capacity restraints, and application purchases.

Current conditions. Sentiment among CIOs regarding the current conditions of the US economy continued to weaken in September. The steady flow of negative news about the stock market, economy, and potential war has taken its toll on buying sentiment.

Those responding they had a “positive” or “slightly positive” outlook on the US economy dropped from 57% in June to 37% in September. Negative sentiment increased from 7% in June to 16% in September. With regard to their own company’s business prospects, we saw deterioration as well, with “positive” respondents decreasing from 60% in June to 56% in September and an increase in negative respondents from 4% in June to 9% in September.

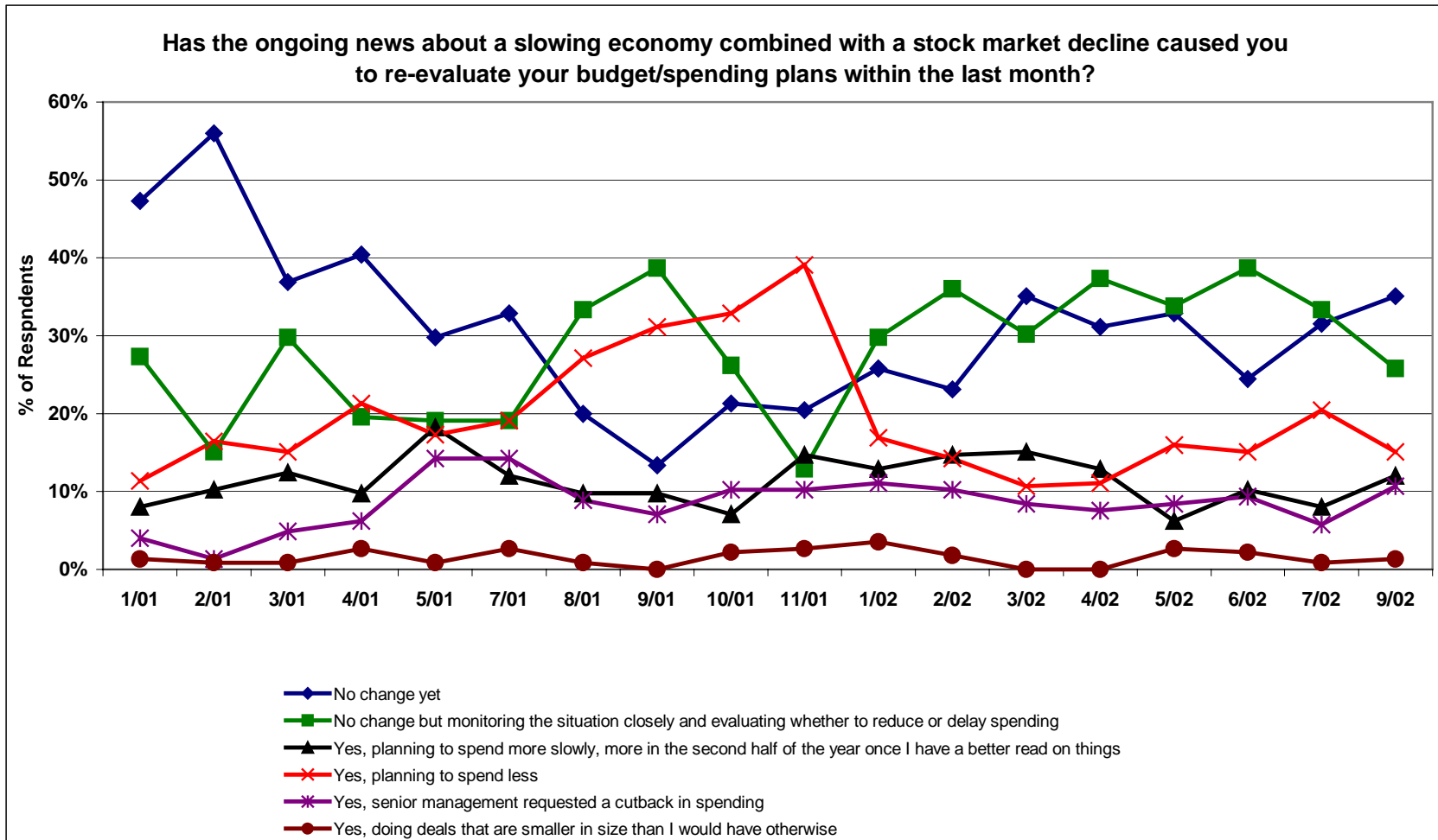
And the recovery comes when? CIOs continue to push back their expectations of an economic recovery. Ninety-five percent of CIOs expect the recovery to come in 2003, versus 52% of CIOs last June. Twelve percent expect an economic recovery in 1Q03, 37% expect it in 2Q03, 24% expect it in 3Q03, and 22% expect it in 4Q02.

Top priorities for CIOs in 2002. The top three priorities for CIOs in 2002, according to this month’s survey, were as follows:

- application integration,
- security software, and
- Windows 2000/XP upgrade – desktop.

Application integration and security software retained their spots from last month, at No. 1 and No. 2, respectively. Windows 2000/XP upgrade – desktop moved up one spot from No. 4.

Exhibit 3
IT Budgets and the Economy

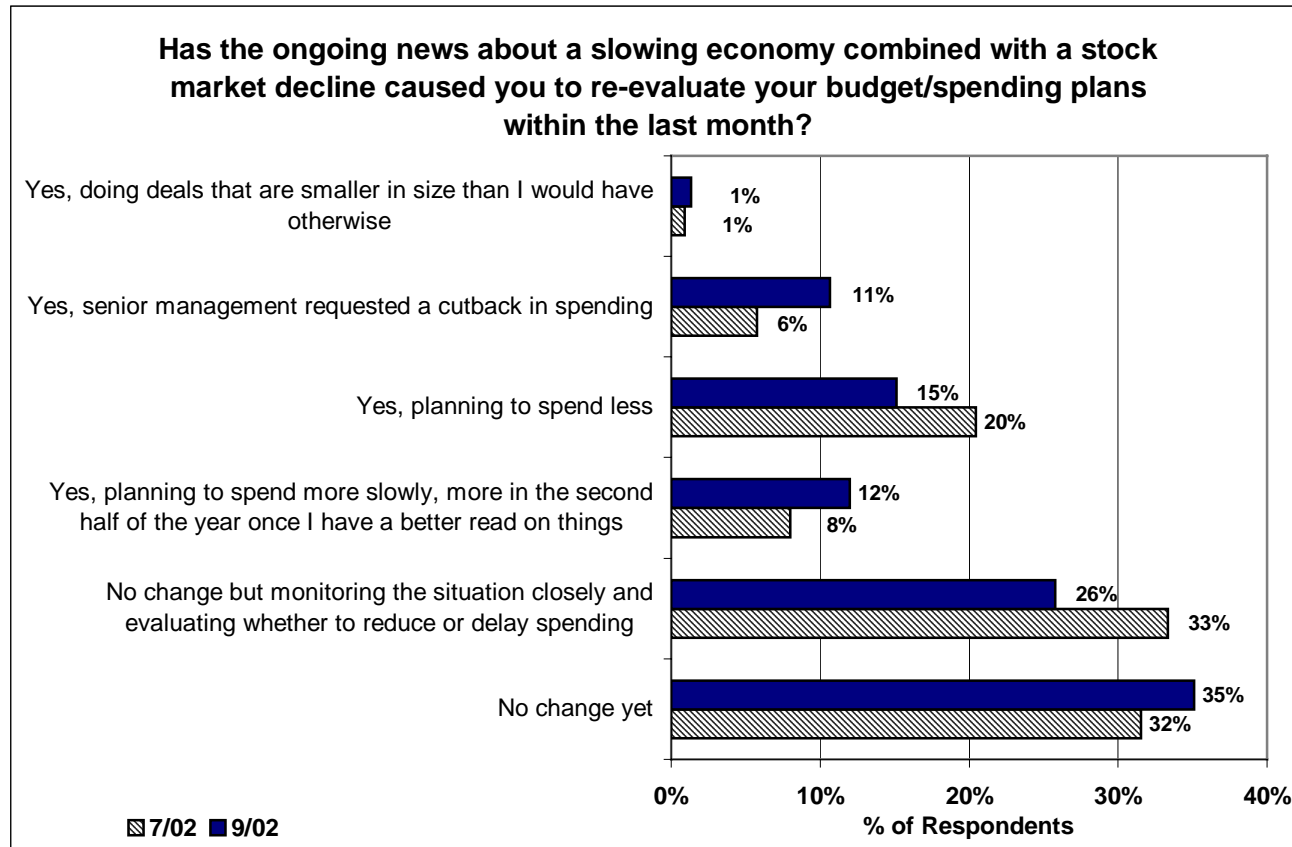


Source: Morgan Stanley CIO Survey, September 2002

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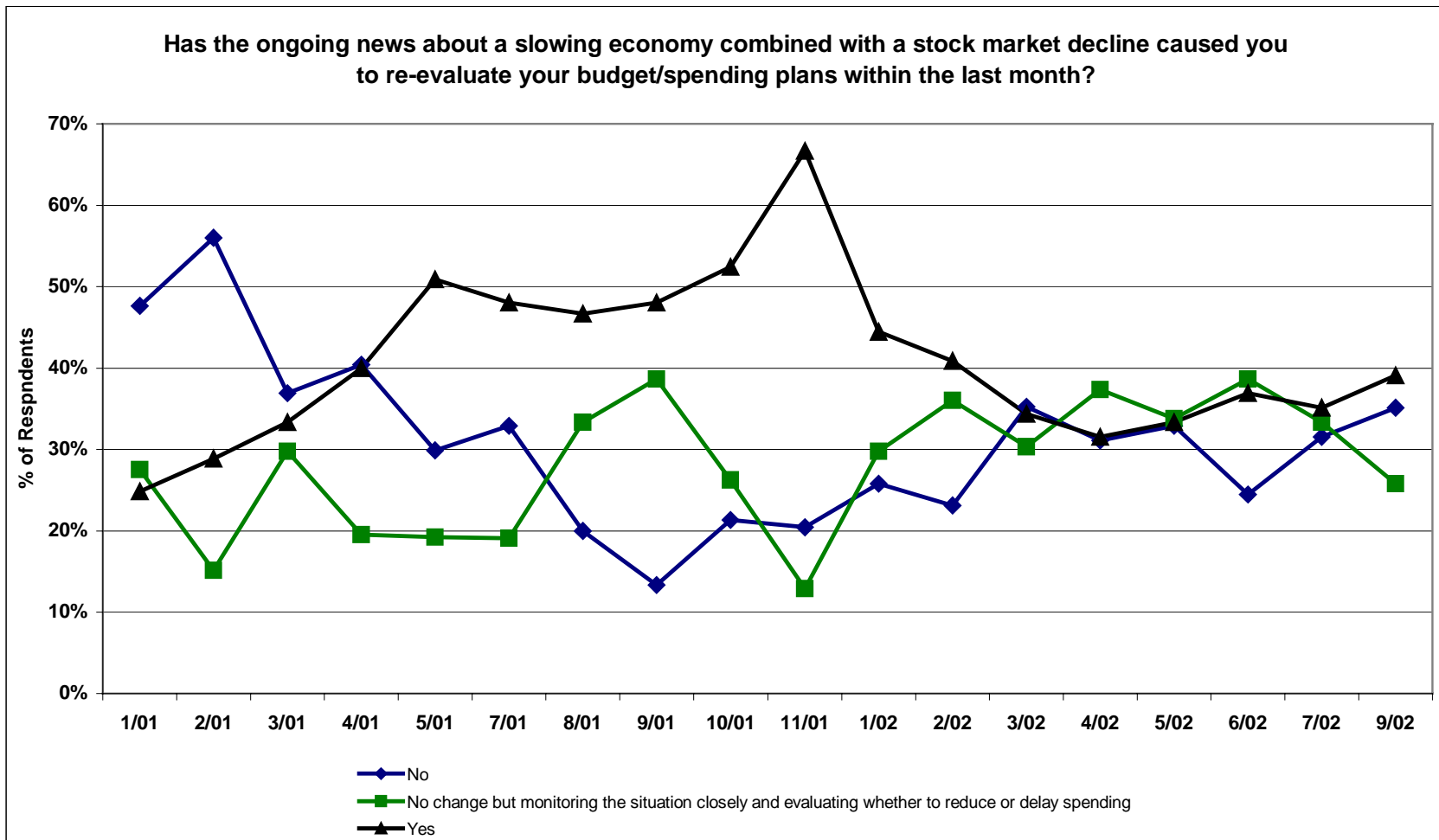
Please see the important disclosures at the end of this report.

Exhibit 4
IT Budgets and the Economy — Month-to-Month Change



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 5
IT Budgets and the Economy



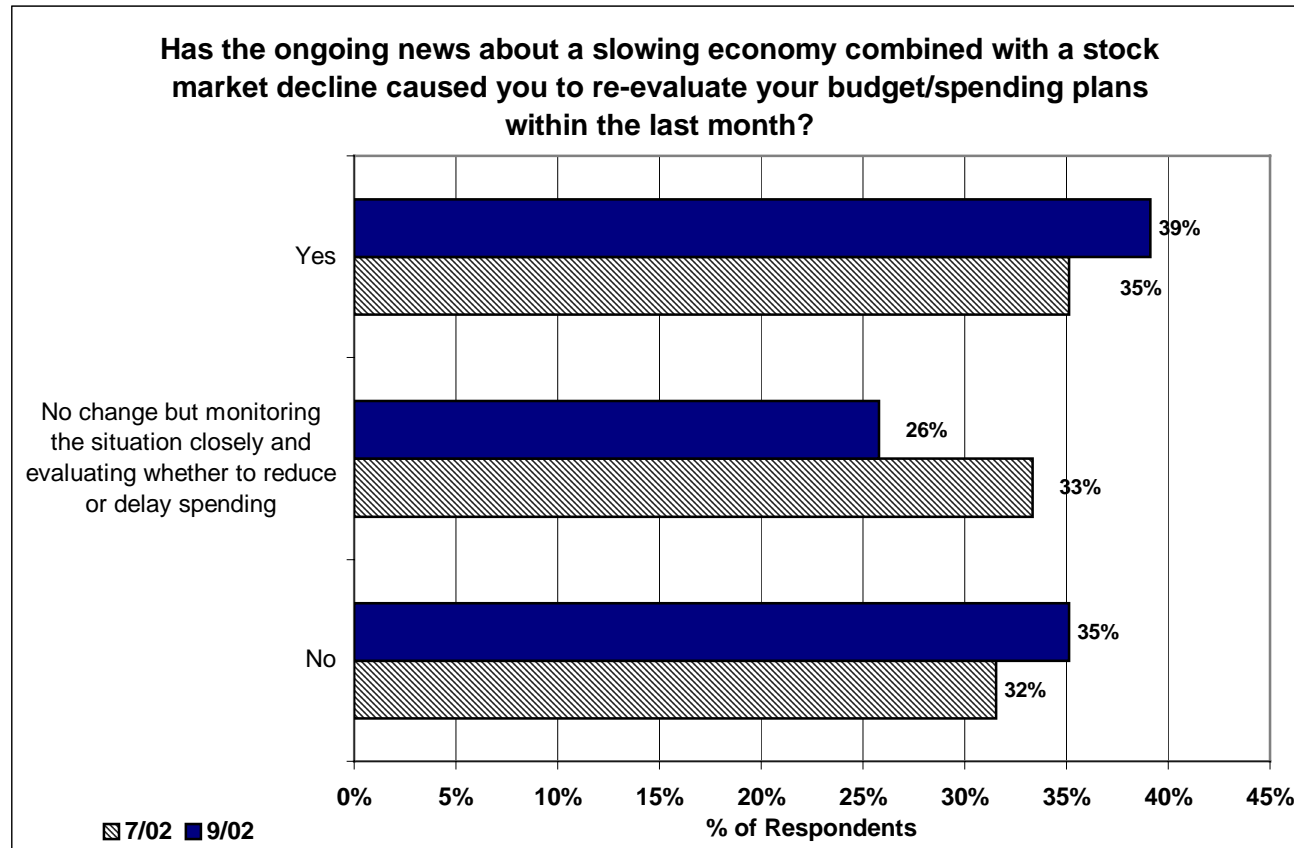
Source: Morgan Stanley CIO Survey, September 2002

This chart is based on the same data as found in Exhibit 1; however, all variations of the "YES" responses have been aggregated.

Enterprise Software – October 11, 2002

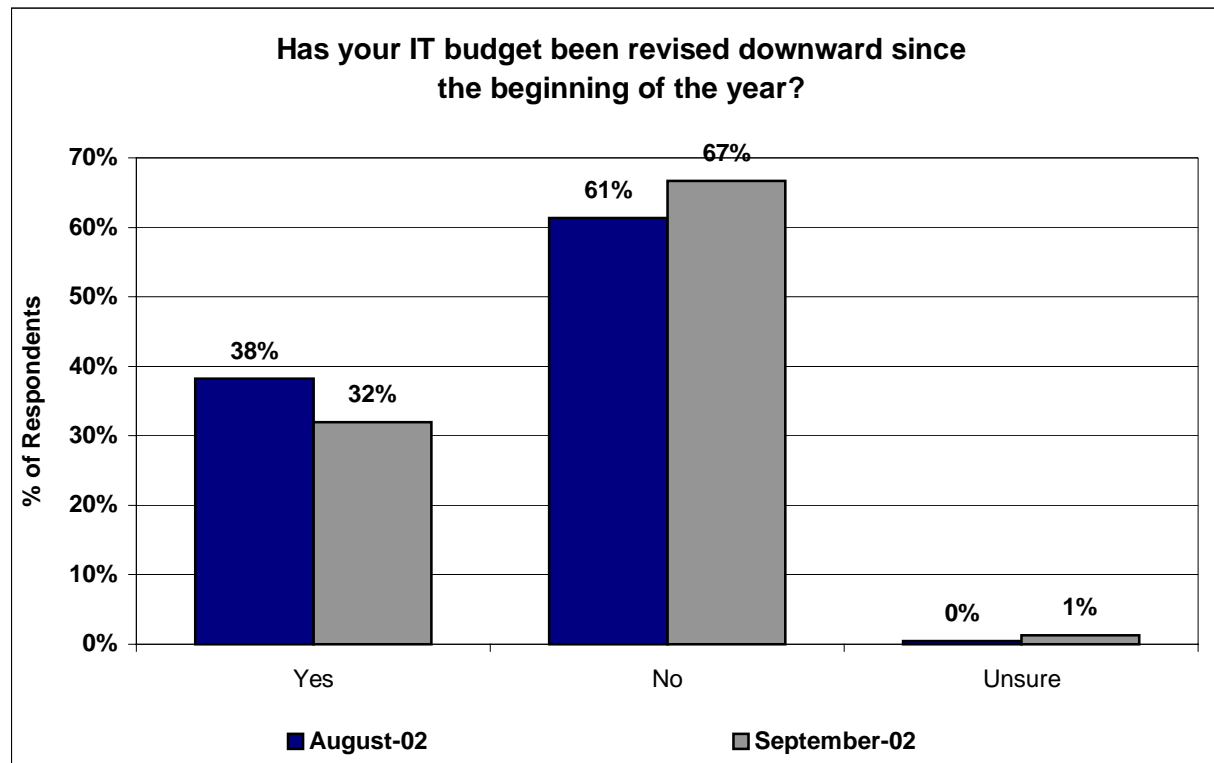
Please see the important disclosures at the end of this report.

Exhibit 6
IT Budgets and the Economy — Month-to-Month Change



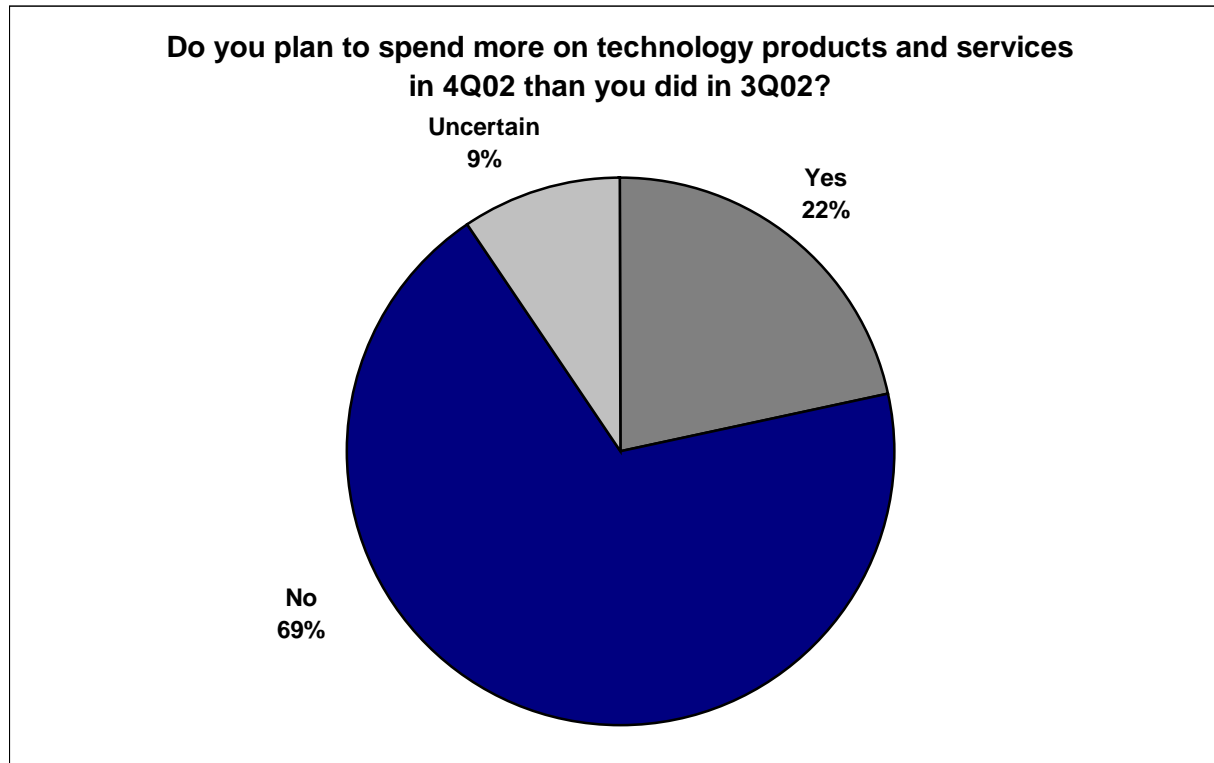
Source: Morgan Stanley CIO Survey, September 2002
 This chart is based on the same data as found in Exhibit 1; however, all variations of the “YES” responses have been aggregated.

Exhibit 7
IT Budgets and the Economy



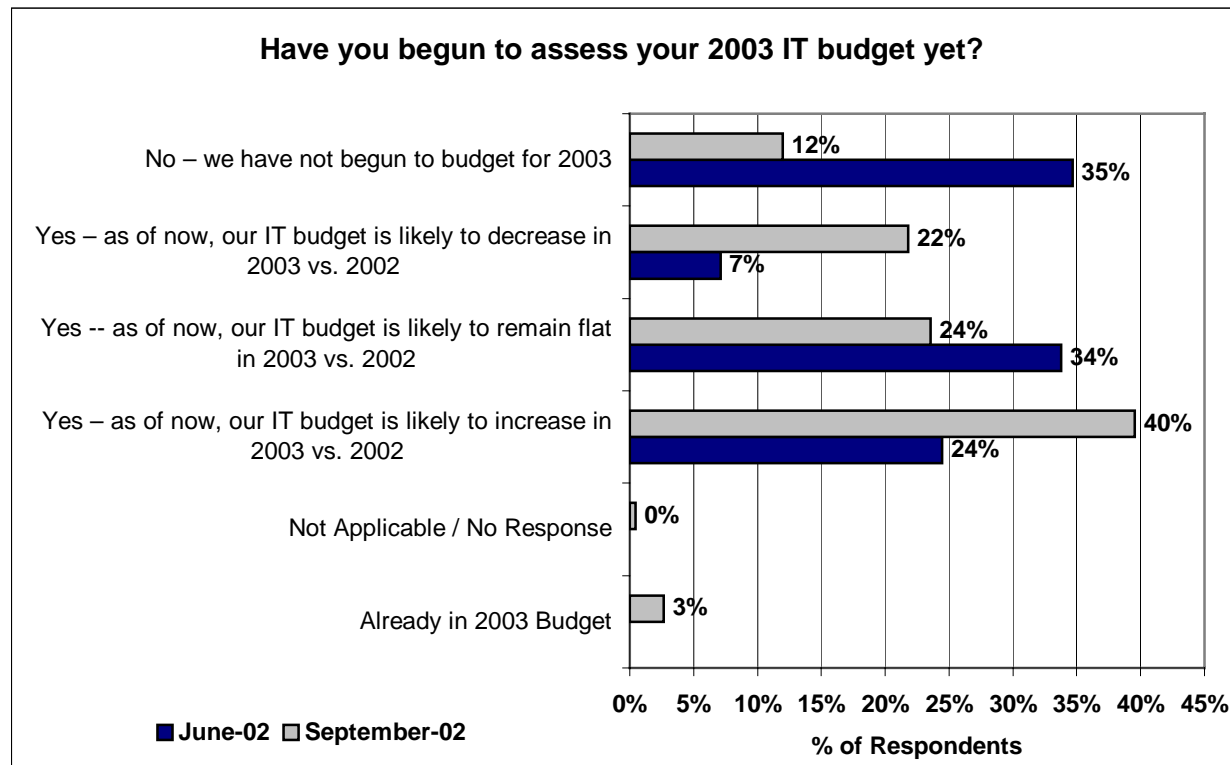
Source: Morgan Stanley CIO Survey, September 2002

Exhibit 8
IT Budgets — 3Q v 4Q



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 9
IT Budgets — 2003



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 10

IT Budgets — 2003

Have you begun to assess your 2003 IT budget yet?

# of Respondents	Company Revenue Size								
	\$40B or more	\$30 - \$39.9B	\$15 - \$29.9B	\$10 - \$14.9B	\$5 - \$9.9B	\$2 - \$4.9B	\$1 - \$1.9B	Under \$1B	Not Applicable
Yes – as of now, our IT budget is likely to increase in 2003 vs. 2002	10	6	9	7	13	13	23	7	1
Yes – as of now, our IT budget is likely to remain flat in 2003 vs. 2002	2	3	10	7	12	5	10	4	0
Yes – as of now, our IT budget is likely to decrease in 2003 vs. 2002	14	3	3	2	9	9	4	3	2
No – we have not begun to budget for 2003	4	4	0	3	2	7	6	1	0
Already in 2003 Budget	2	1	0	0	0	1	2	1	0
Grand Total	32	17	22	19	36	35	45	16	3

% of Total	\$40B or more	\$30 - \$39.9B	\$15 - \$29.9B	\$10 - \$14.9B	\$5 - \$9.9B	\$2 - \$4.9B	\$1 - \$1.9B	Under \$1B	Not Applicable
Yes – as of now, our IT budget is likely to increase in 2003 vs. 2002	4%	3%	4%	3%	6%	6%	10%	3%	0%
Yes – as of now, our IT budget is likely to remain flat in 2003 vs. 2002	1%	1%	4%	3%	5%	2%	4%	2%	0%
Yes – as of now, our IT budget is likely to decrease in 2003 vs. 2002	6%	1%	1%	1%	4%	4%	2%	1%	1%
No – we have not begun to budget for 2003	2%	2%	0%	1%	1%	3%	3%	0%	0%
Already in 2003 Budget	1%	0%	0%	0%	0%	0%	1%	0%	0%
Grand Total	14%	8%	10%	8%	16%	16%	20%	7%	1%

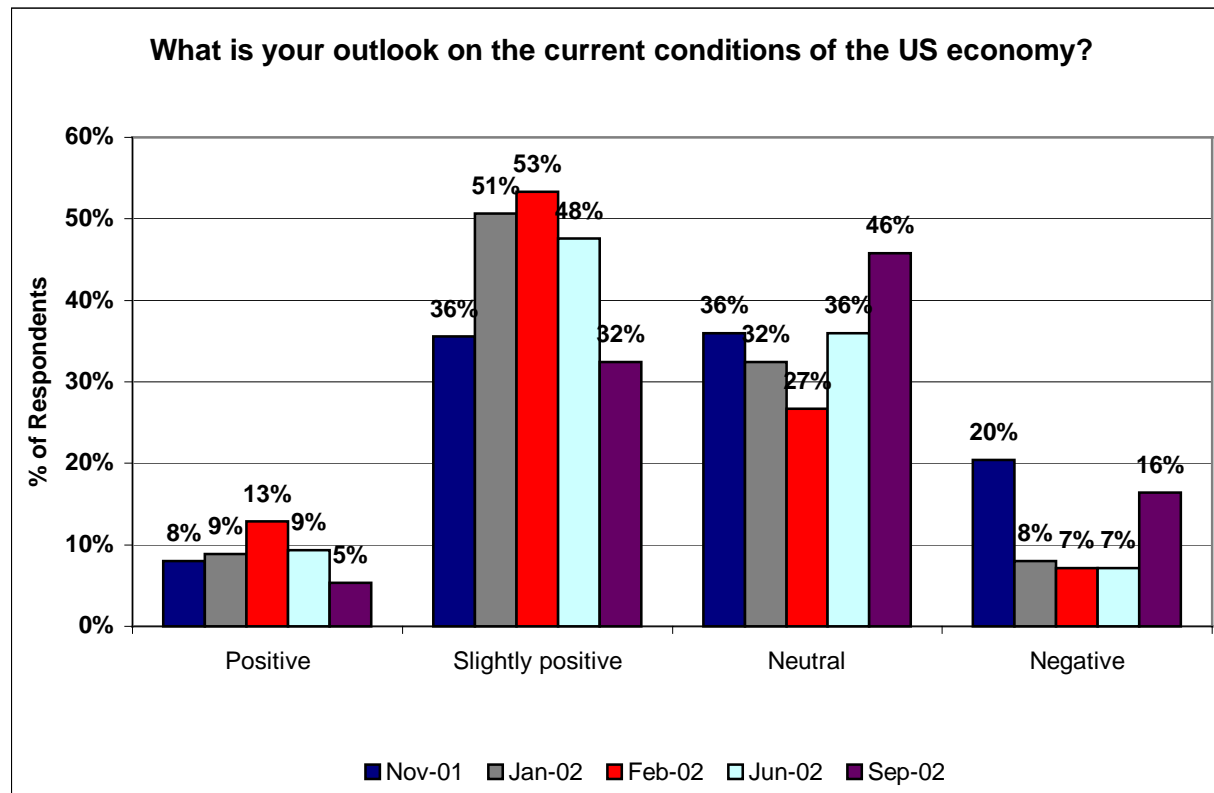
% of Revenue Category	\$40B or more	\$30 - \$39.9B	\$15 - \$29.9B	\$10 - \$14.9B	\$5 - \$9.9B	\$2 - \$4.9B	\$1 - \$1.9B	Under \$1B	Not Applicable
Yes – as of now, our IT budget is likely to increase in 2003 vs. 2002	31%	35%	41%	37%	36%	37%	51%	44%	33%
Yes – as of now, our IT budget is likely to remain flat in 2003 vs. 2002	6%	18%	45%	37%	33%	14%	22%	25%	0%
Yes – as of now, our IT budget is likely to decrease in 2003 vs. 2002	44%	18%	14%	11%	25%	26%	9%	19%	67%
No – we have not begun to budget for 2003	13%	24%	0%	16%	6%	20%	13%	6%	0%
Already in 2003 Budget	6%	6%	0%	0%	0%	3%	4%	6%	0%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Morgan Stanley CIO Survey, September 2002

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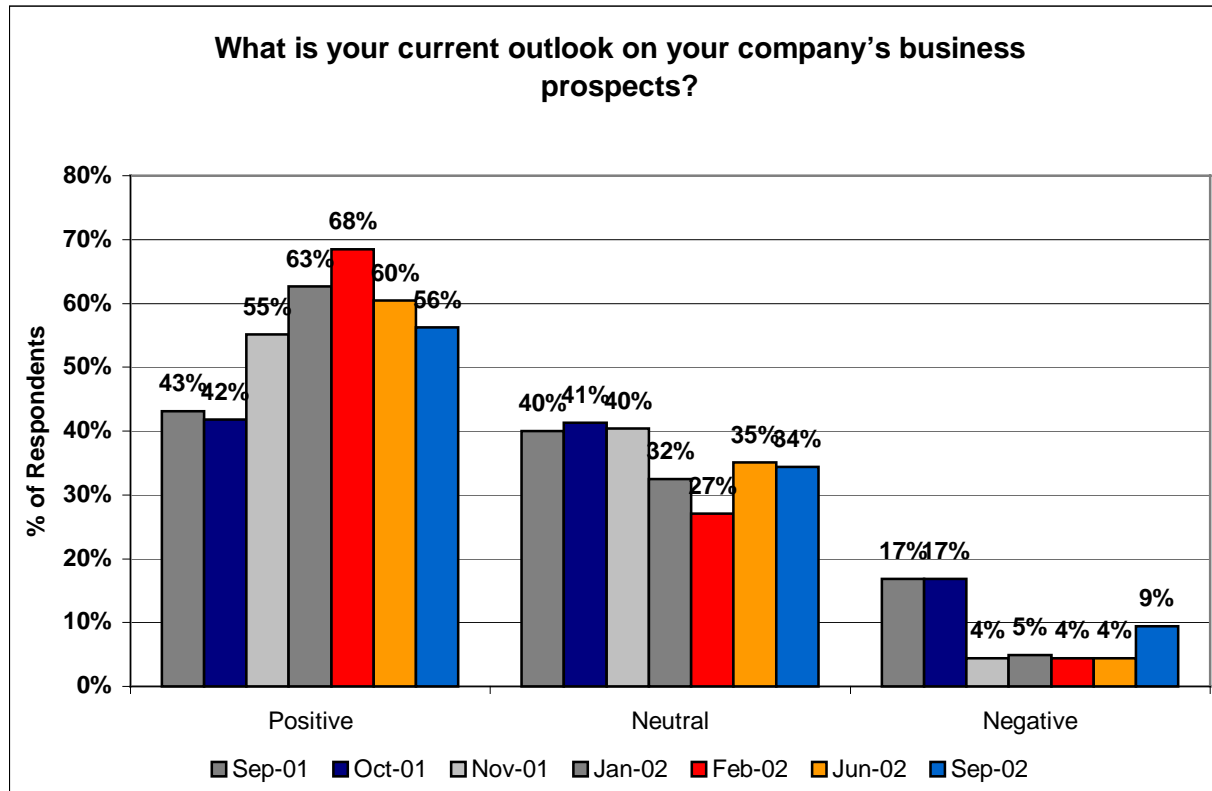
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Exhibit 11
CIOs and the Economy



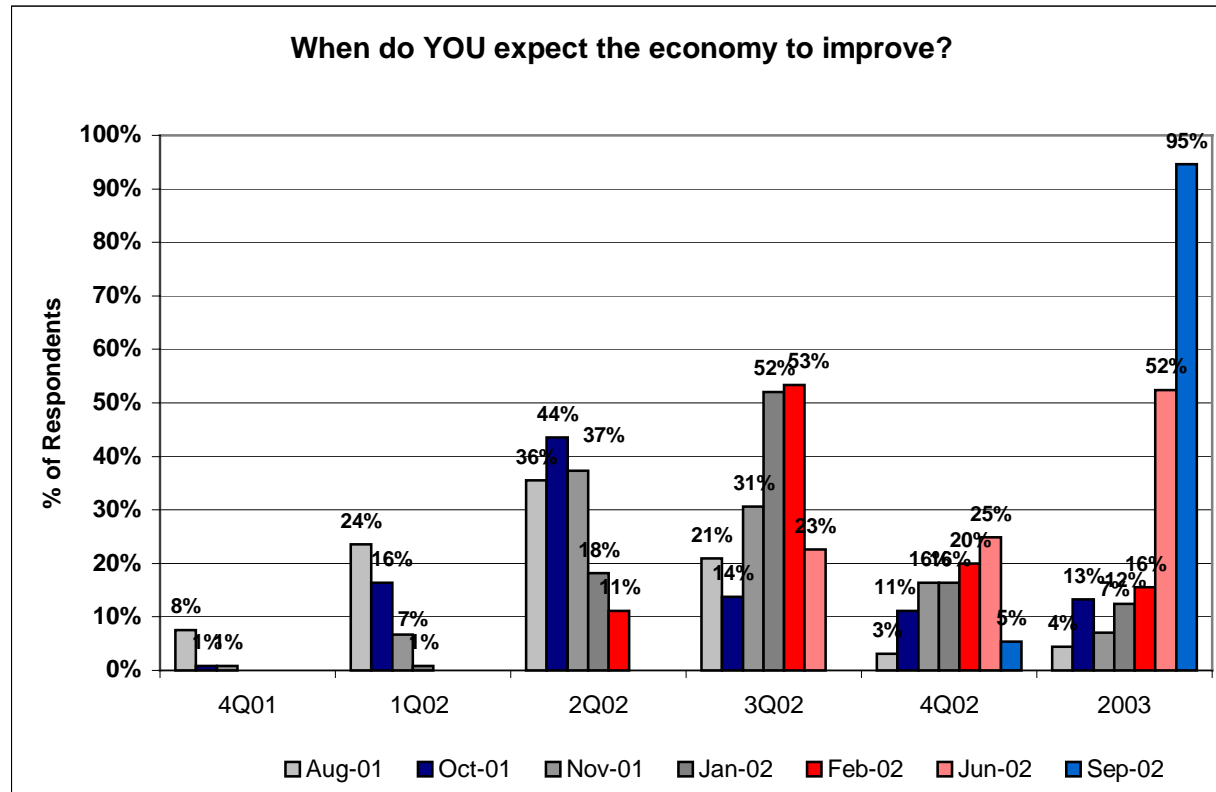
Source: Morgan Stanley CIO Survey, September 2002

Exhibit 12
CIOs and the Economy



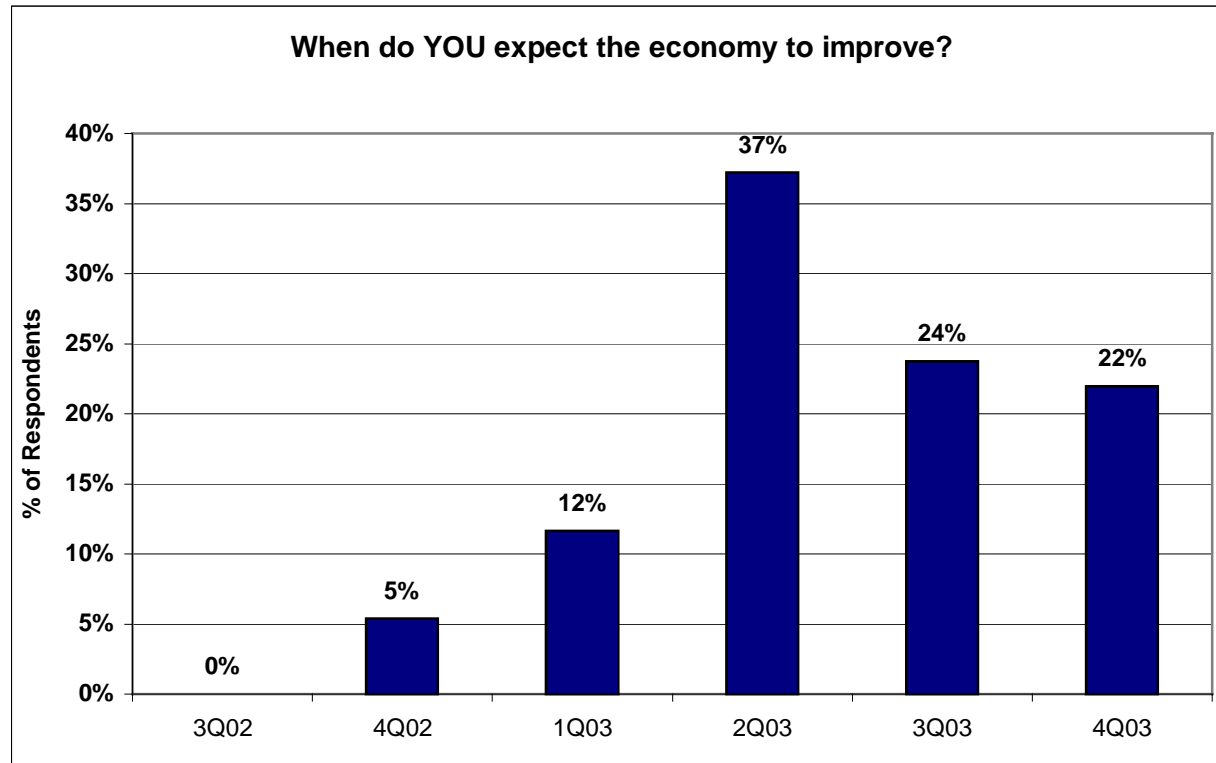
Source: Morgan Stanley CIO Survey, September 2002

Exhibit 13
CIOs and the Economy



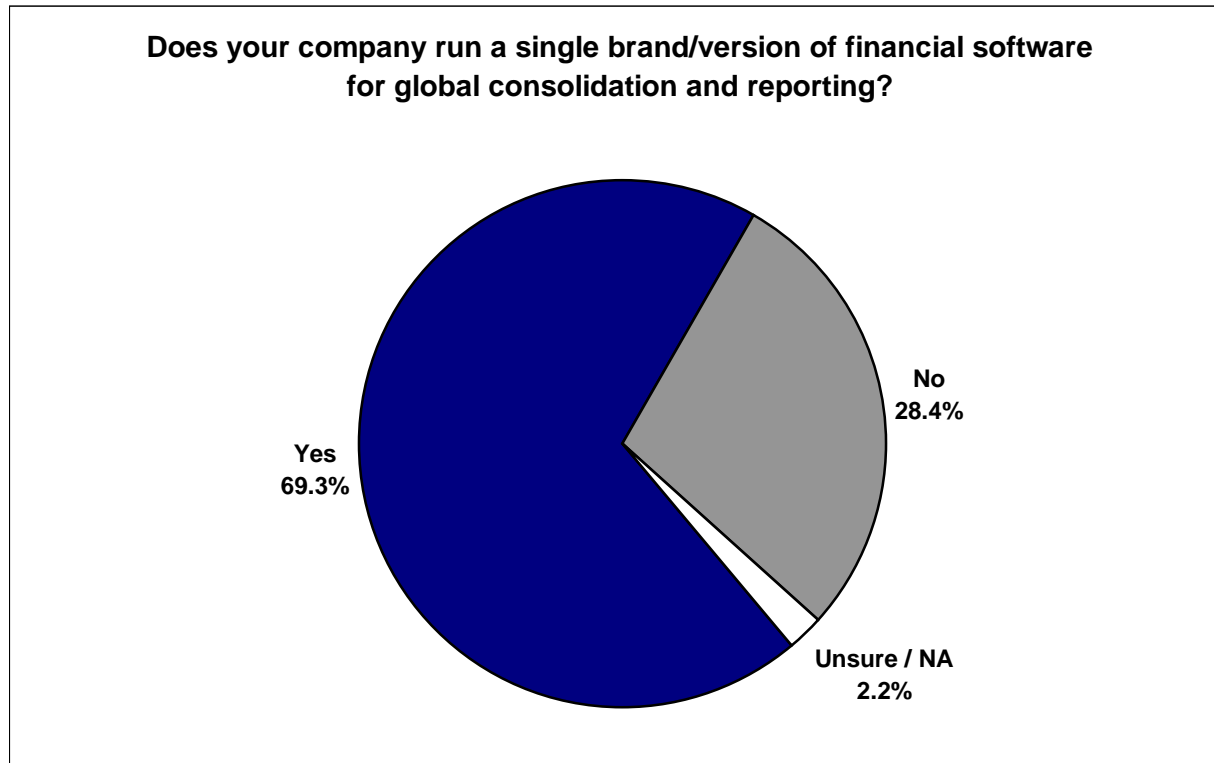
Source: Morgan Stanley CIO Survey, September 2002

Exhibit 14
CIOs and the Economy



Source: Morgan Stanley CIO Survey, September 2002

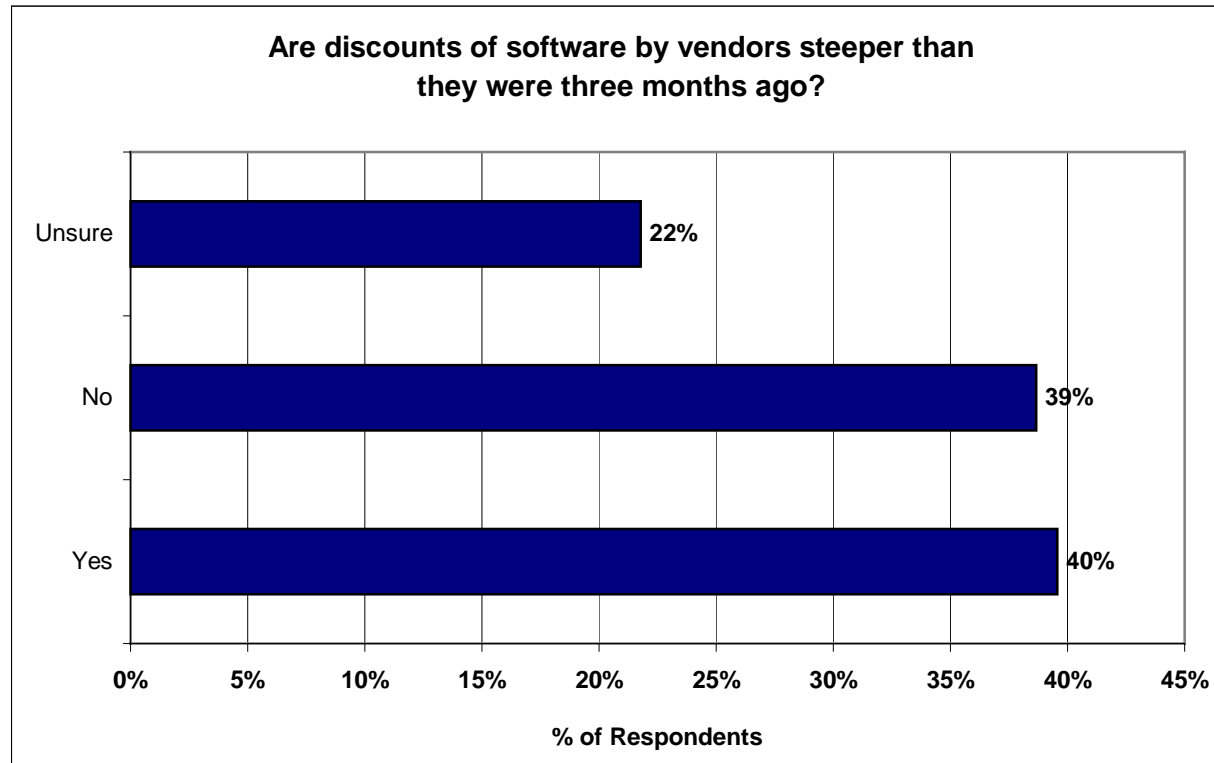
Exhibit 15
Financial Software



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 16

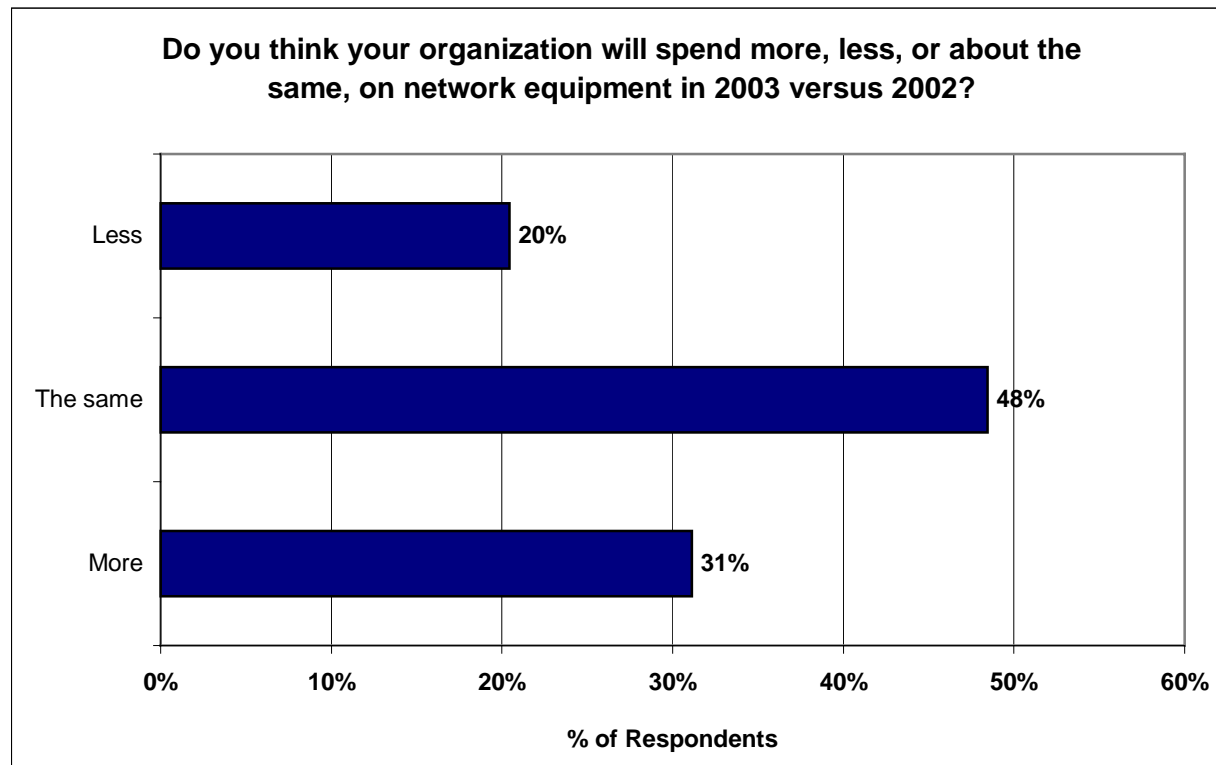
Software Vendor Discounting



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 17

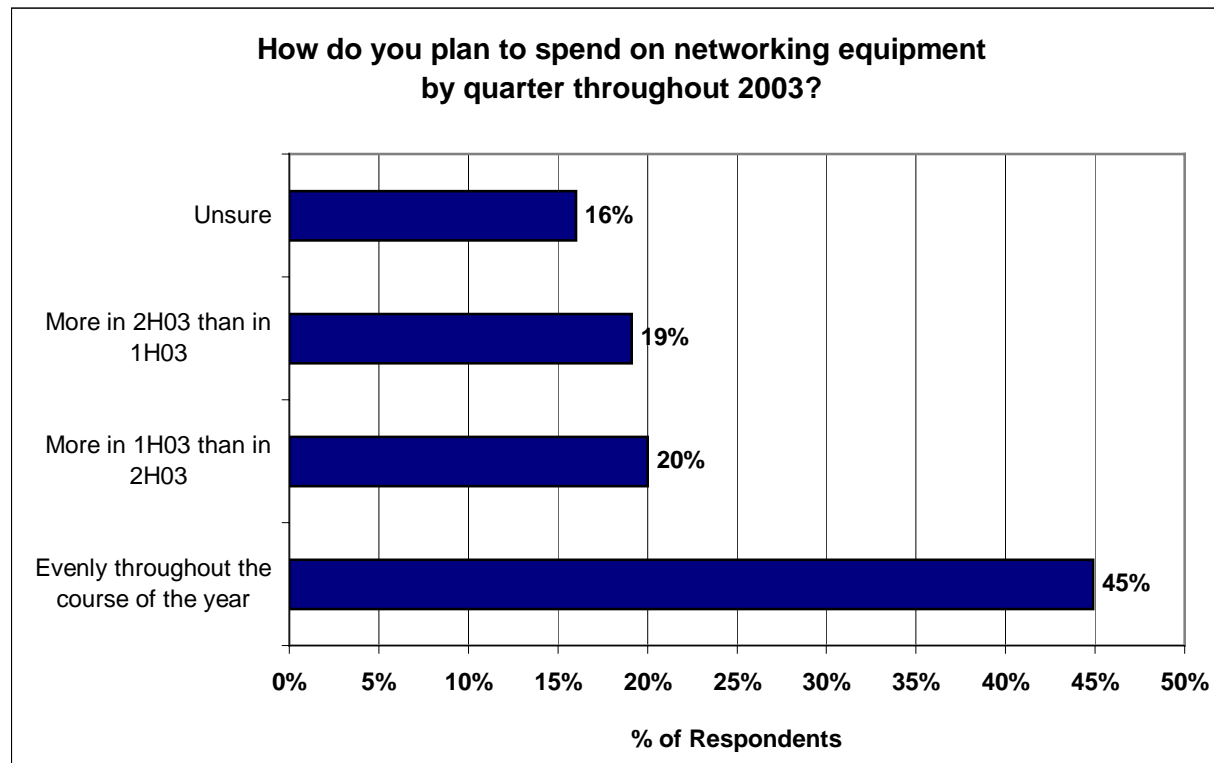
Data Networking Spending



Source: Morgan Stanley CIO Survey, September 2002

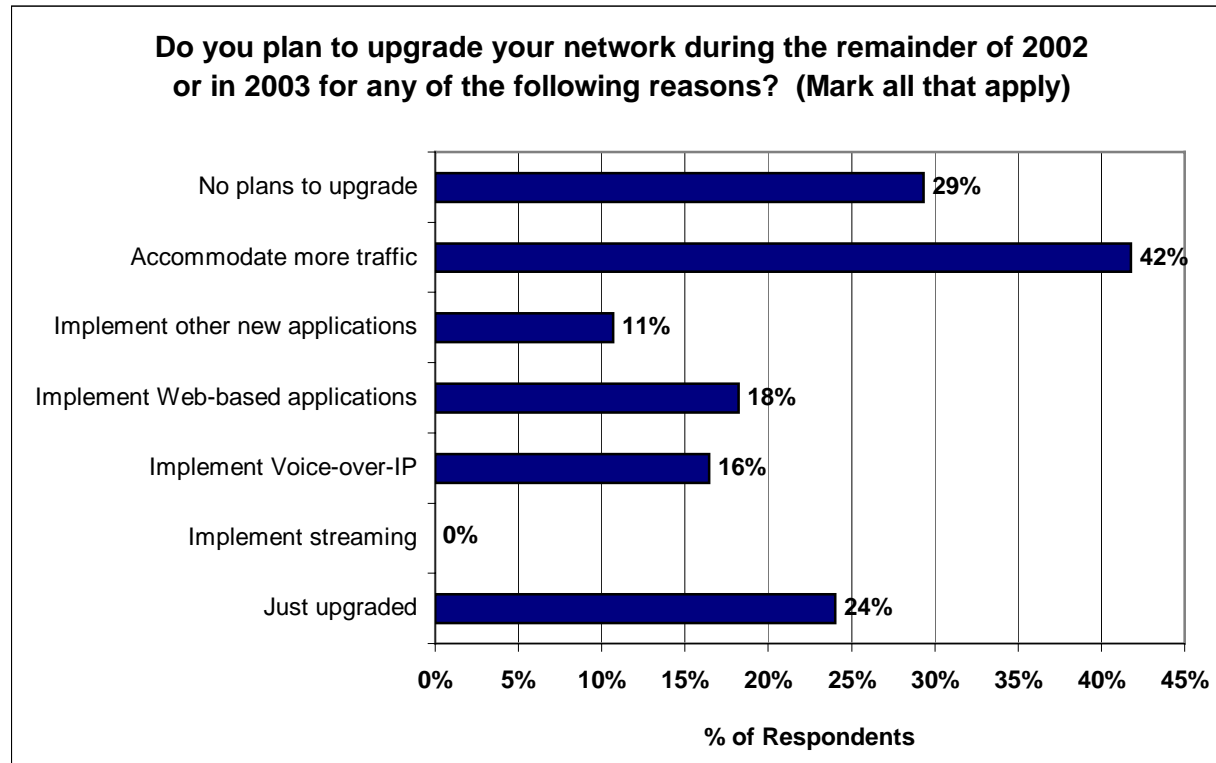
Exhibit 18

Data Networking Spending



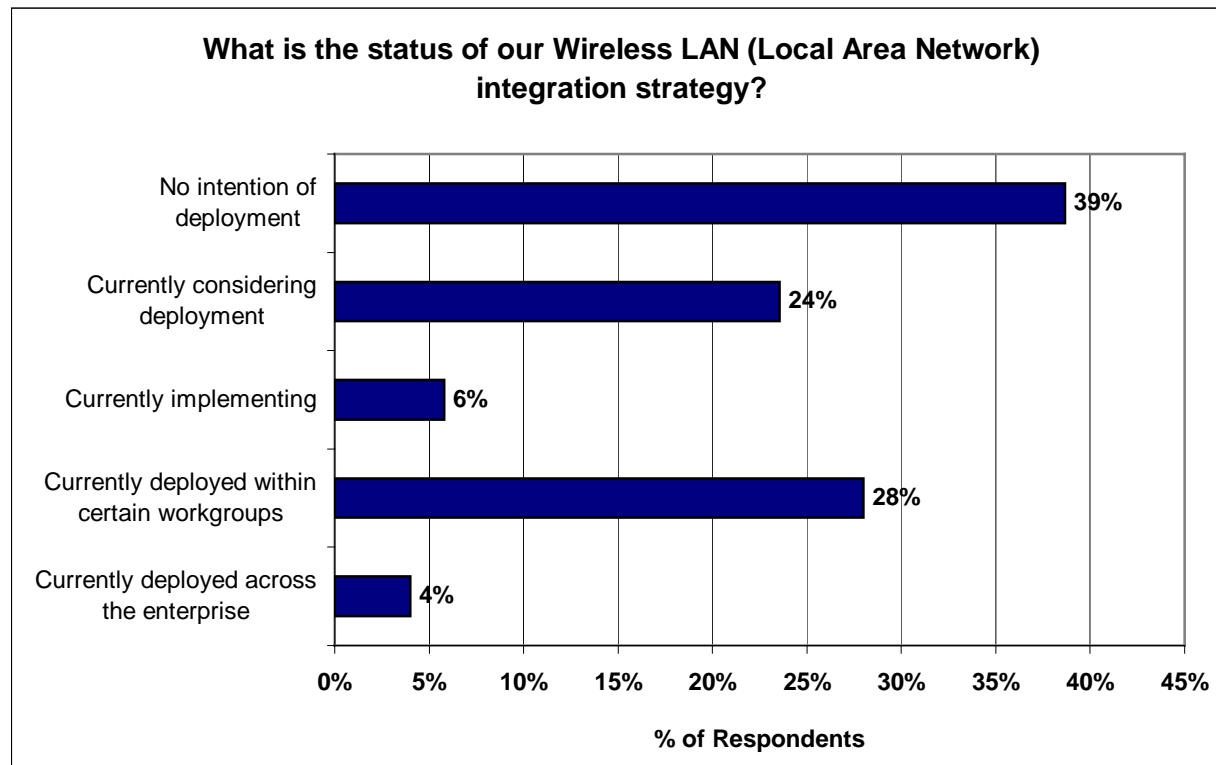
Source: Morgan Stanley CIO Survey, September 2002

Exhibit 19
Data Networking



Source: Morgan Stanley CIO Survey, September 2002

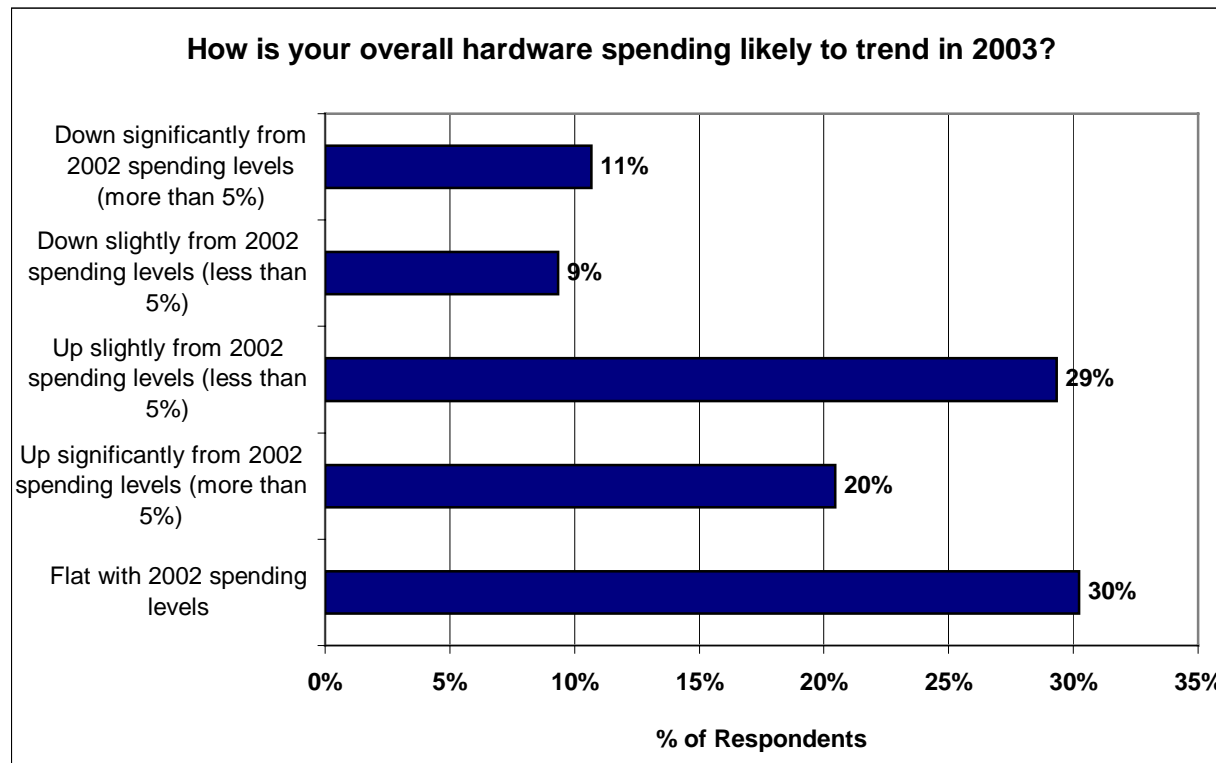
Exhibit 20
Data Networking



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 21

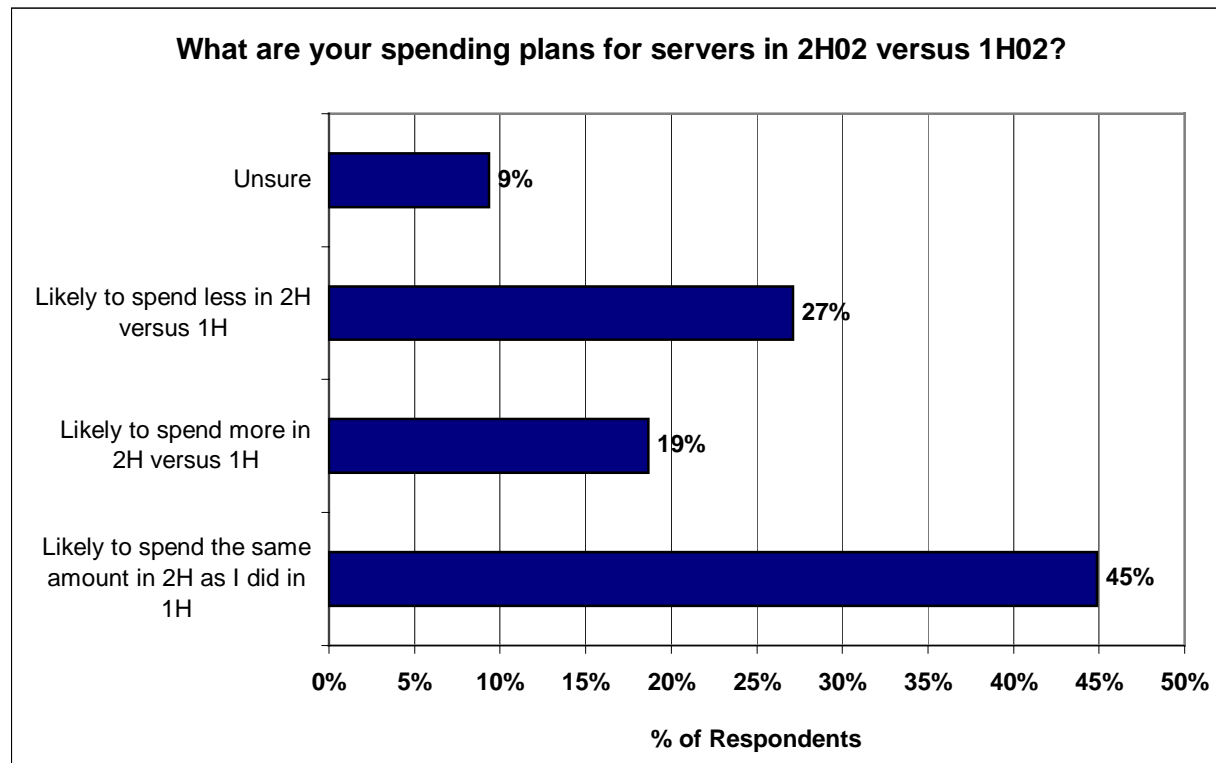
Hardware Spending



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 22

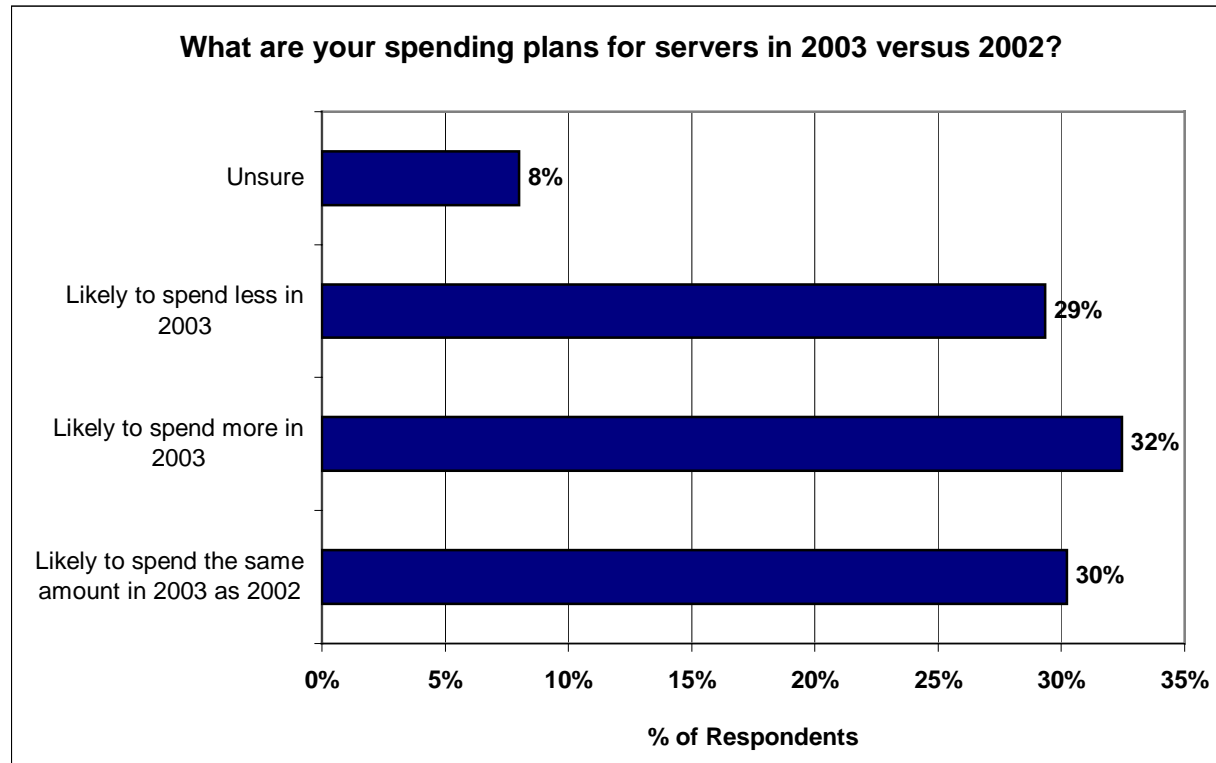
Server Spending



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 23

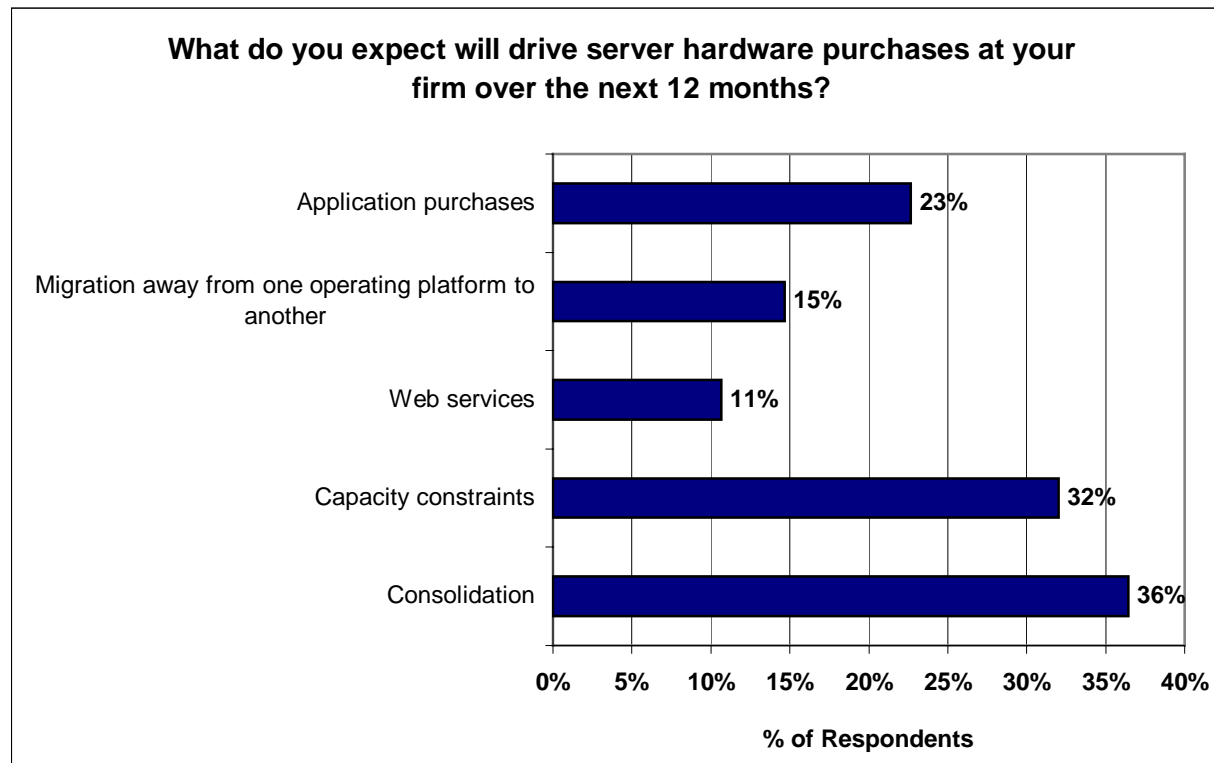
Server Spending



Source: Morgan Stanley CIO Survey, September 2002

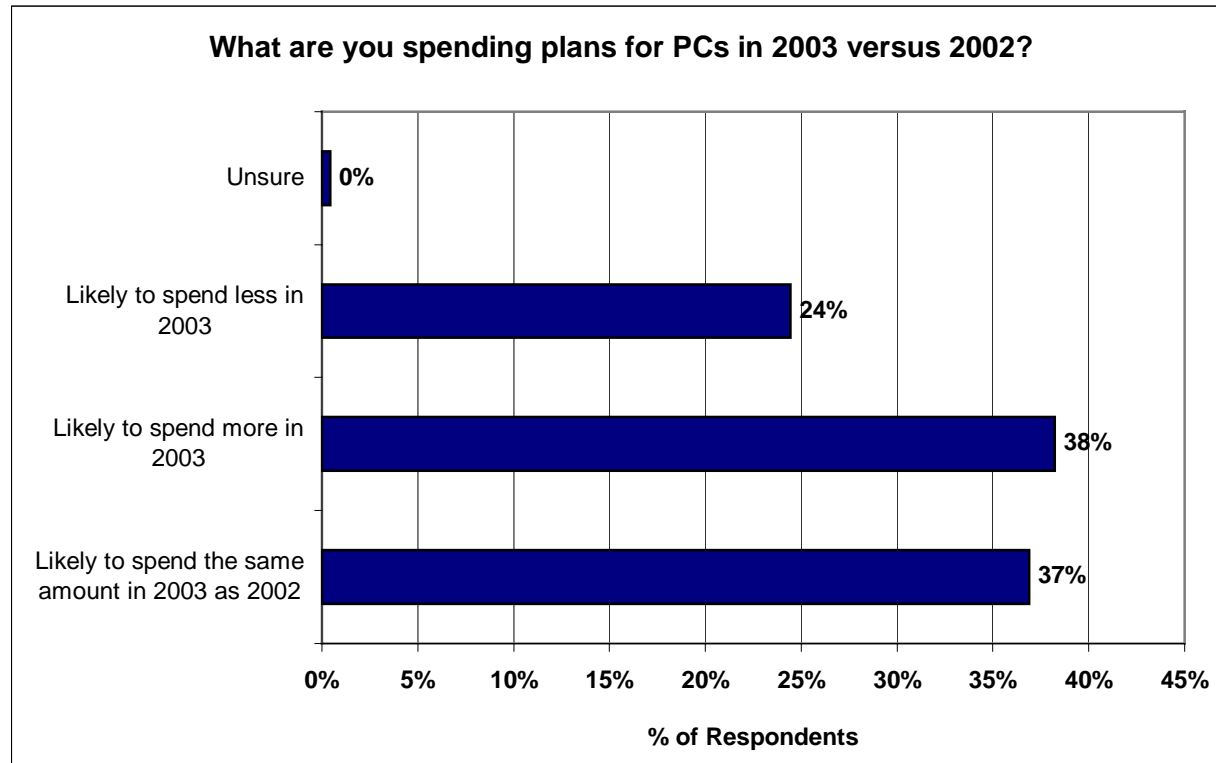
Exhibit 24

Server Hardware Drivers



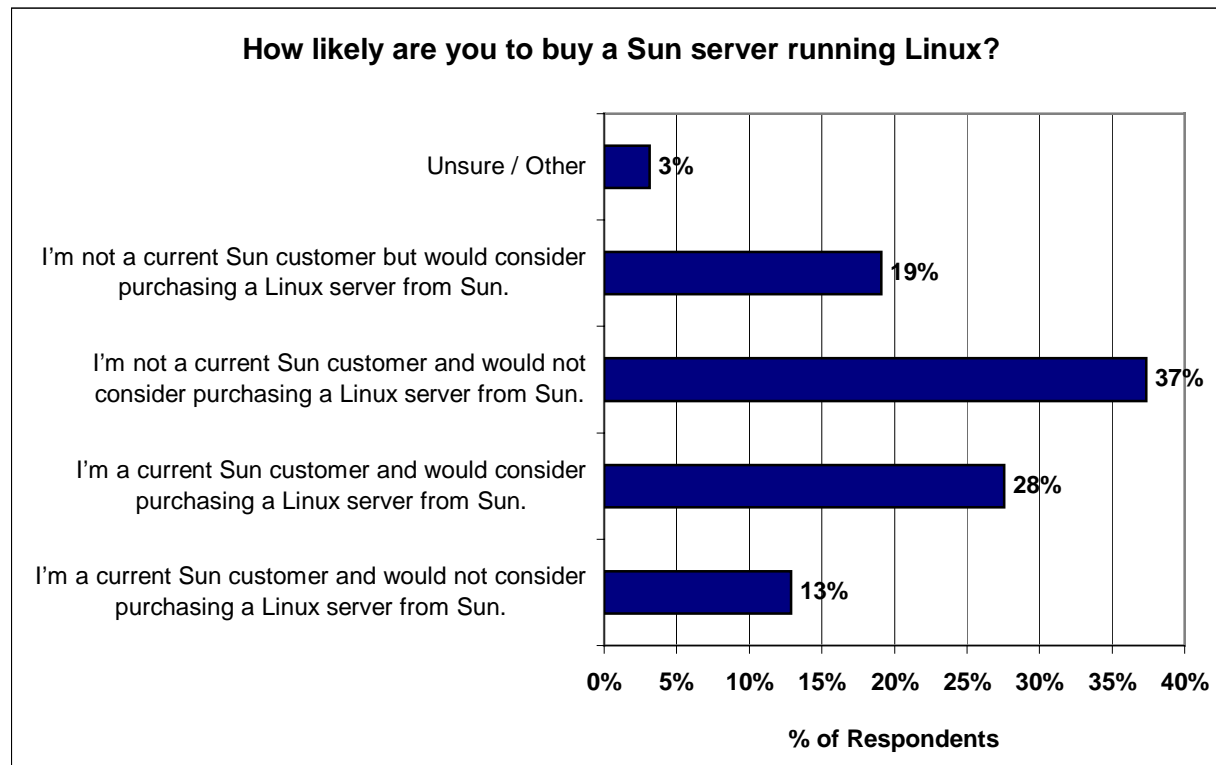
Source: Morgan Stanley CIO Survey, September 2002

Exhibit 25
PC Spending



Source: Morgan Stanley CIO Survey, September 2002

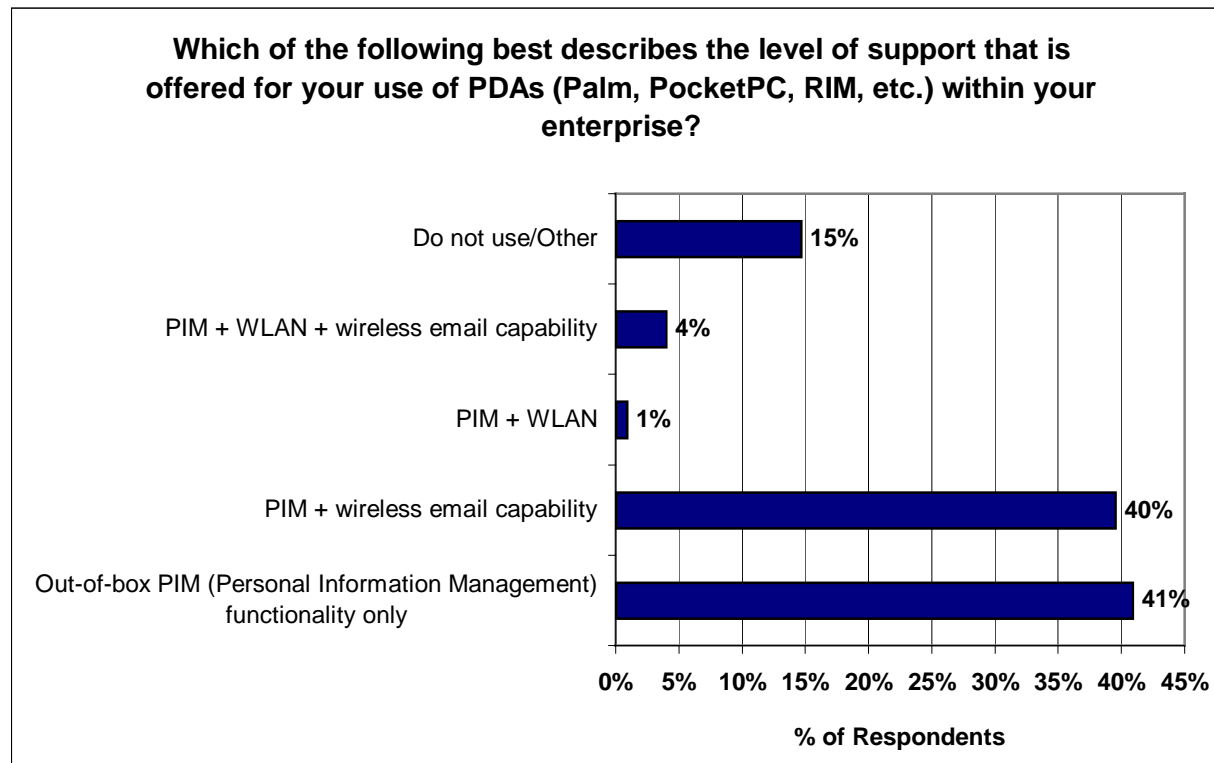
Exhibit 26
Sun & Linux



Source: Morgan Stanley CIO Survey, September 2002

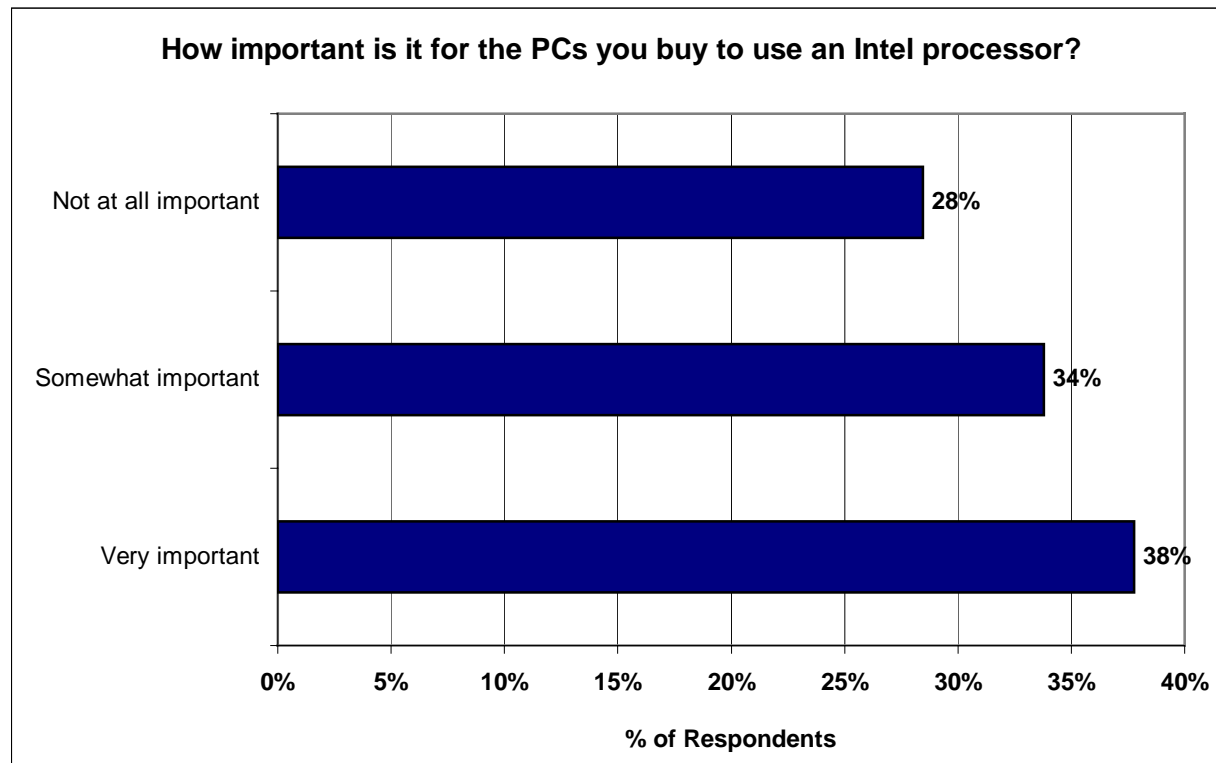
Exhibit 27

PDA's



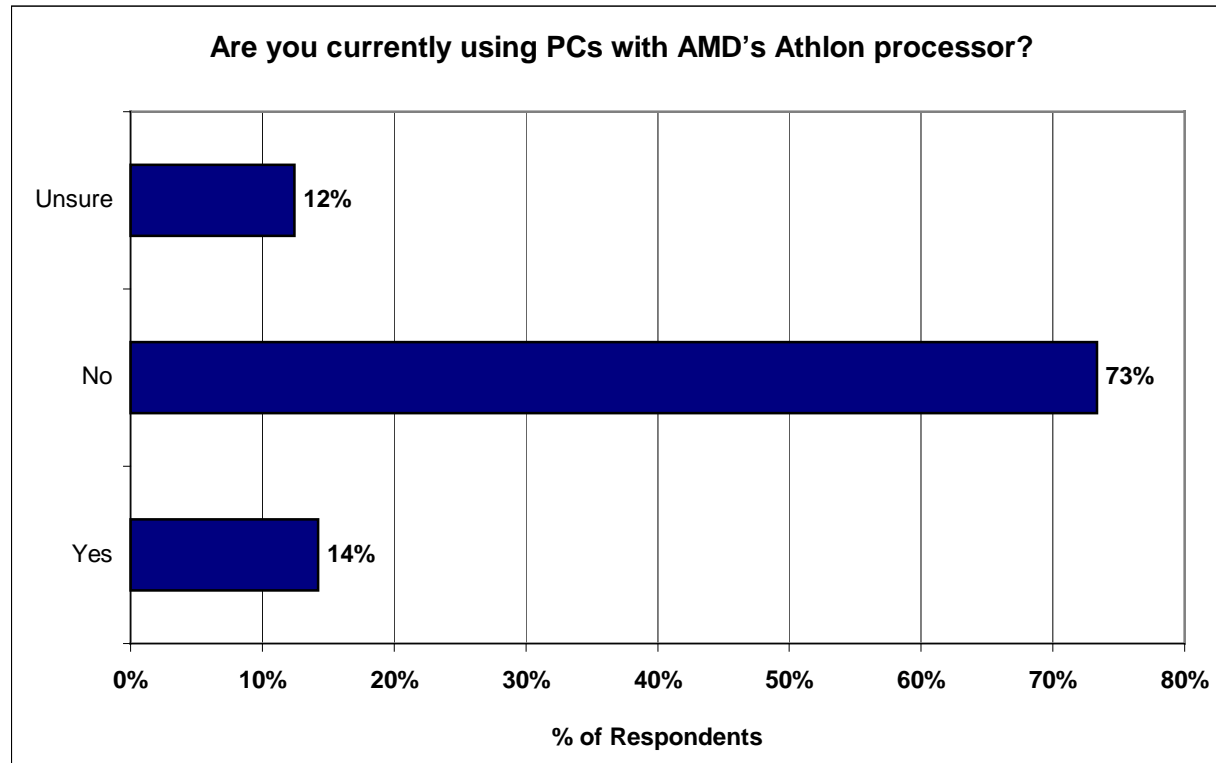
Source: Morgan Stanley CIO Survey, September 2002

Exhibit 28
PC Processors



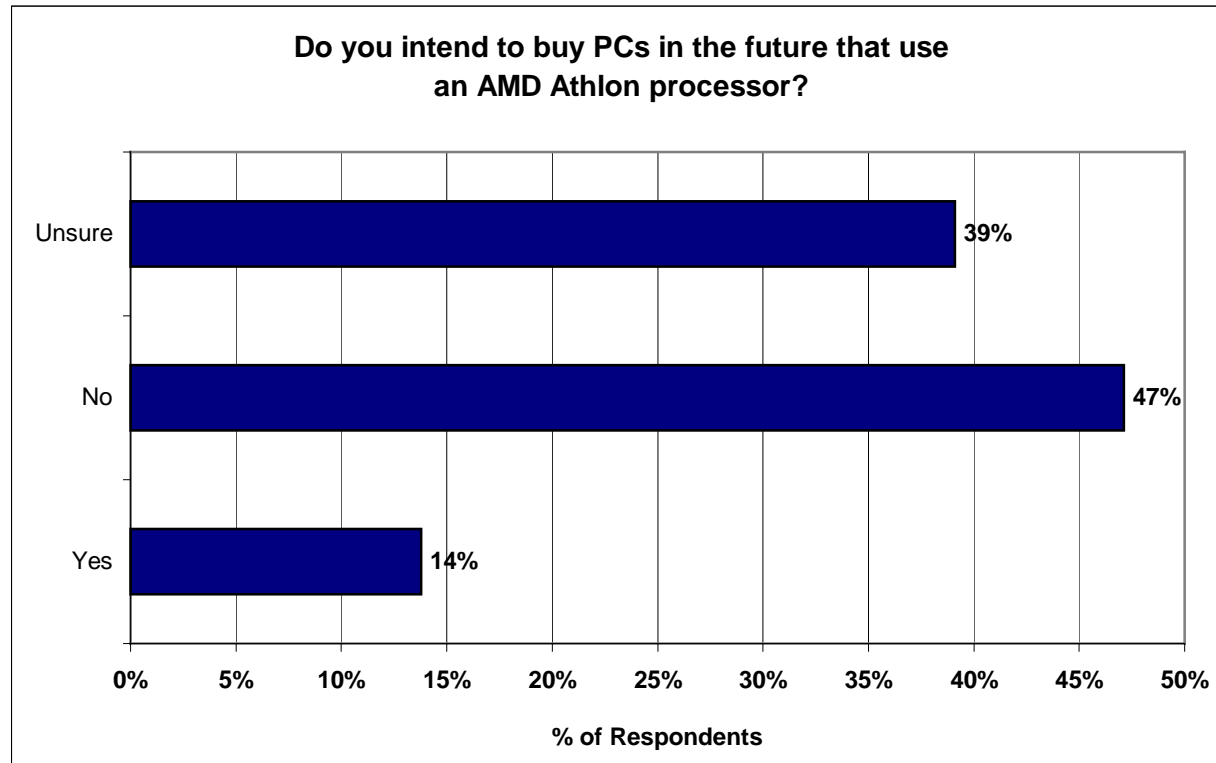
Source: Morgan Stanley CIO Survey, September 2002

Exhibit 29
PC Processors



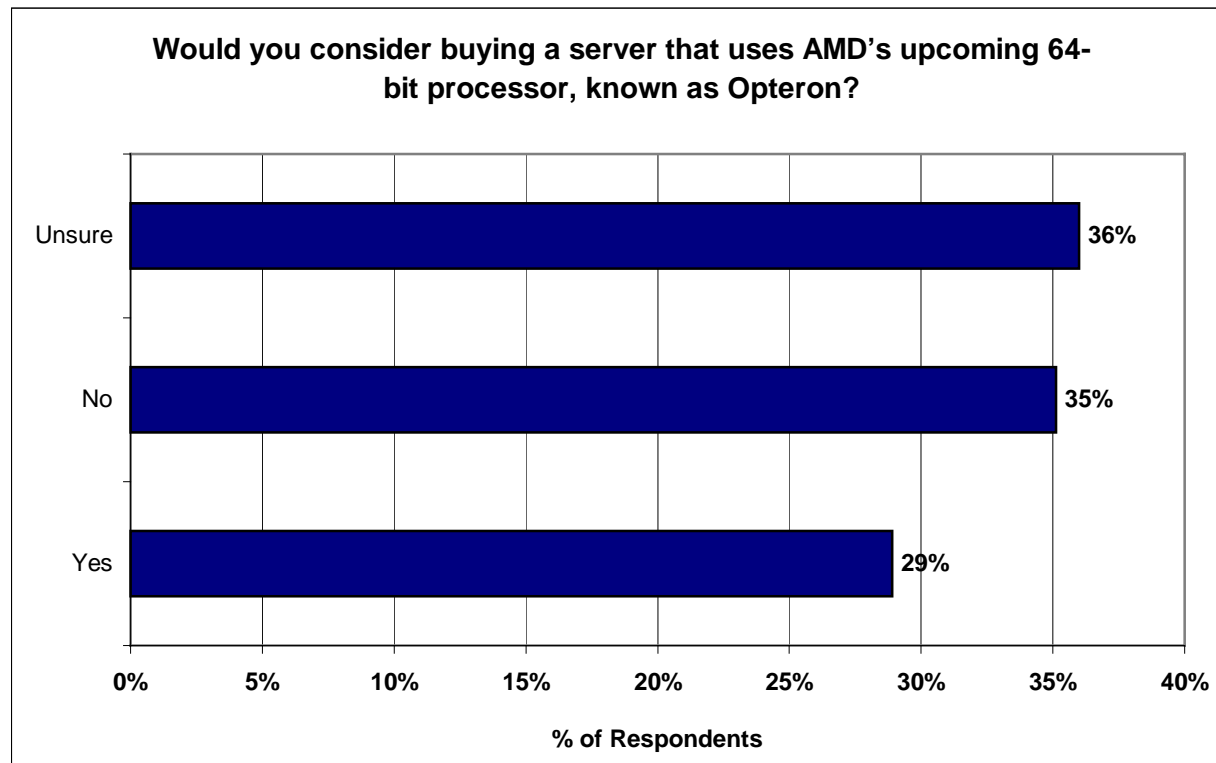
Source: Morgan Stanley CIO Survey, September 2002

Exhibit 30
PC Processors



Source: Morgan Stanley CIO Survey, September 2002

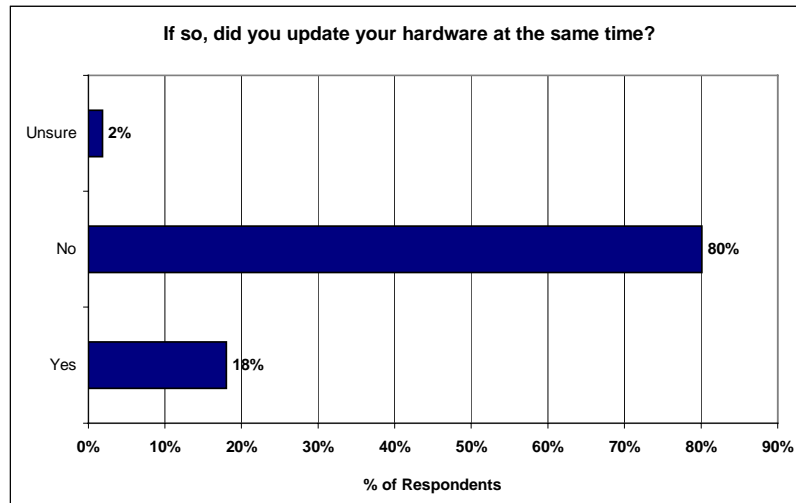
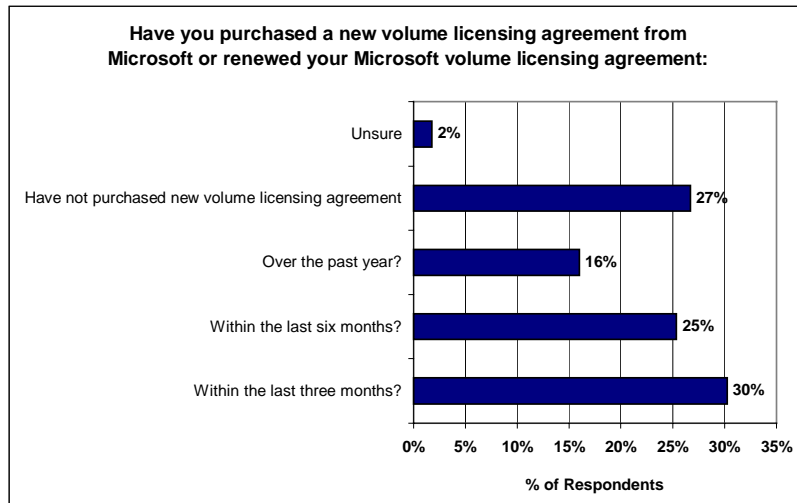
Exhibit 31
PC Processors



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 32

Microsoft Volume Licensing Agreement



Source: Morgan Stanley CIO Survey, September 2002

Exhibit 33

IT Priorities

In your organization, which areas are your top priorities in 2002? (Multiple responses permitted)

	September 2002			July 2002		June 2002		May 2002		January 2002		November 2001	
	# of Resp.	Rank	Δ in Rank	# of Resp.	Rank	# of Resp.	Rank	# of Resp.	Rank	# of Resp.	Rank	# of Resp.	Rank
Application integration	109	1	---	95	1	97	2	89	2	79	1T	74	3
Security software	82	2	---	92	2	99	1	92	1	79	1T	76	2
Windows 2000/XP upgrade – desktop	73	3	up 1	77	4	84	3	76	3	59	4	57	6
ERP software/ERP upgrade	70	4	down 1	82	3	65	9	72	5	49	8	59	5
Wireless initiatives	69	5	up 12	44	17	42	16T	48	16T	45	11	31	23T
E-commerce initiatives	67	6	down 1	73	5	71	6	55	11	71	3	84	1
Employee/Enterprise data portal projects	64	7	up 7	46	14T	37	22T	58	9T	38	15	38	13T
Windows 2000 upgrade – server	61	8	---	55	8T	73	5	73	4	51	7	45	10
Document management software	58	9	up 5	46	14T	44	14T	49	15	30	22	27	28T
Microsoft Office upgrade	55	10T	down 4	66	6	66	8	53	12	37	16T	37	15
Network equipment	55	10T	up 1	51	11	37	22T	35	25	47	9T	38	13T
Database software	54	12T	up 12	31	24T	24	30T	31	28T	23	29	16	38T
Storage hardware	54	12T	down 2	53	10	42	16T	64	6	40	14	64	4
Business intelligence tools	52	14	down 1	48	13	55	12	51	13	33	19T	33	20T
Content Management software for Web site	51	15	down 3	49	12	58	10T	48	16T	47	9T	51	9
XML-based applications	50	16	up 12	28	28	68	7	62	7	52	6	43	11
Application servers	49	17	up 4	37	21	29	27T	47	19	26	24T	25	31
Web site enhancements	48	18	down 10	55	8T	44	14T	58	9T	57	5	53	7T
Personal computers (PCs)	47	19	down 1	42	18	26	29	37	23	36	18	35	17T
CRM software	46	20	down 6	46	14T	58	10T	61	8	41	13	53	7T
Web development tools or products	44	21	down 2	40	19	47	13	48	16T	37	16T	33	20T
Call center software	40	22	up 12	24	34T	42	16T	44	20	26	24T	35	17T
Storage software	39	23	up 1	31	24T	31	26	39	22	33	19T	36	16
Data mining/OLAP tools	36	24T	down 17	64	7	79	4	50	14	44	12	39	12
Web/Intranet to legacy integration tools or products	36	24T	up 24	11	48	23	32	19	38T	19	33T	31	23T
Content delivery networks	33	26	up 19	13	45T	16	38T	13	44T	11	42T	8	50
Network and application management software	32	27	up 2	27	29T	34	24T	36	24	29	23	26	30
Converged voice and data networks	31	28	down 2	29	26T	34	24T	34	26	19	33T	31	23T
Consulting	30	29T	up 15	15	44	18	35T	19	38T	14	41	12	43T
Customer service applications	30	29T	down 7	35	22	39	20T	42	21	31	21	31	23T
Knowledge management	29	31	---	26	31T	13	42T	23	33T	22	30T	16	38T
Procurement software	25	32	up 4	22	36T	9	48	21	37	15	39T	14	40T
New custom development	24	33	down 13	38	20	42	16T	22	35T	19	33T	34	19
Linux-based servers	22	34	up 7	17	41T	18	35T	22	35T	10	44	11	46T
Java-based enterprise applications	21	35T	up 10	13	45T	15	40T	23	33T	18	37	12	43T
Unix servers	21	35T	down 2	25	33	29	27T	31	28T	25	26T	29	27
Supply chain management software	20	37	down 6	26	31T	24	30T	33	27	22	30T	23	32T
Infrastructure resource management software	18	38T	---	18	38T	16	38T	14	42T	15	39T	12	43T
Salesforce automation software	18	38T	down 15	34	23	39	20T	30	30	25	26T	32	22
Intel servers	17	40T	down 11	27	29T	21	33	27	31T	16	38	23	32T
Web server software	17	40T	up 1	17	41T	20	34	27	31T	25	26T	22	34T
E-mail response software	15	42T	down 6	22	36T	10	45T	14	42T	4	49	18	37
Inventory management/provisioning	15	42T	up 1	16	43	15	40T	17	40T	19	33T	10	48T
E-store software for Web site	14	44	up 6	7	50	8	49T	2	51	3	50	2	51
Marketing/customer analytics software	13	45	down 11	24	34T	18	35T	17	40T	21	32	22	34T
Mainframe hardware	12	46T	up 1	12	47	10	45T	9	49	7	45T	19	36
Mainframe software	12	46T	down 8	18	38T	7	51	12	46T	5	48	13	42
Personalization software for E-business	11	48	up 1	9	49	11	44	13	44T	11	42T	10	48T
PRM/Channel management software	6	49	up 2	4	51	8	49T	12	46T	7	45T	27	28T
Mainframe systems management	2	50	down 24	29	26T	10	45T	5	50	2	51	11	46T
CAD/CAM, EDA	0	51	down 13	18	38T	13	42T	12	46T	7	45T	14	40T

Source: Morgan Stanley CIO Survey, September 2002

Enterprise Software – October 11, 2002

Please see the important disclosures at the end of this report.

Global Stock Ratings Distribution

(as of September 30, 2002)

Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)		
	Count	% of Total	Count	% of Total IBC	% of Rating Category
Overweight	688	34%	272	41%	40%
Equal-weight	949	46%	293	44%	31%
Underweight	414	20%	96	15%	23%
Total	2,051		661		

Data include common stock and ADRs currently assigned ratings. For disclosure purposes (in accordance with NASD and NYSE requirements), we note that Overweight, our most positive stock rating, most closely corresponds to a buy recommendation; Equal-weight and Underweight most closely correspond to neutral and sell recommendations, respectively. However, Overweight, Equal-weight, and Underweight are not the equivalent of buy, neutral, and sell but represent recommended relative weightings (see definitions below). An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

ANALYST STOCK RATINGS

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

More volatile (V). We estimate that this stock has more than a 25% chance of a price move (up or down) of more than 25% in a month, based on a quantitative assessment of historical data, or in the analyst's view, it is likely to become materially more volatile over the next 1-12 months compared with the past three years. Stocks with less than one year of trading history are automatically rated as more volatile (unless otherwise noted). We note that securities that we do not currently consider "more volatile" can still perform in that manner.

Ratings prior to March 18, 2002: SB=Strong Buy; OP=Outperform; N=Neutral; UP=Underperform. For definitions, please go to www.morganstanley.com/companycharts.

ANALYST INDUSTRY VIEWS

Attractive (A). The analyst expects the performance of his or her industry coverage universe to be attractive vs. the relevant broad market benchmark over the next 12-18 months.

In-Line (I). The analyst expects the performance of his or her industry coverage universe to be in line with the relevant broad market benchmark over the next 12-18 months.

Cautious (C). The analyst views the performance of his or her industry coverage universe with caution vs. the relevant broad market benchmark over the next 12-18 months.

Stock price charts and rating histories for companies discussed in this report are also available at www.morganstanley.com/companycharts. You may also request this information by writing to Morgan Stanley at 1585 Broadway, 14th Floor (Attention: Research Disclosures), New York, NY, 10036 USA.

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