

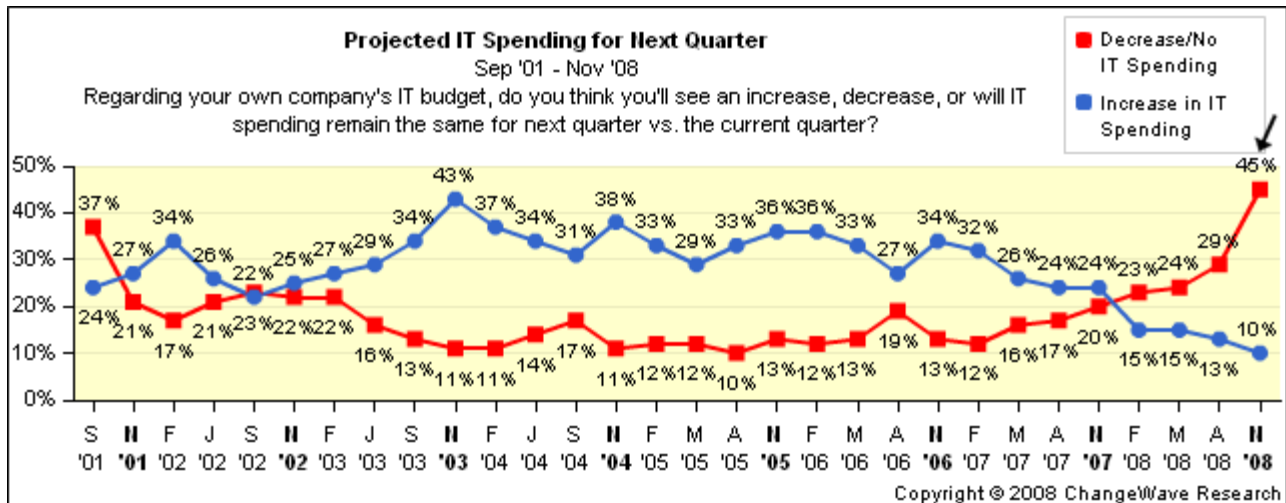


Corporate IT Spending: 90 Day Outlook

A Historic Collapse in U.S. Corporate IT Spending

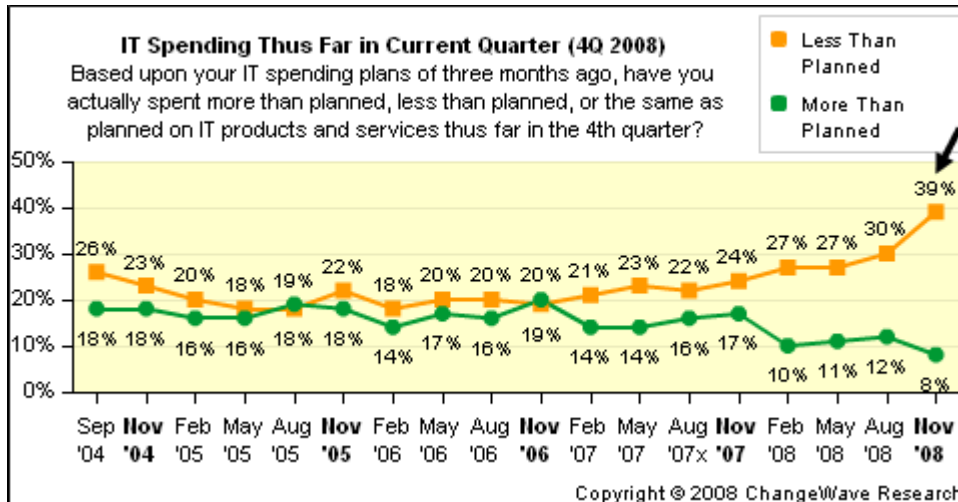
Overview: ChangeWave's latest corporate IT purchasing survey shows a collapse in U.S. business spending of historic proportions – with record pullbacks occurring both in the current 4th Quarter and going forward. The survey of 1,926 respondents involved with IT spending in their organization was conducted November 6-12.

90 Day Outlook – Plunging Downward: Looking at 1st Quarter 2009, the IT spending projections are the worst ever for a ChangeWave survey dating back to 2001. An unprecedented 45% of respondents say their company's IT spending will decrease (or there will be no spending at all) in the 1st Quarter – 16-pts worse than our August survey.



Only one-in-ten (10%) say spending will increase – a 3-pt drop from previously. Most disturbingly, these projections are occurring at a time of year when we normally see seasonal increases in spending.

Current 4th Quarter Spending: When we asked respondents if their IT spending was on track so far in the 4th Quarter, the results were also the worst on record by a wide margin.



Nearly four-in-ten (39%) say they've spent "Less than Planned" so far this quarter – 9-pts worse than in the August ChangeWave survey. Just 8% have spent "More than Planned" – a 4-pt drop from previously.

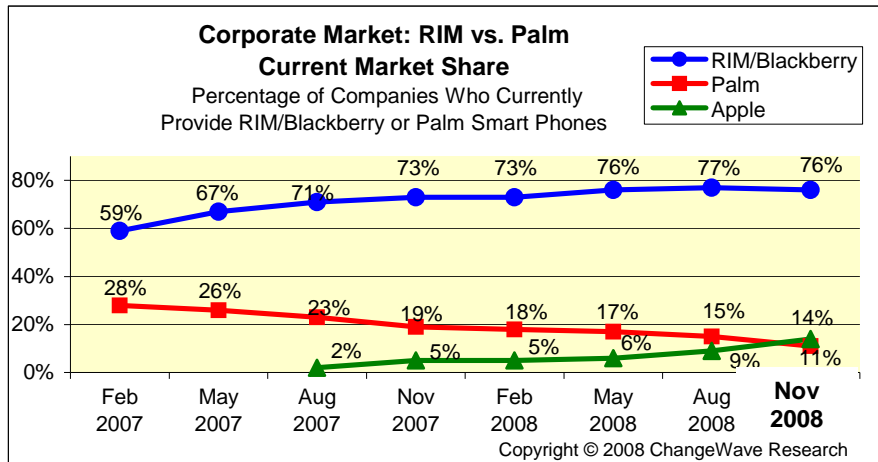
1st Half 2009: In a further bearish finding, when respondents were asked about the 1st half of 2009 (Jan-Jun), nearly one-in-two (48%) think their company's IT budget will be less than 2nd half 2008. That's more than twice the amount of the previous survey. Only 10% think their 1st half 2009 IT budget will be greater – 8-pts worse than previously.

Impact of the Election: In the aftermath of the U.S. presidential election, respondents do not see any immediate improvement occurring in their company's IT spending. In fact, nearly half (48%) now believe IT spending won't pick up for their company until the 3rd Quarter of 2009 or later – a two-fold increase since our August survey.

Corporate Smart Phone Market

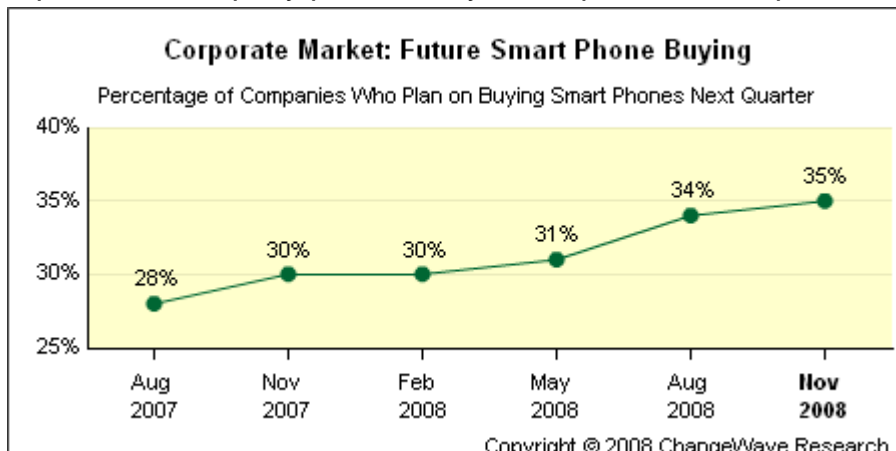
Research In Motion Maintains its Lead: In terms of current share, Research in Motion (RIM; 76%; down 1-pt) maintains its huge lead in the corporate smart phone market.

But in a breakthrough for Apple (AAPL; 14%), they have gained 5-pts in current corporate smart phone share – moving ahead of Palm (PALM; 11% – down 4-pts) into second place.

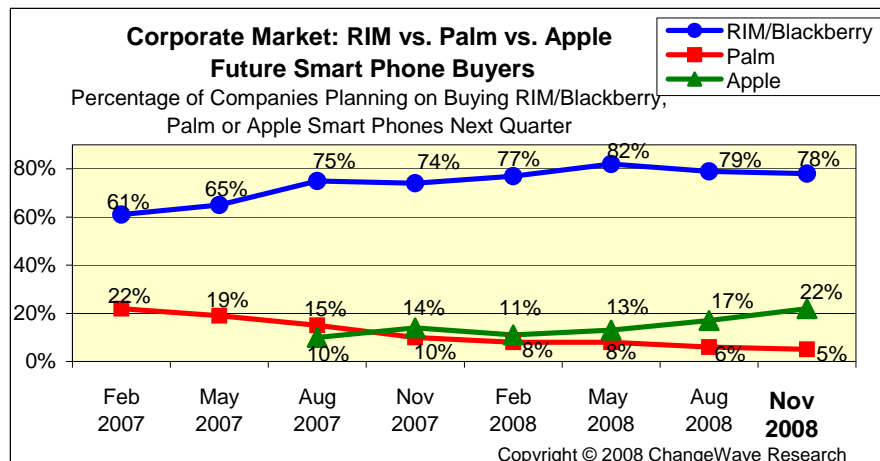


We note that RIM's corporate share is heavily concentrated among larger companies (*Over 1,000 Employees*), while three quarters of Apple's share is among small- to medium-sized companies (*Under 1,000 Employees*).

Planned Smart Phone Buying: In one of the few upbeat findings of the survey, the corporate smart phone market continues to show growth. A total of 35% of respondents report their company plans to buy smart phones next quarter - up 1-pt from August.



In terms of manufacturers, RIM (78%; down 1-pt) continues to garner the dominant share of planned smart phone buying.



But once again, the Apple iPhone (22%; up 5-pts) shows considerable momentum in terms of corporate planned purchases going forward.

In a further confirmation that the 3G iPhone is having a positive impact on Apple’s corporate business, nearly one-in-five respondents (18%) report the release of the 3G version has made their company *More Likely* to purchase Apple products in the future.

Corporate PC Purchases: Our ChangeWave survey also shows clear signs of slower corporate PC growth for 1st Quarter 2009. We’ll take a close-up look at corporate PC purchasing – including the economic slowdown’s impact on the major manufacturers – in an upcoming ChangeWave report.

Bottom Line: U.S. corporate IT spending is in the midst of a huge nose-dive, the likes of which haven’t been seen before in a ChangeWave survey dating back to 2001.

Looking ahead, 1st Quarter IT purchase projections are abysmal. Compounding things, spending is plunging at a time of year when we normally experience seasonal increases. This becomes immediately apparent when you look at the change from each November—beginning with Nov 2003 – in the Projected IT Spending chart at the top of page one.

Ever since the recovery, November was always the peak point of the yearly cycle in this survey -- up until November of 2007. It was then that we had our biggest warning that things were very seriously breaking down in terms of corporate spending. Continued deterioration for the next 4 quarters led us to this November’s historic collapse

In sum, the current ChangeWave survey findings virtually guarantee that we’ll see the technology sector get hammered with pre-announcements before the January earnings season gets underway.

On a more upbeat note, the corporate smart phone results show Research In Motion maintaining its big market share, but Apple continuing to make headway within the small-to-medium size business market.

The ChangeWave Alliance is a group of 20,000 highly qualified business, technology, and medical professionals in leading companies of select industries—credentialed professionals who spend their everyday lives working on the frontline of technological change. ChangeWave surveys its Alliance members on a range of business and investment research and intelligence topics, collects feedback from them electronically, and converts the information into proprietary quantitative and qualitative reports.

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I. Summary of Key Findings

Historic Collapse in U.S. Corporate IT Spending

90 Day Outlook – Plunging Downward

- 45% say their company's IT spending will *decrease* – 16-pts worse than in Aug
- Just 10% say spending will *increase* – a 3-pt drop

Current 4th Quarter Spending: Worst on Record

- 39% say their company has spent *less than planned* so far in 4th Quarter – 9-pts worse than previously
- Just 8% spent *more than planned* – 4-pts less

Bearish Outlook for 1st Half 2009

- 48% think their company's IT budget for 1st half 2009 will be less than 2nd half 2008 – more than twice the amount of the previous survey
- Only 10% think their 1st half 2009 budget will be greater – 8-pts worse

Impact of the Election

- 48% now believe IT spending won't pick up for their company until the 3rd Quarter of 2009 or later – a two-fold increase since August

Corporate Smart Phone Market

Current Market Share

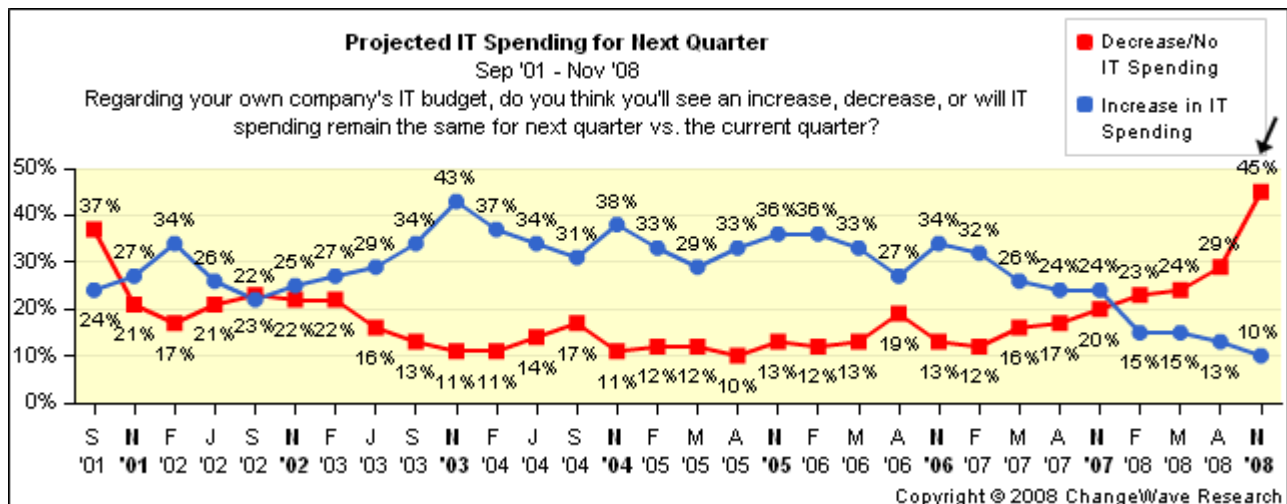
- RIM (76%; down 1-pt)
- Apple iPhone (14%; up 5-pts) moves into second
- Palm (11%; down 4-pts) falls to third
- Motorola (6%; down 3-pts)

Future Purchasing Trends

- RIM (78%; down 1-pt) leads in planned 1Q buying
- Apple (22%) is in second – up 5-pts
- Motorola (5%; unchanged)
- Palm (5%; down 1-pt) falls again

Overview: ChangeWave's latest corporate IT purchasing survey shows a collapse in U.S. business spending of historic proportions – with record pullbacks occurring both in the current 4th Quarter and going forward. The survey of 1,926 respondents involved with IT spending in their organization was conducted November 6-12.

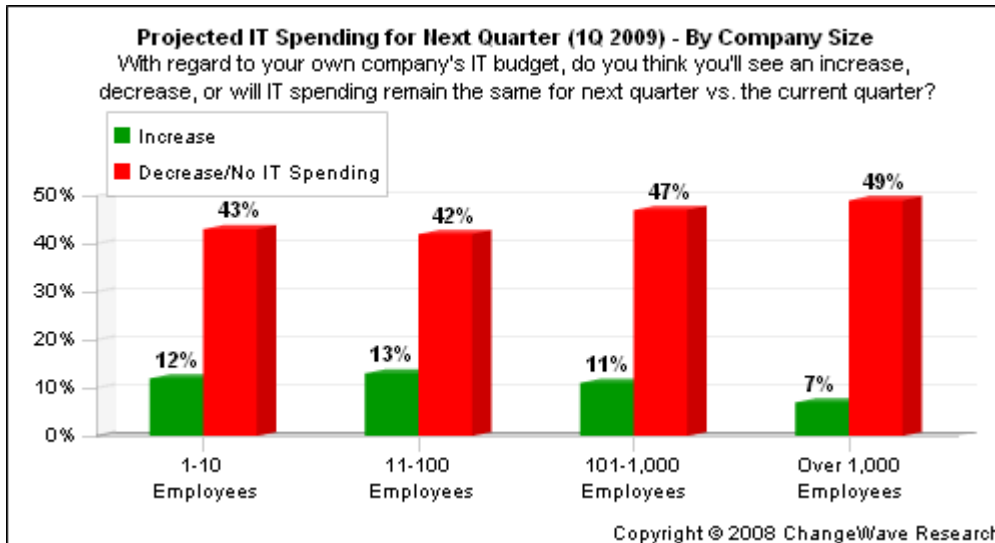
90 Day Outlook – Plunging Downward: Looking at 1st Quarter 2009, the IT spending projections are the worst ever for a ChangeWave survey dating back to 2001. An unprecedented 45% of respondents say their company's IT spending will decrease (or there will be no spending at all) in the 1st Quarter – 16-pts worse than our August survey.



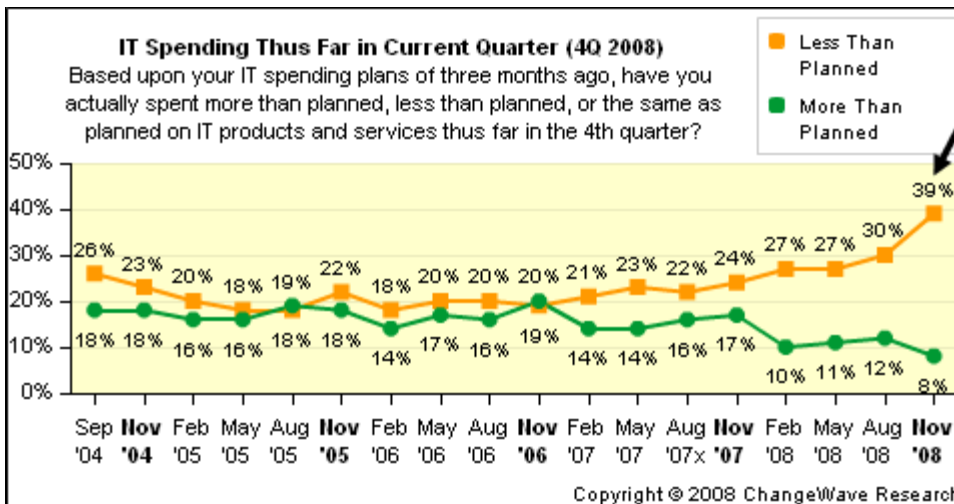
Only one-in-ten (10%) say spending will increase – a 3-pt drop from previously. Most disturbingly, these projections are occurring at a time of year when we normally see seasonal increases in spending.

The decrease in projected IT spending for the 1st Quarter continues to occur across companies of all sizes – including small (1-10 Employees), medium (11-100 and 101-1,000) and large (over 1,000 employees) companies.

Projected IT Spending for Next Quarter (1Q 2009) – By Company Size

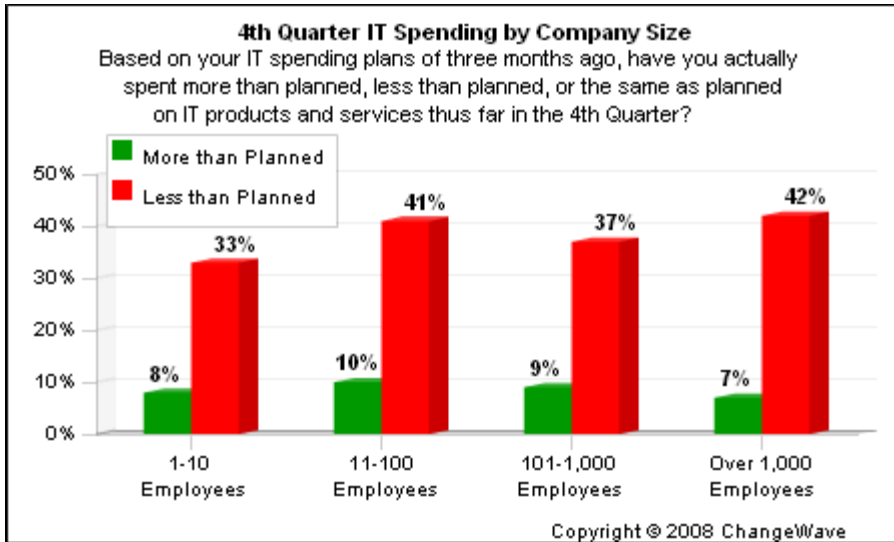


Current 4th Quarter Spending: When we asked respondents if their IT spending was on track so far in the 4th Quarter, the results were also the worst on record by a wide margin.

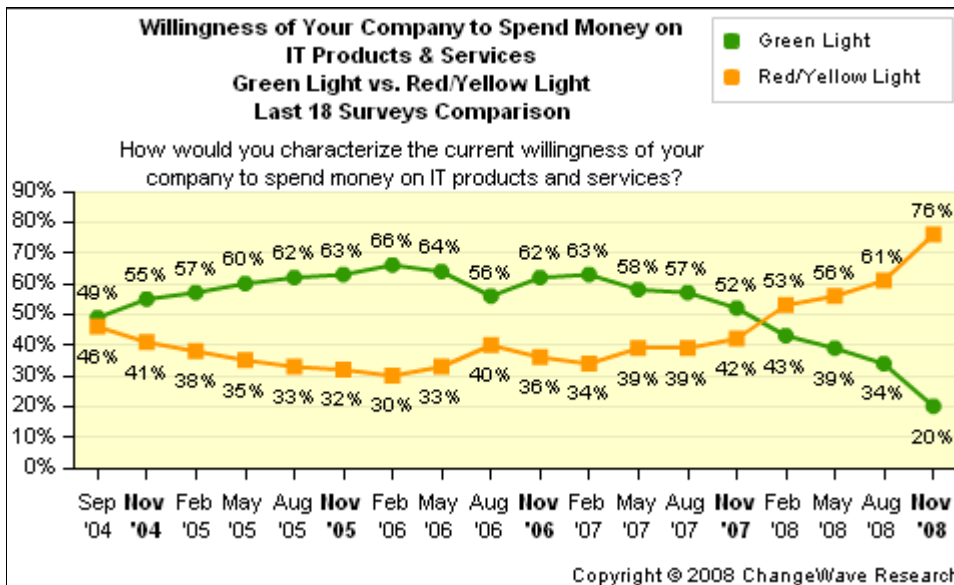


Nearly four-in-ten (39%) say they've spent "Less than Planned" so far this quarter – 9-pts worse than in the August ChangeWave survey. Just 8% have spent "More than Planned" – a 4-pt drop from previously.

4th Quarter IT Spending by Company Size

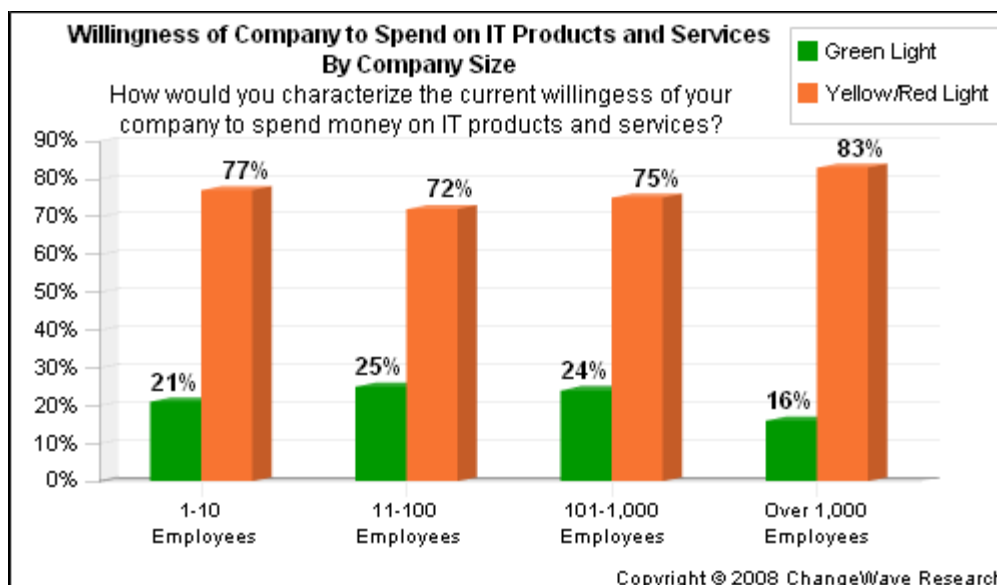


Major Breakdown in Willingness to Spend: We also asked respondents to rate the current willingness of their company to spend money on IT products and services. Three-in-four (76%) say their company has placed a “Yellow/Red Light” on IT spending – 15-pts worse than previously.



Only 20% say their company is giving a "Green Light" to IT spending (i.e., spending is normal).

Willingness of Company to Spend on IT Products and Services – By Company Size



(1) For which of the following main IT spending categories - if any - have you spent more than planned thus far in the 4th Quarter? (Check All That Apply)

	Current Survey Nov '08	Previous Survey Aug '08	Previous Survey May '08	Previous Survey Feb '08	Previous Survey Nov '07
PCs	7%	10%	9%	11%	11%
Servers	6%	7%	7%	8%	11%
Networking	5%	6%	6%	7%	7%
Security	5%	7%	6%	5%	8%
Storage	5%	6%	7%	6%	10%
Application Development Software/Tools	4%	5%	5%	6%	6%
Outsourced IT Services: Systems Integration/ Implementation	4%	4%	4%	4%	4%
Software: Enterprise Applications	3%	5%	5%	6%	8%
Software: Platforms/Operating Systems	3%	5%	3%	4%	5%
Outsourced Application Services: App Mgmt/ Business Process Outsourcing/Hosting	3%	3%	2%	2%	3%
Communications	2%	3%	4%	3%	5%
Virtualization	2%	4%	4%	NA	NA
Outsourced Application Management/Software-as-a-Service (SaaS)	1%	1%	NA	NA	NA
Business Process Outsourcing/Hosting (BPO)	0%	1%	NA	NA	NA
Don't Know	27%	25%	29%	27%	23%
Other	7%	6%	6%	6%	4%

(2) And for which of the following main IT spending categories – if any – have you spent less than planned thus far in the 4th Quarter? (Check All That Apply)

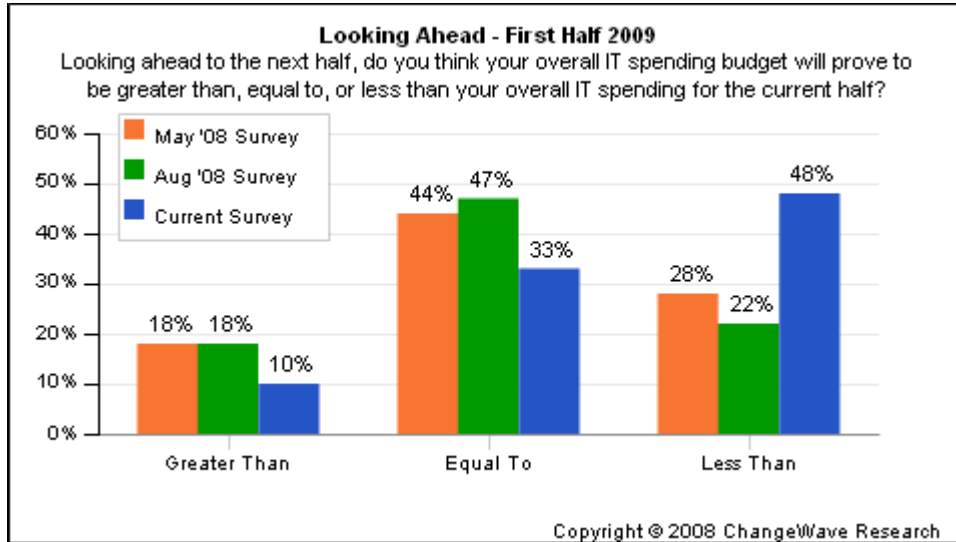
	Current Survey Nov '08	Previous Survey Aug '08	Previous Survey May '08	Previous Survey Feb '08	Previous Survey Nov '07
PCs	20%	15%	14%	13%	14%
Software: Enterprise Applications	12%	8%	7%	8%	6%
Servers	12%	11%	10%	9%	8%
Software: Platforms/Operating Systems	11%	8%	9%	9%	8%
Application Development Software/Tools	11%	8%	7%	7%	6%
Outsourced IT Services Systems Integration/ Implementation	10%	7%	7%	7%	7%
Storage	9%	8%	7%	7%	5%
Networking	8%	6%	6%	8%	8%
Outsourced Application Services: App Mgmt/ Business Process Outsourcing/Hosting	8%	5%	5%	5%	5%
Virtualization	7%	5%	4%	NA	NA
Communications	6%	5%	4%	5%	5%
Security	5%	4%	5%	5%	5%
Outsourced Application Management/ Software-as-a-Service (SaaS) *	5%	3%	NA	NA	NA
Business Process Outsourcing/Hosting (BPO)	4%	3%	NA	NA	NA
Don't Know	27%	28%	31%	29%	28%
Other	4%	4%	4%	5%	2%

Change in Net Difference Score: Current Survey (Nov '08) vs. Previous Survey (Aug '08)

Overall IT Spending Categories	Current Survey Net Difference Score (Nov '08)	Previous Survey Net Difference Score (Aug '08)	Change in Net Difference Score
Storage	-4	-2	-2
Communications	-4	-2	-2
Servers	-6	-4	-2
Security	0	+3	-3
Networking	-3	0	-3
Outsourced Application Services: App Mgmt/ Business Process Outsourcing/Hosting	-5	-2	-3
Outsourced IT Services Systems Integration/ Implementation	-6	-3	-3
Virtualization Software	-5	-1	-4
Application Development Software/Tools	-7	-3	-4
Software: Platforms/Operating Systems	-8	-3	-5
Software: Enterprise Applications	-9	-3	-6
PCs	-13	-5	-8

The 4th Quarter IT spending slowdown is hitting all IT categories, with PCs (Change in Net Difference Score = -8) registering the biggest slowdown, followed by Enterprise Application Software (-6).

1st Half 2009: In a further bearish finding, when respondents were asked about the 1st half of 2009 (Jan-Jun), nearly one-in-two (48%) think their company's IT budget will be less than 2nd half 2008. That's more than twice the amount of the previous survey. Only 10% think their 1st half 2009 IT budget will be greater – 8-pts worse than previously.



Note that 33% say their IT budgets will remain the same.

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Impact of the U.S. Presidential Election

(3) Some analysts think IT Spending will pick up now that the U.S. Presidential elections are over, while others think it won't pick up until second half 2009 or later. What about you? Within your own company, when do you think IT Spending will pick up? (n=1,636)

	Current Survey Nov '08
Has Already Picked Up	2%
Current 4th Quarter 2008	1%
1st Quarter 2009	8%
2nd Quarter 2009	15%
3rd Quarter 2009	19%
4th Quarter 2009	10%
2010 or Later	19%
Don't Know	26%

Impact of the Election: In the aftermath of the U.S. presidential election, respondents do not see any immediate improvement occurring in their company's IT spending. In fact, nearly half (48%) now believe IT spending won't pick up for their company until the 3rd Quarter of 2009 or later – a two-fold increase since our August survey.

(4) What effect – if any – are current energy costs having on your company's IT spending plans for the first half of 2009 (Jan-Jun '09)?

	Current Survey Nov '08
IT Spending Will Be Much Lower Because of Current Energy Costs	3%
IT Spending Will Be Somewhat Lower Because of Current Energy Costs	13%
No Effect on IT Spending Plans	70%
IT Spending Will Be Somewhat Higher Because of Current Energy Costs	2%
IT Spending Will Be Much Higher Because of Current Energy Costs	0%
Don't Know /No Answer	11%

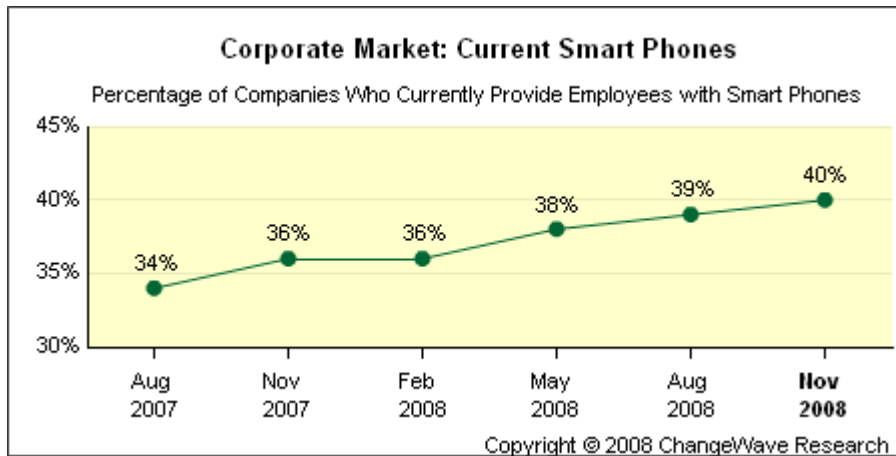
Energy Costs: Only 16% report their company's IT spending plans for first half 2009 will be lower due to current energy costs (3% *Much Lower*, 13% *Somewhat Lower*).

Breakdown by Company Size – Current Survey (Nov 2008)

	Total	1-10 Employees	11-100 Employees	101-1,000 Employees	Over 1,000 Employees
IT Spending Will Be Much Lower Because of Current Energy Costs	3%	3%	4%	3%	3%
IT Spending Will Be Somewhat Lower Because of Current Energy Costs	13%	11%	13%	14%	14%
No Effect on IT Spending Plans	70%	76%	73%	73%	64%
IT Spending Will Be Somewhat Higher Because of Current Energy Costs	2%	1%	1%	2%	3%
IT Spending Will Be Much Higher Because of Current Energy Costs	0%	0%	0%	0%	0%

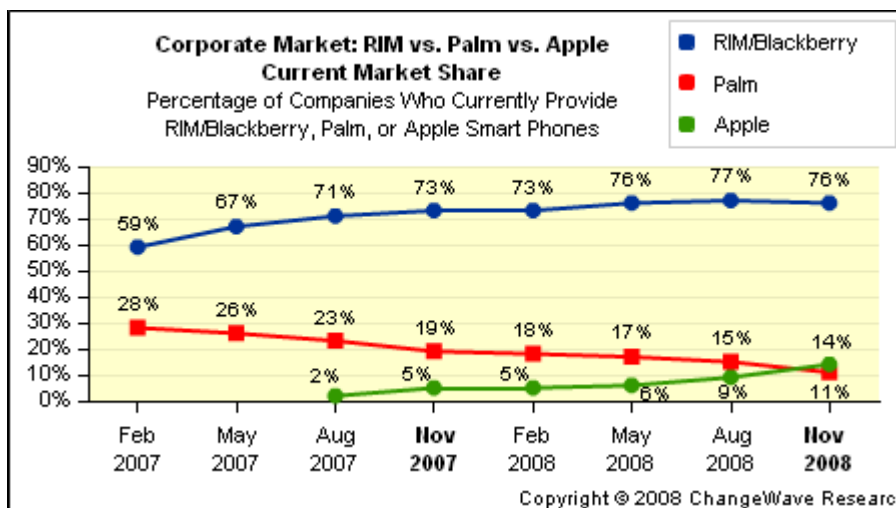
II. Corporate Smart Phone Market

(1) *Does your company currently provide employees with Smart Phones?*



Research In Motion Maintains its Lead: In terms of current share, Research in Motion (RIMM; 76%; down 1-pt) maintains its huge lead in the corporate smart phone market.

But in a breakthrough for Apple (AAPL; 14%), they have gained 5-pts in current corporate smart phone share – moving ahead of Palm (PALM; 11% – down 4-pts) into second place.



(1A) Who is the manufacturer of the current Smart Phones your company provides? (Check All That Apply) (n=770)

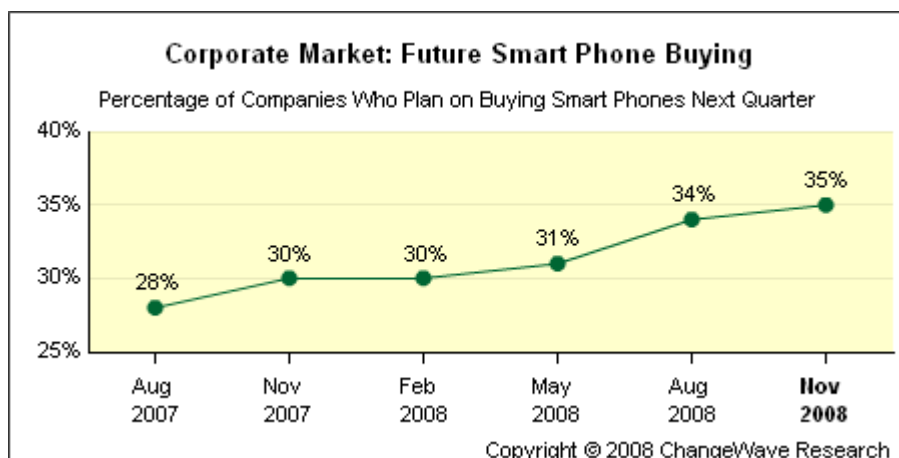
	Current Survey Nov '08	Previous Survey Aug '08	Current Survey May '08	Current Survey Feb '08	Previous Survey Nov '07	Previous Survey Aug '07
Research In Motion (e.g., RIM/Blackberry)	76%	77%	76%	73%	73%	71%
Apple (e.g., iPhone)	14%	9%	6%	5%	5%	2%
Palm (e.g., Treo, Centro)	11%	15%	17%	18%	19%	23%
HTC (e.g. Touch, Tilt, Dash)	6%	6%	5%	3%	NA	NA
Motorola (e.g., Q)	6%	9%	10%	9%	11%	12%
Samsung (e.g., BlackJack)	6%	6%	6%	5%	7%	7%
Nokia (e.g., N95)	5%	7%	5%	7%	7%	7%
LG (e.g., Dare)	1%	NA	NA	NA	NA	NA
T-Mobile G1 (e.g., Android)	1%	NA	NA	NA	NA	NA
Other	4%	4%	3%	5%	10%	10%

We note that RIM's corporate share is heavily concentrated among larger companies (Over 1,000 Employees), while three quarters of Apple's share is among small- to medium-sized companies (Under 1,000 Employees).

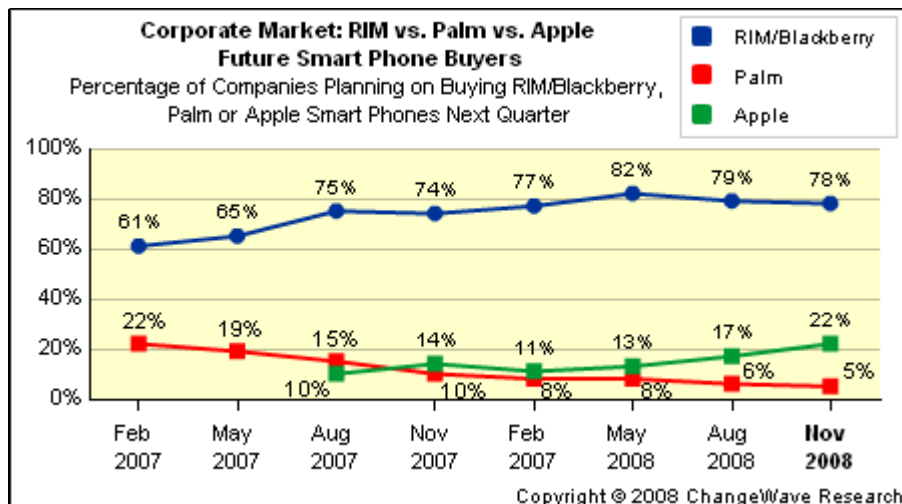
Current Share: Apple vs. RIM Breakdown by Company Size (Current Nov '08 Survey)

	1-10 Employees	11-100 Employees	101-1,000 Employees	Over 1,000 Employees
Apple (e.g., iPhone) (n=110)	28%	32%	15%	25%
Research In Motion (e.g., RIM/Blackberry) (n=583)	7%	14%	17%	61%

Planned Smart Phone Buying: In one of the few upbeat findings of the survey, the corporate smart phone market continues to show growth. A total of 35% of respondents report their company plans to buy smart phones next quarter - up 1-pt from August.



In terms of manufacturers, RIM (78%; down 1-pt) once again garners the dominant share of planned smart phone buying.



But once again, the Apple iPhone (22%; up 5-pts) shows considerable momentum in terms of corporate planned purchases going forward.

(2) (FOR THOSE COMPANIES BUYING SMART PHONES IN 1ST QUARTER 2009)
Who is the manufacturer of the Smart Phones your company is planning on buying?
(Check All That Apply) (n=667)

	Current Survey Nov '08	Previous Survey Aug '08	Previous Survey May '08	Previous Survey Feb '08	Previous Survey Nov '07	Previous Survey Aug '07
Research In Motion (e.g., RIM/Blackberry)	78%	79%	82%	77%	74%	75%
Apple (e.g., iPhone)	22%	17%	13%	11%	14%	10%
Motorola (e.g., Q)	5%	5%	6%	7%	9%	10%
Palm (e.g., Treo, Centro)	5%	6%	8%	8%	10%	15%
Samsung (e.g., BlackJack)	5%	5%	5%	4%	6%	4%
Nokia (e.g., N95)	4%	5%	4%	7%	8%	8%
HTC (e.g. Touch, Tilt, Dash)	3%	4%	4%	3%	NA	NA
T-Mobile G1 (e.g., Android)	2%	NA	NA	NA	NA	NA
LG (e.g., Dare)	1%	NA	NA	NA	NA	NA
Other	2%	2%	1%	4%	5%	5%

Palm (5%) is down 1-pt and now tied for third place with Samsung (5%) and Motorola (5%) in terms of future buying.

(3) Below is a list of several recent Apple product releases. For each, please tell us if the release of this product has made your company more likely to purchase Apple products in the future, less likely, or if it has had no effect. (n=938)

	More Likely	Less Likely	No Effect	Don't Know
iPhone 3G	18%	1%	55%	25%
iPhone Software 2.0	8%	1%	60%	31%
iPhone SDK (Software Development Kit)	6%	1%	61%	32%
New MacBook (with aluminum unibody)	7%	1%	61%	31%
MacBook Air	4%	1%	63%	32%
iPhone Enterprise Beta Program	4%	1%	60%	34%

And in a further confirmation that the 3G iPhone is having a positive impact on Apple's corporate business, nearly one-in-five respondents (18%) report the release of the 3G version has made their company *More Likely* to purchase Apple products in the future. Only 1% say *Less Likely*.

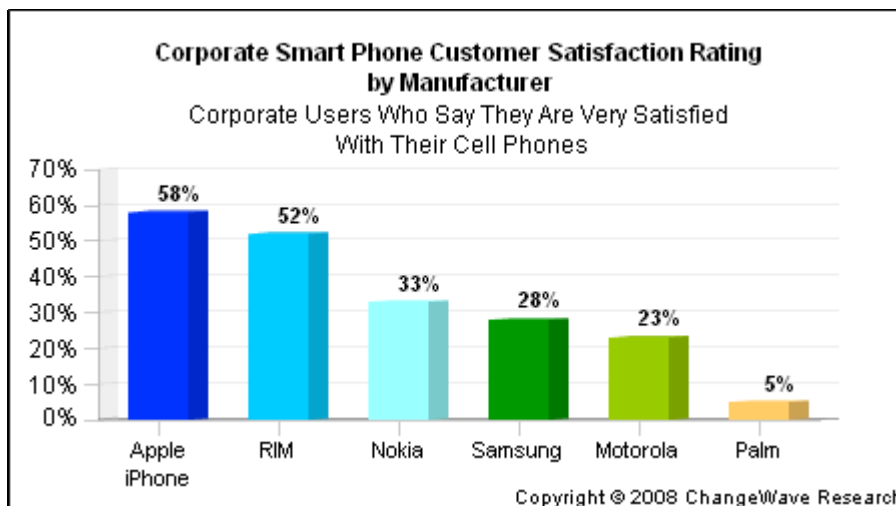
Corporate Smart Phone Customer Satisfaction

(4) And how satisfied is your company with their current Smart Phones? (Please rate only those manufacturers your company currently provides.)

Current Survey (Nov 2008)

	Current Smart Phone Manufacturer					
	Apple	RIM	Nokia	Samsung	Motorola	Palm
Very Satisfied	58%	52%	33%	28%	23%	5%
Somewhat Satisfied	39%	41%	56%	58%	48%	63%
Somewhat Unsatisfied	2%	3%	11%	9%	21%	20%
Very Unsatisfied	2%	4%	0%	5%	8%	12%

Apple continues to lead all competitors in customer satisfaction. Better than half (58%) of their business customers say their company is *Very Satisfied* with the iPhone.



RIM ranks a very strong second, with a relatively high 52% *Very Satisfied* rating. Palm (5%), on the other hand, receives its lowest corporate smart phone satisfaction rating in a ChangeWave survey yet.

III. ChangeWave Research Methodology

The current findings are based on a survey of ChangeWave Research Network members involved with IT spending in their organization, conducted November 6-12, 2008. The goal of the survey was to get an up-to-date picture of IT spending for the 1st Quarter of 2009. To this end, the survey was composed of a sample of 1,926 accredited members.

ChangeWave's proprietary research and business intelligence gathering system is based upon the systematic gathering of valuable business and investment information directly over the Internet from accredited members.

The Research Network is assembled from senior technology and business executives in leading companies of select industries. Nearly 3 out of every 5 members (56%) have advanced degrees (e.g., Master's or Ph.D.) and 93% have at least a four-year bachelor's degree.

The business and investment intelligence provided by ChangeWave provides a real-time view of companies, technologies and business trends in key market sectors, along with an in-depth perspective of the macro economy – well in advance of other available sources.

IV. About ChangeWave Research

ChangeWave Research, a subsidiary of InvestorPlace Media, LLC, identifies and quantifies "change" in industries and companies through surveying a network of thousands of business executives and professionals working in more than 20 industries.

The ChangeWave Research Network is a group of 20,000 highly qualified business, technology, and medical professionals – as well as early adopter consumers – who work in leading companies of select industries. They are credentialed professionals who spend their everyday lives on the frontline of technological change. ChangeWave surveys its Network members weekly on a range of business and consumer topics, and converts the information into a series of proprietary quantitative and qualitative reports.

ChangeWave delivers its products and services on the Web at www.ChangeWave.com.

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