

IBM Global Services

Canadian Securities Administrators STP Readiness Assessment

November 5, 2004

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Research Objectives

- IBM was commissioned to conduct an online survey of certain Canadian financial service entities with the objective of understanding the industry's readiness for STP implementation. IBM developed this survey jointly with the OSC with review and approval by the CSA. In addition, members of different regulatory groups were invited to two focus group discussions to test the completeness and ease of understanding of the intended questionnaire. Their feedback was taken into consideration and the electronic survey was finalized.
- This year's research is a replication of a nearly identical survey conducted in 2003. Some questions were modified slightly and two questions were eliminated.
- The objectives of this survey were to:
 1. Assess the degree of support for in-house initiatives and commitment of resources to STP.
 2. Identify the relative significance of the issues that need to be addressed to achieve STP.
 3. To measure progress, based on a comparison between the 2003 and 2004 results.

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Executive Summary

Overall

- Survey results continue to indicate a low commitment to investment, planning and resource allocation towards STP initiatives.
- Large firms are willing to move forward, have allocated budget and resources and are concerned about issues that are outside their span of control.
- Small firms still don't know how STP applies to them.
- Many firms are still unsure of the true cost benefits in moving to STP.
- There is continued uncertainty regarding outside vendors' plans for STP.
- Year over year there is a positive trend to a higher degree of automation, but there still appears to be a significant amount of non real-time processing for trade activities.
- There are no significant differences in the completion of activities (allocation, confirmation, affirmation) for institutional trades. With over half of the trade processing done manually, it remains the key focus for the STP initiative.

Executive Summary

Degree of Support for In-house Initiatives and Commitment of Resources

Awareness:

- Awareness of STP is much improved over last year. There is an increase in planning, but real action with budget commitment remains low. Overall, larger firms are more prepared, smaller firms are still unsure how STP applies to them.
- There is a significant increase in firms that report being prepared although there was only a small increase in firms with an STP budget allocated. This could imply that those who feel prepared have enough STP processes in place and that no additional budget is required.
- Although fewer firms state that they are unsure how STP applies to their organization compared to last year, many still do not understand the cost benefits. Without first understanding the benefits of moving to STP, there may be little incentive to invest capital and resources towards this initiative.

STP Investment:

- Compared to 2003, there is an increase in investment of those firms who report being 'Net Prepared'. STP spending is increasing slightly with fewer firms reporting 'No Investment' this year compared to last year. The spending reported in this year's survey for 2003 is less than was predicted in last year's survey. Although there seems to be an increase in STP investment, still over half of the firms have indicated there was no STP investment made in 2003. Those firms with no STP investment likely see no clear benefit or are relying on their service providers.
- Almost half of the firms still report having no plans for organizing for STP. Of those with no plans, two-thirds are the smaller organizations represented by the IC/portfolio managers and limited market dealers. It is no surprise that the smaller organizations have the least commitment to an organized structure to assess and implement STP plans. This is consistent with discussions with many of the 'buy' side participants during the T+1 initiative (2001) where there is little enthusiasm for investing towards this industry initiative for the institutional trade process. It was perceived that there was less tangible benefit in the 'clearing and settlement' processes of the trade flow for the investment councilor/ portfolio managers.
- Among those who said they were organized for STP, the allocation for FTEs is increasing slightly, but close to one-half of firms still have fewer than one FTE dedicated towards enabling STP readiness. The larger firms are ramping up and have increased their FTEs in the 1-5 category dedicated to enabling STP from 2003 to 2004. By dedicating more resources, this appears to indicate a positive trend in getting past the awareness stage.

Executive Summary

Issues to be Addressed to Achieve STP

Impediments to Adoption

- The sense of urgency and knowledge about STP is increasing, however one-third of participants are still unsure of outside vendors' plans for STP.
- Overall, the top three issues impeding STP adoption remain: unsure of outside vendors' plans, a low sense of urgency, and a lack of standards driving minimum requirements.
- Although small firms don't report a significant impediment, they may feel that it is a service provider issue and hence a low sense of urgency. Medium organizations recognize dependency on infrastructure. Larger firms show more experience with STP and report that lack of industry standards and regulatory requirements are the largest impediments to their adoption of STP.
- Interestingly enough, very few responded with 'lack of adequate funding' which would imply that the firm does have the capital resources if it had the right impetus.

Drivers for Initiatives

- Similar to last year, drivers remain the same with revenue generation being the least important and risk reduction identified as the most important.
- Revenue generation was not perceived as a key driver as part of the business case for STP. STP may not yet be considered a differentiator in winning new business.

Business Functions of Focus for STP

- Not surprisingly, the core trade flow processes: trade order management, trade processing, and trade settlement, have the most impact on STP and have increased in terms of investment focus.
- There is a high reliance on outsourcing to a service provider for both trade settlement and trade processing for current and future STP investment. For these participants that use 3rd party service providers, it is important that they understand their service providers plans for STP which clearly many of them don't.

Executive Summary

Measuring Progress

Degree of Automation

- Year over year there is a positive trend to a higher degree of automation. The area of trade order management reports the largest reduction of manual processing.
- The trade flow process (trade order management, trade processing, trade settlement) have the highest degree of automation regardless of company size. It is no surprise that large companies perceive themselves as 'more automated' in these processes. No change was observed from 2003 to 2004.

Type of Processing (Batch vs Real-time)

- There still appears to be a significant amount of non real-time activity for trade processing with the largest reduction in real-time processing reported within the IC/portfolio managers and mutual fund categories. However, it appears that reconciliation is moving more towards a more real-time environment. All of the processes have a significant amount of manual activity that could be streamlined through enabling STP.

Electronic vs Manual Instruction

- There is no significant increase in electronic instruction for institutional trades and over fifty percent remains manual. It remains the key focus for the STP initiative.
- Mutual Funds use a greater degree of electronic instruction than Equities with investment dealers being the furthest ahead. It appears that the largest degree of electronic instruction lies in Trade Execution for Equities and Trade Settlement for Mutual Funds.

Completion Timing for Activities

- There are no significant differences in the completion timing of activities (allocation, confirmation, affirmation) for institutional trades.
- The completion timing of activities for Retail Trades is improving. Year over year, more Retail Trades are completed by T/T+1, while the number of trades completed after T+3 has reduced.

Exceptions

- The proportion of exceptions in transactions has increased between 2003 to 2004. Exceptions falling in the less than 2% range has decreased while exceptions falling in the 2-10% range has increased, particularly in the Mutual Fund and Equities categories.

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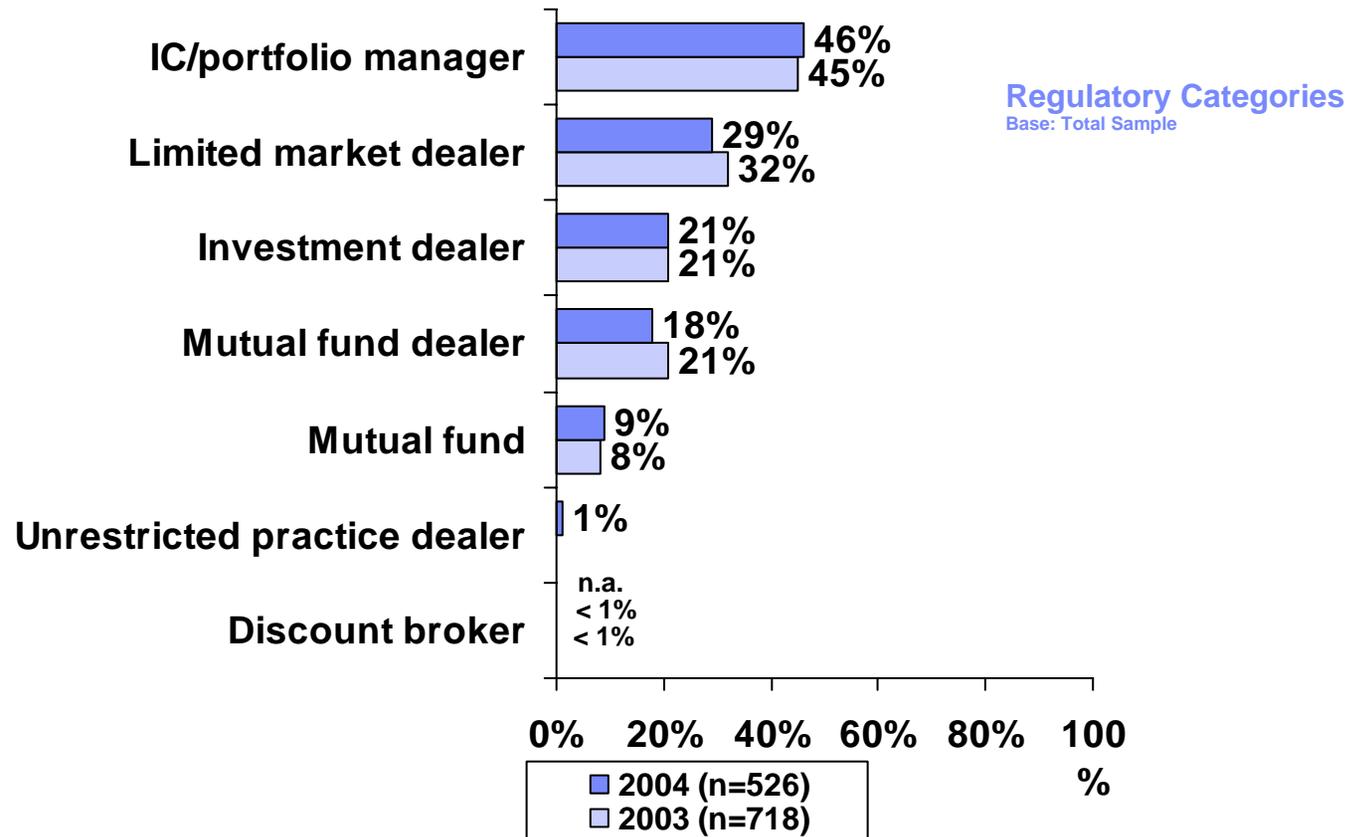
Methodology

- As part of the 2004 survey enrollment process registrants were contacted by e-mail and letter. From the registrant population contacted, 744 registrants enrolled to complete the 2004 survey and 532 registrants actually completed the survey. That gives a 72% response rate.
- Last year 902 registrants enrolled to complete the survey and 732 actually completed the survey. That produced a response rate of 73%.
- The reduction in the number of registrants that completed the survey in 2004 is spread fairly equally across the registration categories and between small, medium and large firms and thus does not skew the results.
- Survey results were tabulated by respondent registration category and corporate size. Registration categories included: investment counsel/portfolio manager, limited market dealer, investment dealer, mutual fund and two Quebec based categories, discount broker and unrestricted practice dealer. No reporting was done against the two Quebec-only categories due to their small sample size.
- Small, medium and large companies are defined by their employee size. Small companies are defined as having less than 10 employees, medium sized companies are defined as having between 10 and 99 employees, with large organizations defined as having over 100 employees. For the remainder of the report the names Small, Medium and Large will be used.
- The 2004 results were compared to the 2003 results for most of the questions.

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Overall, there is a similar representation of participants across the categories in the survey this year compared to last year although fewer provided their contact information causing a decrease in overall participation.

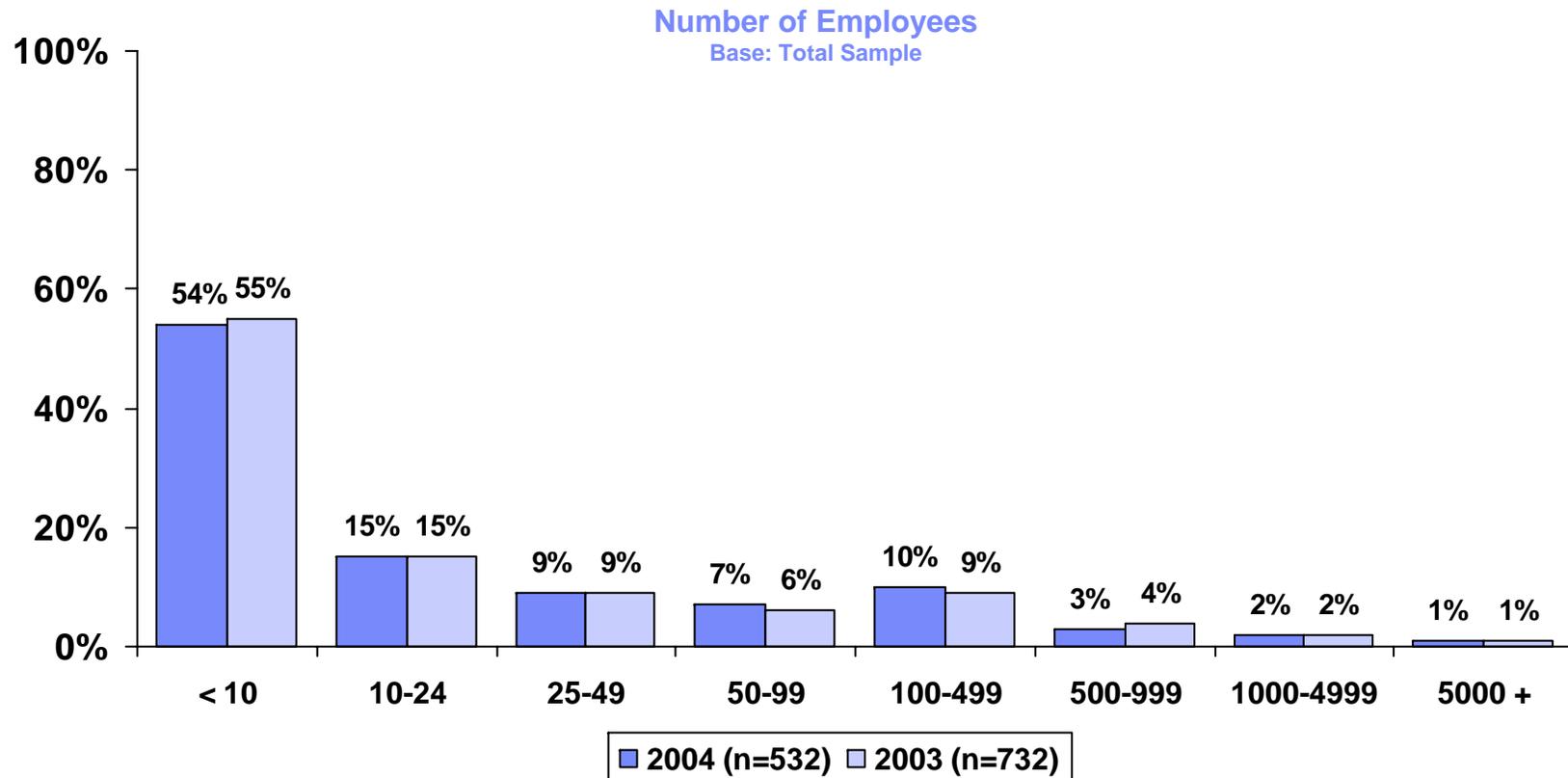


- The greatest proportions of participants' firms are investment counselors/portfolio managers (46%) and/or limited market dealers (29%) while one-in-five are investment dealers (21%) and/or mutual fund dealers (18%).
- Both participant profile measures are not significantly different from those collected in 2003.
- In general, when compared with small and medium organizations, proportionally more large firms are mutual fund dealers while fewer are investment counselors/portfolio managers and/or limited market dealers.

Question 1. Identify which of the following regulatory categories apply to [Name of Company].

Please select a maximum of three regulatory categories.

There is a similar representation of participants based on size of firm this year compared to last year.

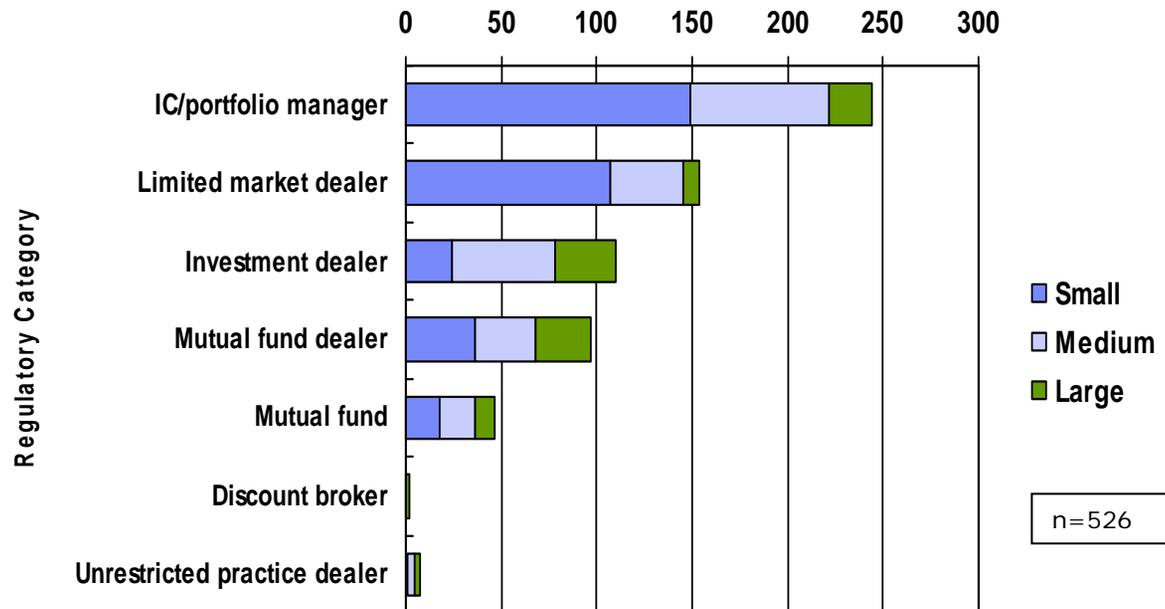


- Approximately one-half of firms represented in this research (54%) employ fewer than ten staff while 24% employ 10 to 49 individuals.

Question 2. Approximately how many people are employed (including agents) at [Name of Company]?
Include all locations in Canada only.

Most firms participating in this survey have fewer than 50 employees.

Number of Respondents by Regulatory Categories and Company Size



- Nearly one-half of the legal entities are investment counselors and/or portfolio managers (46%), one-third are limited market dealers (29%), and one-in-five are investment dealers (21%) and/or mutual fund dealers (18%).
- Most participants are multi-licensed or operate in more than one regulatory category and as a result many indicated more than one regulatory category.
- Eight-in-ten firms participating in this research (79%) have fewer than 50 employees in Canada.

Question 1. Identify which of the following regulatory categories apply to your Company . Please select a maximum of three regulatory categories. Question 2. Approximately how many people are employed (including agents) at your Company ? Include all locations in Canada only.

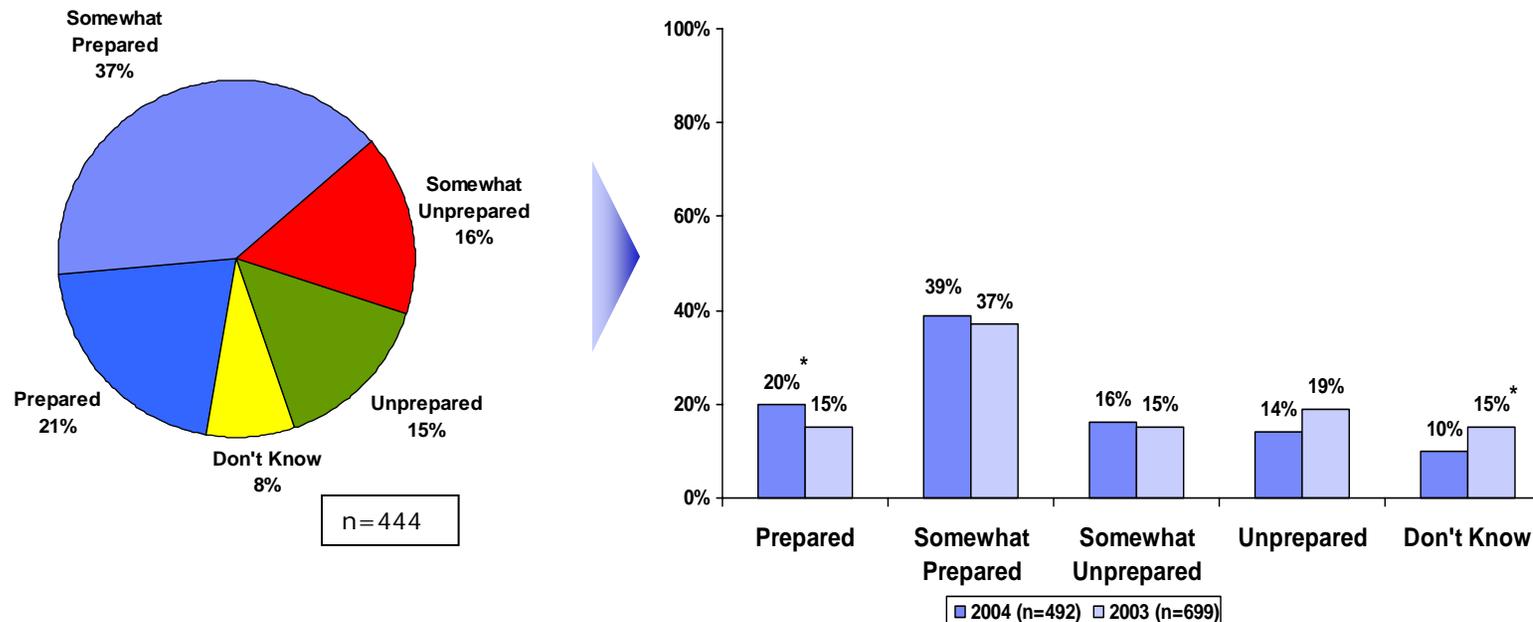
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Compared to 2003, more firms report being prepared or somewhat prepared, with fewer in the 'Don't Know' category

Level of Preparedness for Implementing STP Plans – Year over Year

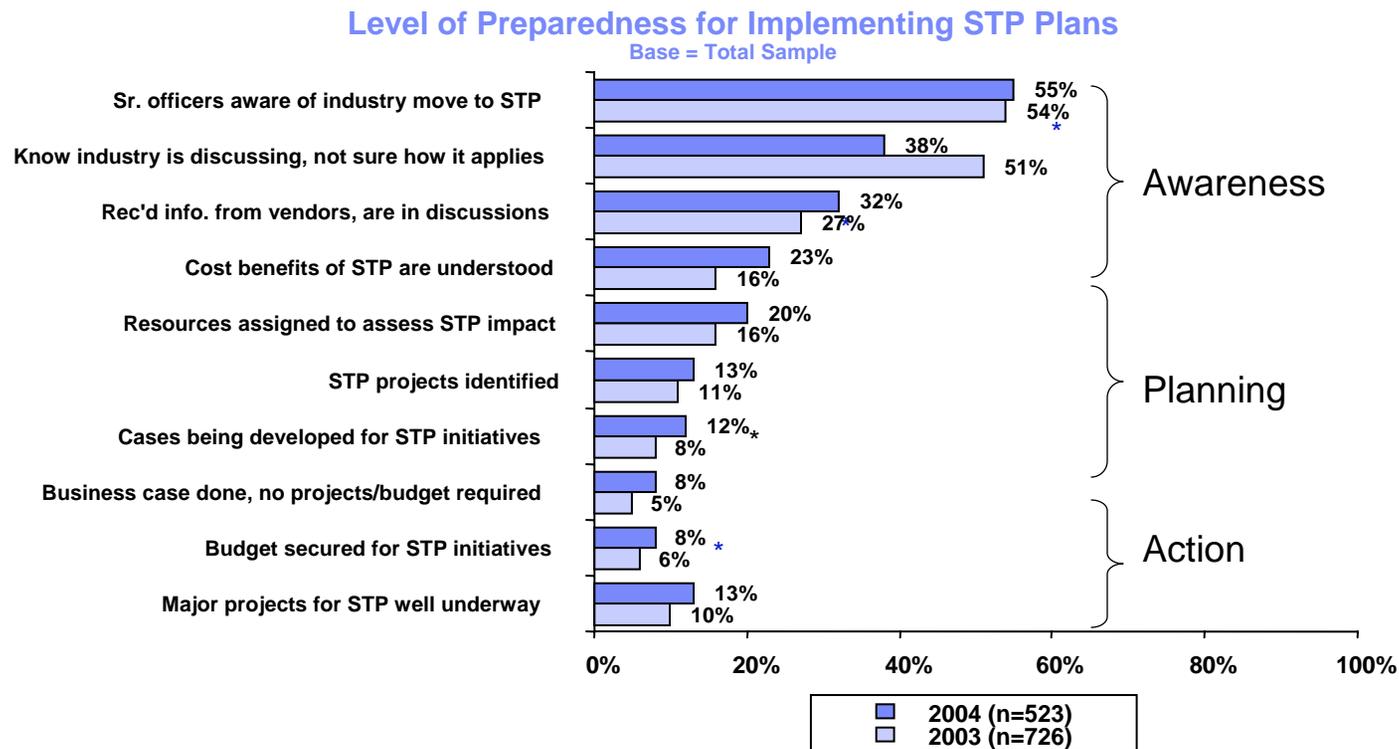
Base: Total Sample



- Six-in-ten firms (59%) report being prepared/somewhat prepared for STP implementation, 30% are unprepared/somewhat unprepared, and 10% of respondents are unsure of their firm's preparedness.
- When compared with 2003, proportionally more firms in 2004 are prepared/somewhat prepared for STP implementation (59% versus 52%).
- Proportionally more large firms are prepared/somewhat prepared for STP (78%), when compared with small (53%) or medium (61%).

* Percentage is significantly higher than adjacent value

Awareness of STP is much improved over last year. There is an increase in planning, but real action with budget commitment remains low. Overall, larger firms are more prepared, smaller firms are still unsure how STP applies to them.



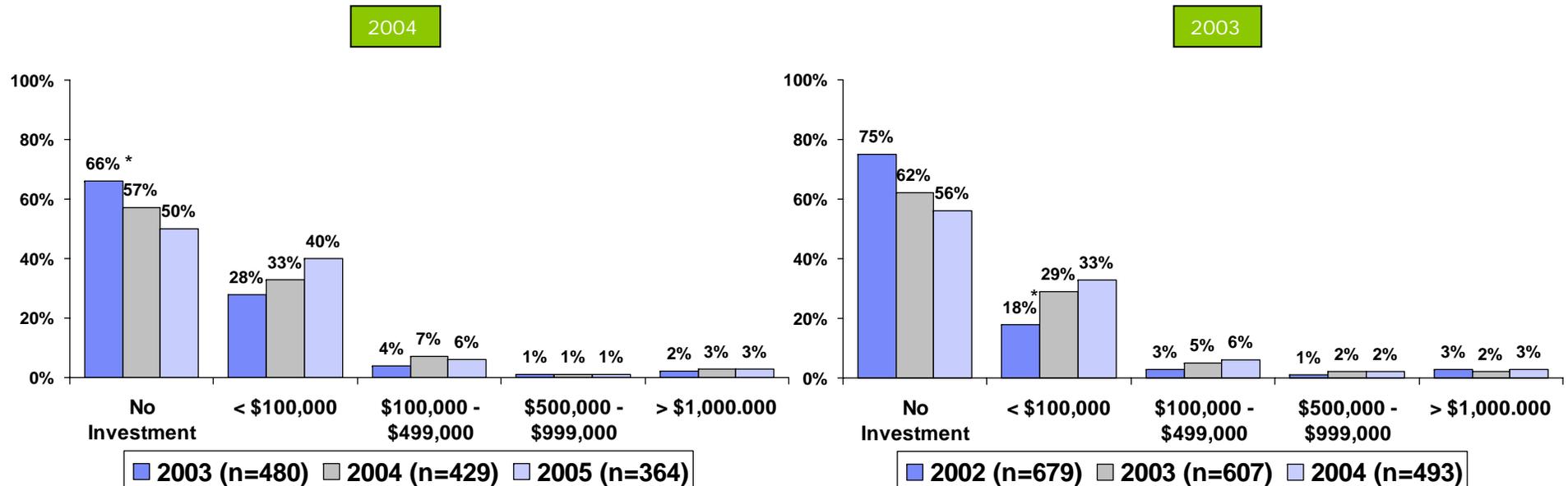
- About one-half of respondents state that senior officers in their firm are aware of the industry's commitments towards STP implementation (55%).
- Proportionally fewer participants in 2004 than in 2003 state that they know the industry is discussing STP but 'are not sure how this applies to us' (38% versus 51%). Proportionally more respondents in 2004 than in 2003 report that the cost benefits of STP are understood within their firm (23% versus 16%).
- Proportionally more large firms report being prepared for implementing STP while proportionally more small firms state that they 'know the industry is talking about this but are not sure how this applies to us' (49%), when compared with medium (29%) or large (16%).

Question 3. Which of the following best describes [Name of Company] level of preparedness for implementing STP plans?

Please select all that apply.

STP spending is increasing slightly with fewer firms reporting 'No Investment' in STP this year compared to last year. The spending reported in this year's survey for 2003 is less than was predicted in last year's survey.

STP Investment for Past Year, Current Year and Next Year



- Two-thirds (66%) state that their firm did not make an STP-related investment in 2003, while 57% do not expect an STP-related investment to be made in 2004. Close to one-in-three spent/expect to spend less than \$100,000 during the same time-periods (2003, 28%; 2004, 33%). (Don't Knows excluded).
- A smaller proportion of participants in 2004 than 2003 states that their organization made no STP-related investment in the previous year (66% versus 75%).
- As would be anticipated, past, present and future STP spending increases as organization size increases.

* Percentage is significantly higher than corresponding 2003/ 2004 value

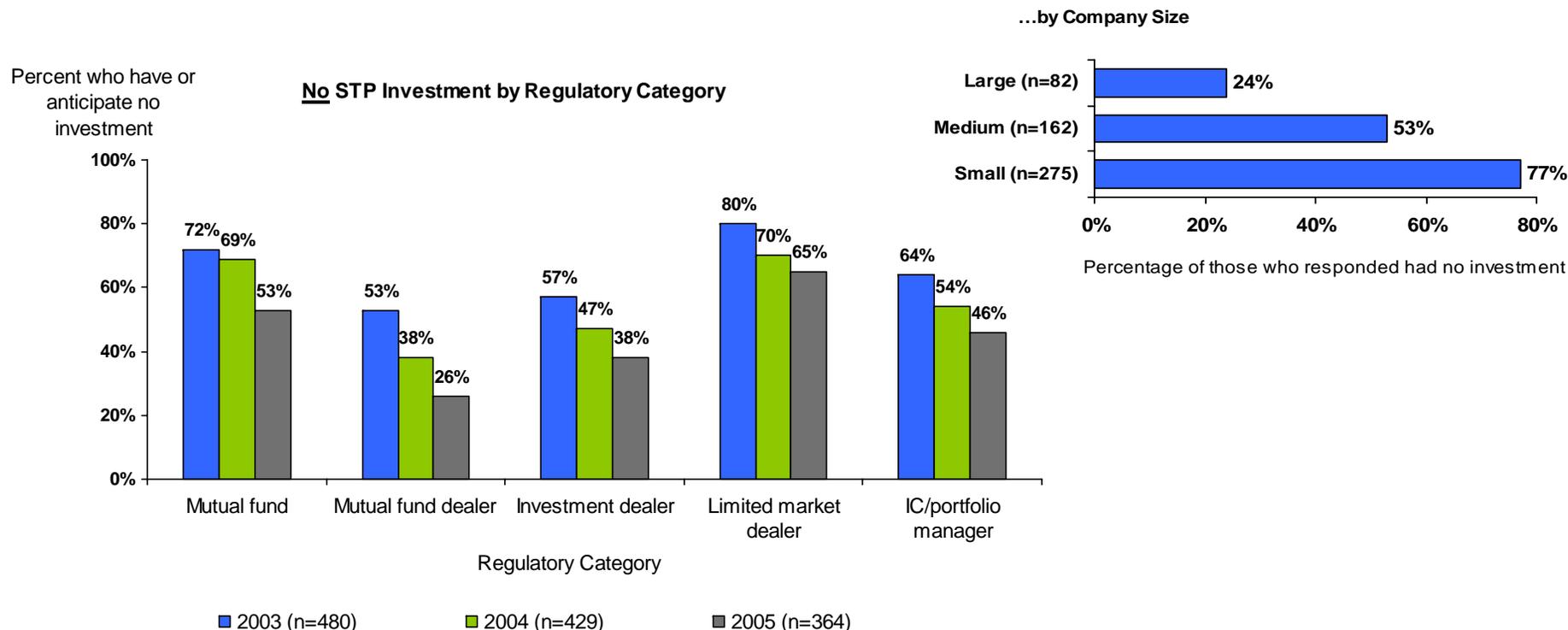
Question 7. What was [Name of Company]'s investment related to STP in 2003?

Question 8. What is your forecasted investment related to STP in 2004?

Question 9. What is your anticipated investment related to STP in 2005?

Although there seems to be an increase in STP investment, still over half of the firms have indicated there was No STP investment made last year.

STP Investment for 2003, 2004 and 2005 (as reported in 2004)



- 50% or more, in each regulatory category, have indicated their firms had no STP investment for 2003.
- It appears however that spending in general is expected to increase in 2004 and 2005 (by regulatory category as well as by size of company).
- Three-in-ten respondents expect that their organizations' STP investment will be less than \$100,000 for both 2003 (28%) and 2004 (33%) and 2005 (40%).

Question 7. What was your Company's investment related to STP in 2003? Q8 forecasted investment in 2004? Q9 in 2005? (don't know removed from base)

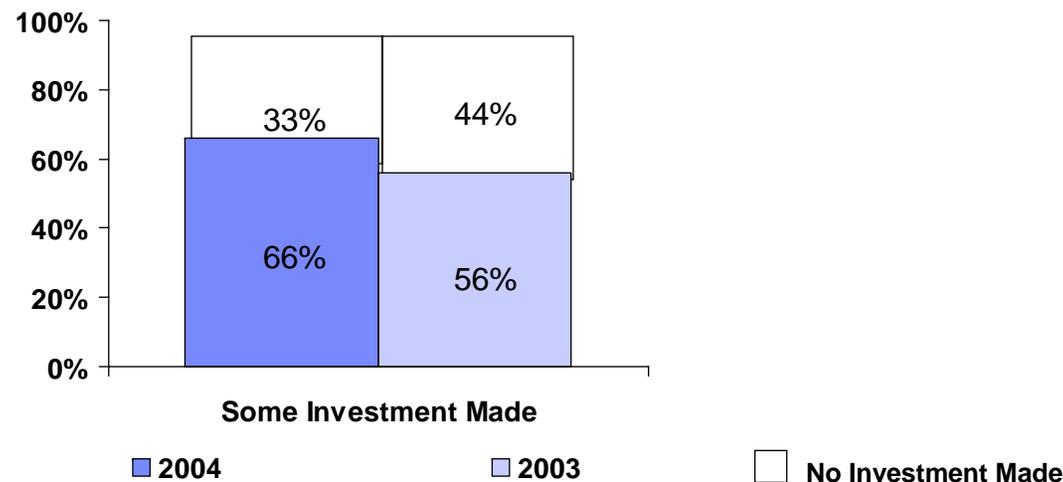
* Net prepared = those who indicated both prepared and somewhat prepared

Compared to 2003, there is an increase in investment of those firms who report being 'Net Prepared'.

STP Investment for 2003, and 2004

NET PREPARED *

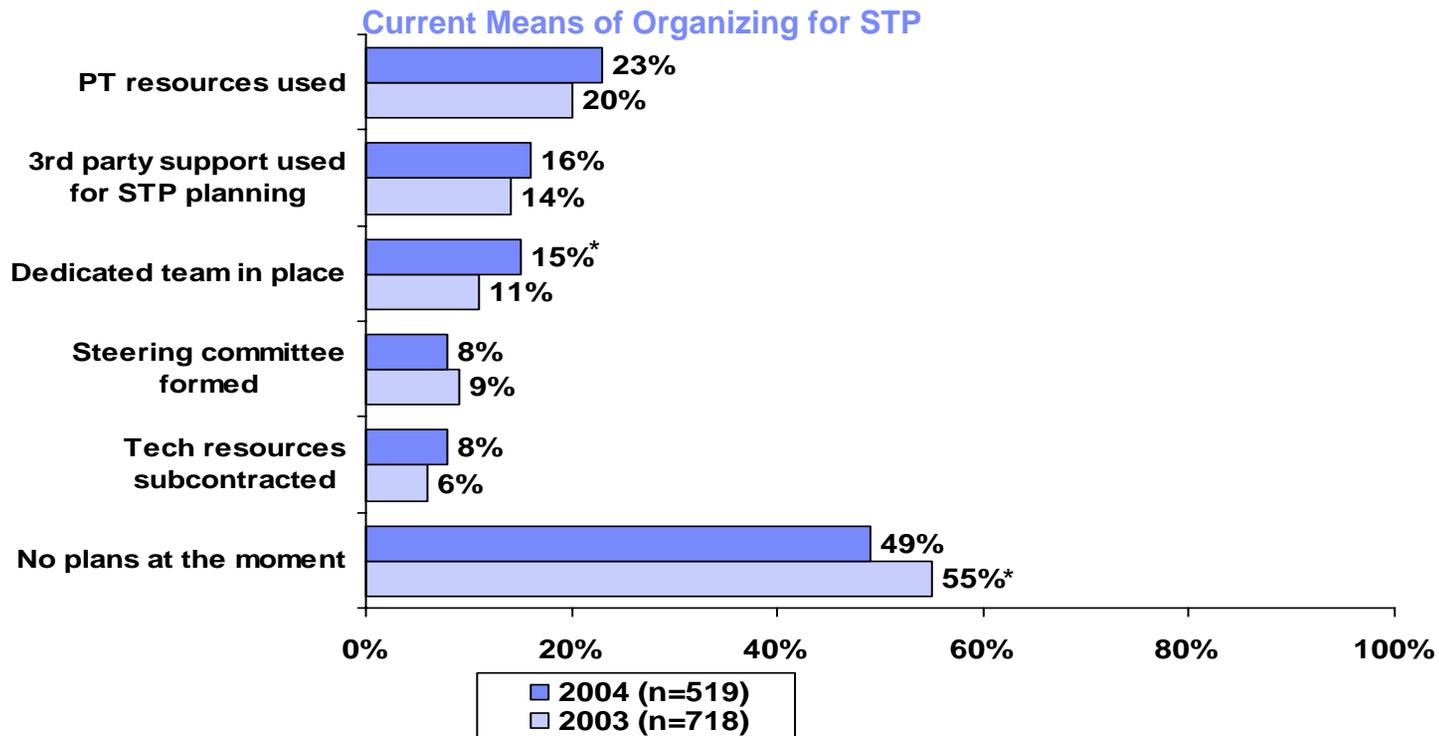
Participants who indicated their organizations are net prepared and have made some STP investment



- A large portion of participants who indicate their organizations are prepared for STP implementation have no STP investment.
 - Among all the participants who indicated their organizations are somewhat prepared or prepared for STP implementation, (66% of total), 46% had no STP investment in 2003 and 33% indicate no planned STP investment for 2004.
- Moreover, there is little STP investment momentum among those participants who indicated their organizations are net unprepared for STP implementation
 - Among all participants who indicated their organizations are somewhat unprepared or unprepared (34% of total), 80% had no STP investment in 2003 and 64% indicate no planned STP investment for 2004.

Question 20. How prepared is your organization for STP implementation? (don't know removed from base) with cross tab results from Q7. Question 7. What was your Company's investment related to STP in 2003? Q8 forecasted investment in 2004? (don't know removed from base) * Net prepared = those who indicated both prepared and somewhat prepared

Although there are more resources being allocated to STP initiatives this year compared to last year, almost half still have 'No plans' resulting in no resource requirements.



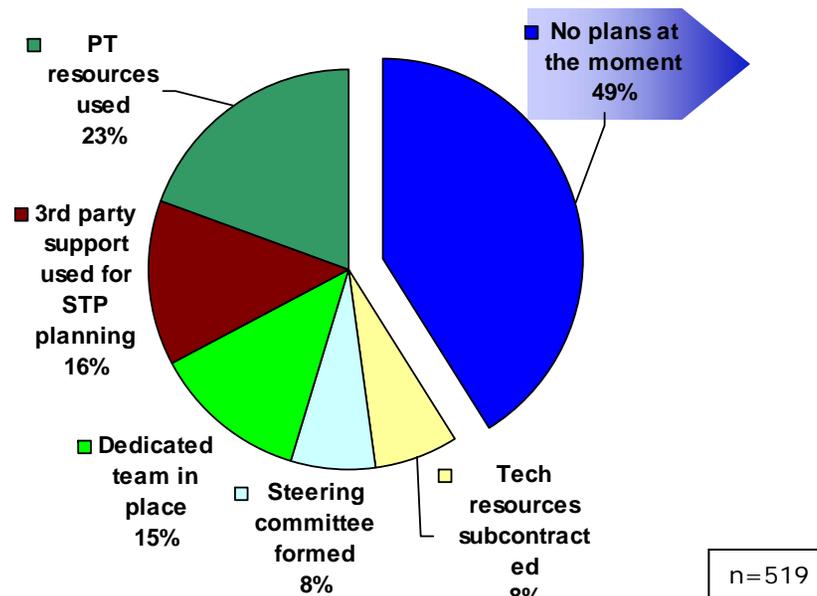
- Twenty-three percent of the firms are utilizing part-time resources to implement STP, while more than one-in-ten are using third party support for assessment and planning (16%) and/or have a dedicated team in place (15%).
- Proportionally fewer respondents in 2004 than in 2003 state that their firm does not have any STP implementation plans in place (49% versus 55%) while a greater proportion of 2004 than 2003 participants states that their organization has a dedicated team in place (15% versus 11%).
- A larger proportion of small firms do not have any STP implementation plans in place at the moment (62%), when compared with medium firms (40%) or large firms (24%).

* Percentage is significantly higher than adjacent value

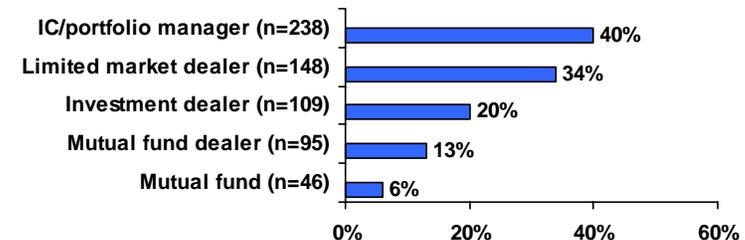
Question 5. How is [Name of Company] currently organized for STP implementing? Please select all that apply.

Of those with no plans for organizing for STP, two-thirds are the smaller organizations. Most of these are IC/portfolio managers and limited market dealers.

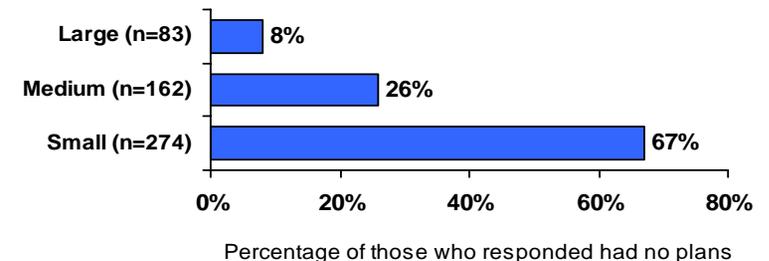
Current Means of Organizing for STP



Of those participants with no plans, by regulatory category



...by Company Size

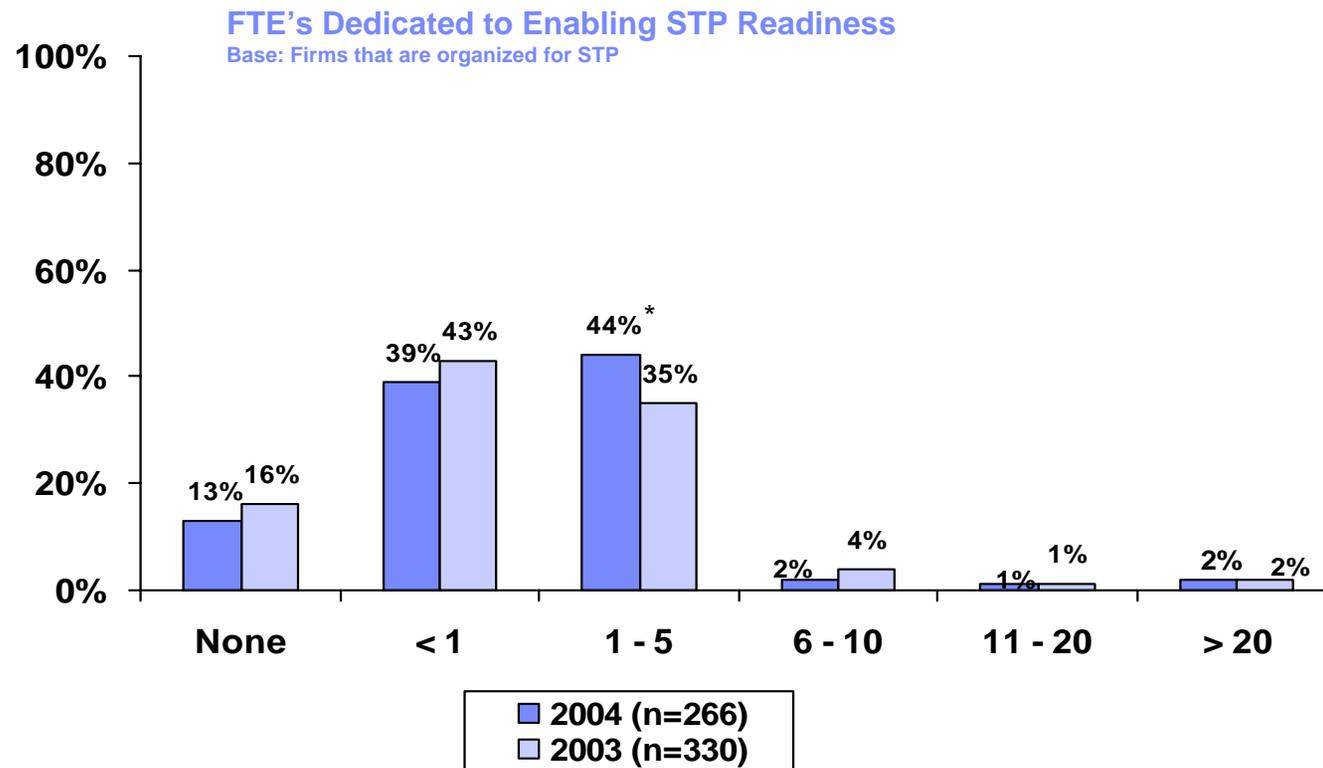


- 49% of the participants do not have any plans at the moment for organizing their company for STP implementation. A significant portion of these are small companies and who are limited market dealers or IC/portfolio managers.
- Large and medium sized institutions are more likely to have a plan in place or are executing on a plan to be organized for STP.
- Twenty percent of firms (23%) are currently using part-time resources for STP implementation while 16% are utilizing a third party for STP assessment and planning

Question 5. How is your Company currently organized for STP implementing? Please select all that apply.

* Within cross tabulated results, some questions yield lower response rates than others. Please refer to the 'n' value for the total number of responses to a particular question. Tabulated results that yield less than 50 responses may be affected by an undetermined amount of non-response bias.

Among those who said they were organized for STP, there is an increase in FTEs (1-5 category) dedicated to enabling STP. By dedicating more resources, this appears to indicate a positive trend in getting past the awareness stage.

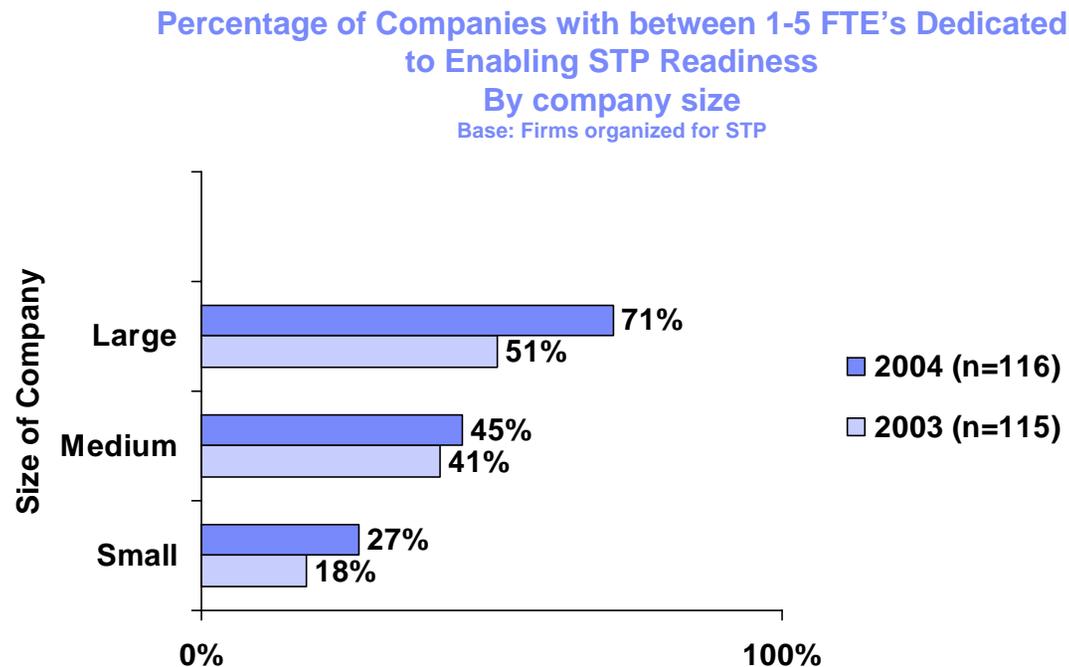


- Close to one-half of participating firms have fewer than one FTE dedicated to enabling STP readiness (52%), while 44% have one to five FTEs dedicated to this initiative.
- Proportionally more firms in 2004 than in 2003 have one to five FTEs dedicated to STP readiness (44% versus 35%).
- In general and as anticipated, the number of FTEs dedicated to enabling STP readiness increases as organization size increases.

* Percentage is significantly higher than adjacent value

Question 6. Approximately how many full-time equivalent employees (including subcontractors) are dedicated to enabling STP readiness?

Large firms are ramping up and have increased their number of FTEs dedicated to enabling STP in 2004 vs 2003.



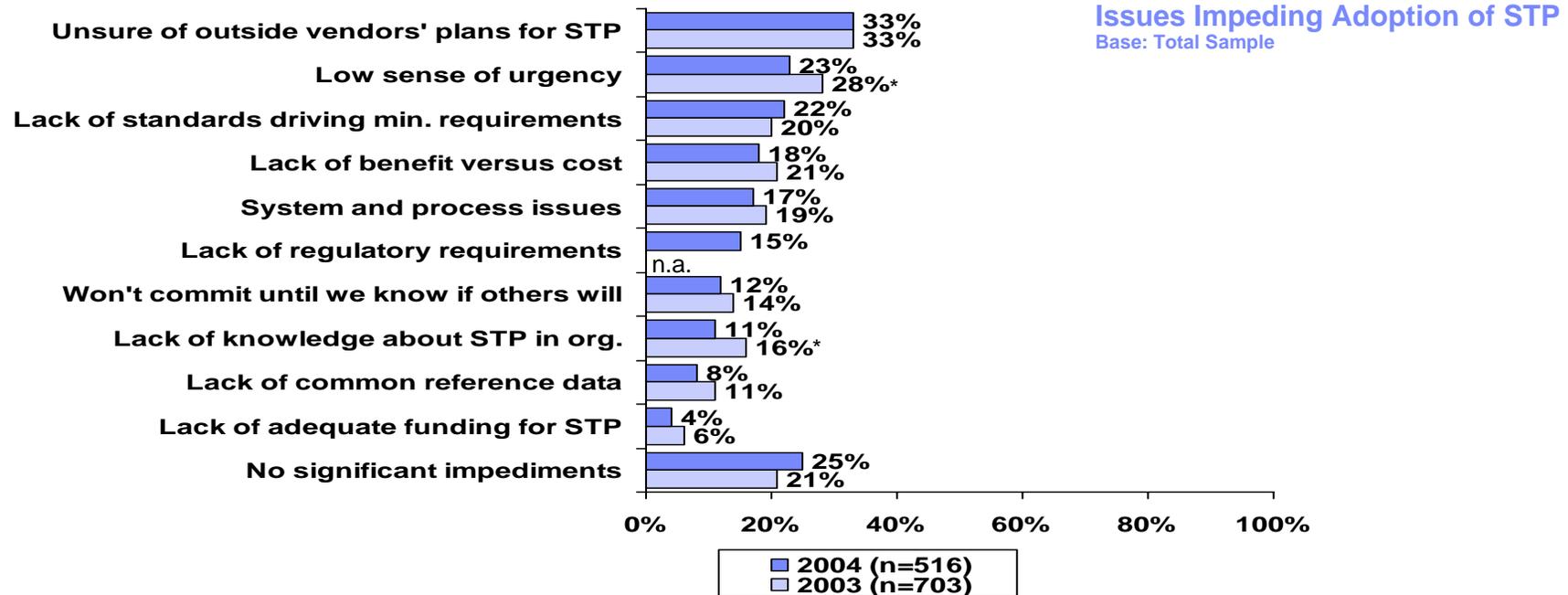
- Compared to 2003, all firms are increasing the number of FTEs in the 1-5 category.
- Proportionally more large firms in 2004 than in 2003 have one to five FTEs dedicated to STP readiness (71% versus 51%).

Question 6. Approximately how many full-time equivalent employees (including subcontractors) are dedicated to enabling STP readiness?

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The sense of urgency and knowledge about STP is increasing, however one-third of participants are still unsure of outside vendors' plans for STP.



- One-third of participants state that being unsure of outside vendors' plans and timing for STP is an impediment to adoption (33%); other impediments mentioned by more than one-in-five respondents include the perception that STP has a 'low sense of urgency, relative to other business imperatives' (23%), and that there is a 'lack of industry standards driving minimum requirements' (22%). Among all regulatory categories, the issue of outside vendors' plans was more evident for Mutual fund dealers and IC/Portfolio Managers.
- Awareness of STP has increased from 2003 to 2004. Proportionally fewer respondents in 2004 state that a 'low sense of urgency, relative to other business imperatives' (23%) and/ or a lack of knowledge of STP (11%) are impediments, when compared with those who participated in 2003 (28% and 16% respectively).
- A larger proportion of individuals who work in large firms state that a lack of industry standards driving minimum requirements is an impediment (43%), when compared with small firms (13%) or medium firms (25%). Additionally, proportionally more of those who work in medium firms (23%) or large firms (24%) state that system and process issues are impediments, when compared with individuals in small firms (12%).

* Percentage is significantly higher than adjacent value

Question 4. Which of the following, if any, do you perceive to be the major issues that impede adoption of STP in [Name of Company]? Please select a maximum of three issues.

Although small firms don't report a significant impediment, they may feel that it is a service provider issue and hence a low sense of urgency. Medium organizations recognize dependency on infrastructure. Larger firms show more experience with STP and report that lack of industry standards and regulatory requirements are the largest impediments to their adoption of STP.

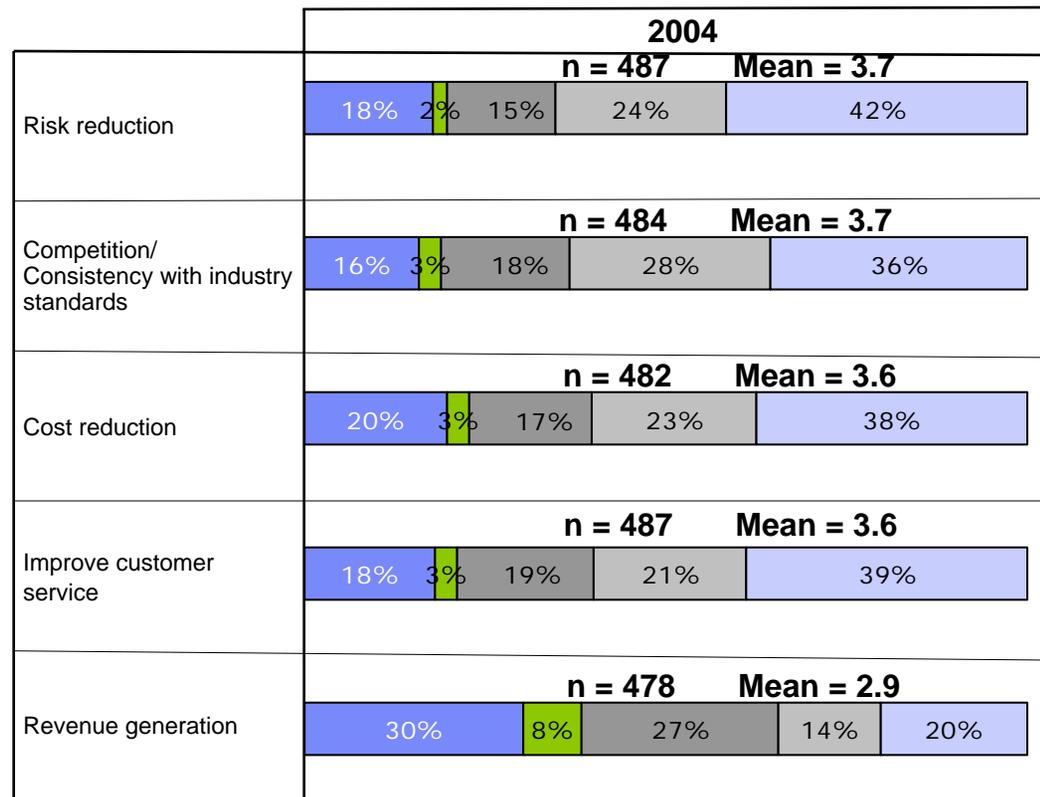
| Major Issues Impeding Adoption of STP | | |
|--|--|---|
| Small (<10 employees, n=271) | Medium (10-99 employees, n=162) | Large (100+ employees, n=83) |
| <ul style="list-style-type: none"> ▪ No significant impediments (34%) ▪ Unsure of outside vendors' plans (26%) ▪ Low sense of urgency (23%) ▪ Lack of perceived benefit (19%) ▪ Lack of knowledge about STP in org (14%) ▪ Lack of industry standards (13%) ▪ System and process issues (12%) ▪ Won't commit investment until others comply (10%) ▪ Lack of regulatory requirements (8%) ▪ Lack of common reference data (6%) ▪ Lack of adequate funding (4%) | <ul style="list-style-type: none"> ▪ Unsure of outside vendors' plans (44%) ▪ Lack of industry standards (25%) ▪ System and process issues (23%) ▪ Low sense of urgency (23%) ▪ No significant impediments (18%) ▪ Won't commit investment until others comply (17%) ▪ Lack of perceived benefit (17%) ▪ Lack of regulatory requirements (12%) ▪ Lack of knowledge about STP in org (9%) ▪ Lack of common reference data (9%) ▪ Lack of adequate funding (4%) | <ul style="list-style-type: none"> ▪ Lack of industry standards (43%) ▪ Lack of regulatory requirements (42%) ▪ Unsure of outside vendors' plans (31%) ▪ System and process issues (24%) ▪ Lack of perceived benefit (19%) ▪ Low sense of urgency (18%) ▪ Won't commit investment until others comply (13%) ▪ Lack of common reference data (13%) ▪ No significant impediments (13%) ▪ Lack of knowledge about STP in org (7%) ▪ Lack of adequate funding (1%) |

- Larger firms show more experience with STP and report that lack of industry standards and regulatory requirements are the largest impediments to their adoption of STP.
- Of all the Unprepared, the issue of outside vendors' plans was the largest issue.
- Among all respondents, the issues of 1) lack of knowledge internally (26%), 2) lack of perceived cost benefit (26%), 3) low sense of urgency (33%), and 4) lack of adequate STP funding were significantly more evident among the Unprepared vs the Prepared.
- Lack of funding is not a major issue impeding adoption of STP.

Question 4. Which of the following, if any, do you perceive to be the major issues that impede adoption of STP in your Company? Please select a maximum of three issues.

Similar to last year, drivers remain the same with revenue generation being the least important and risk reduction identified as the most important.

- Similar to 2003, four of the five drivers presented are rated important/somewhat important by sixty percent or more of respondents (risk reduction, 66%; competitive pressure, 64%; cost reduction, 61%; customer service, 60%). Revenue generation remains a weak driver for STP. Overall, there are no significant differences between 2003 and 2004, overall or by company size.
- For all five drivers, smaller proportions of individuals who work within small firms rate each item as important/somewhat important, when compared with those who work in medium or large firms.



Importance of Drivers
Base: Total Sample



Question 10. Please rate the importance of the following drivers, if any, to your firm's STP initiatives?

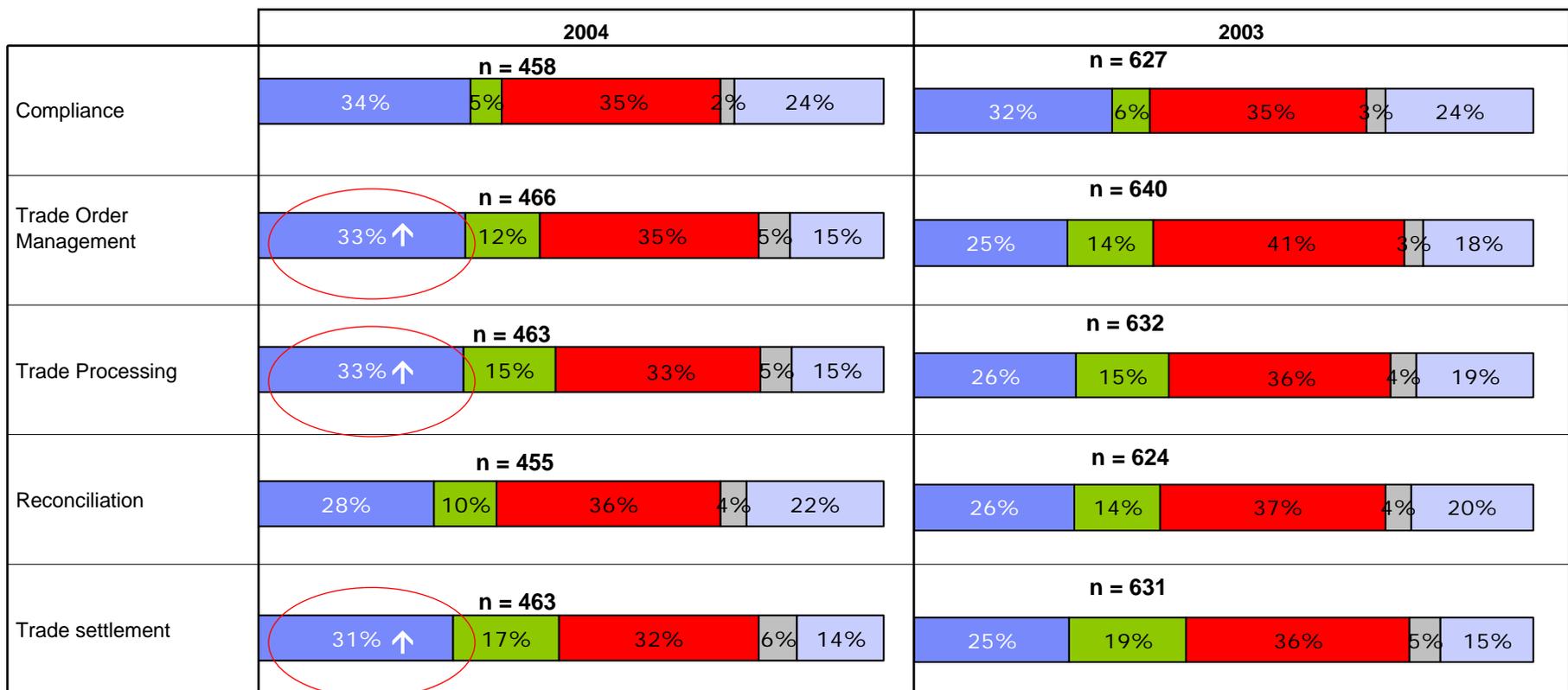
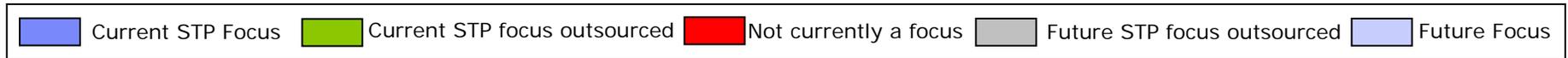
Unimportant Neutral Important
Scale: 1-----> 3 -----> 5

Business Functions of Focus for STP Investment

- Nearly one-half of participants' firms are currently focussed on trade processing and trade settlement functions for their STP investment (48% each) while 45% are focussed on trade order management (data presented on following two slides).
 - The greatest proportions of participants' firms will be focussing on compliance (26%) and/or reconciliation (26%) in the future.
- Compared with 2003, greater proportions of respondents' firms in 2004 are currently focussing on trade processing (48% versus 41%) and/ or trade order management (45% versus 39%) and/ or trade settlement (31% versus 25%).
- In general, proportionally more large firms are currently focussed on the STP functions listed; small firms are the least likely to be focussing on these functions.
- Similar to 2003, three-quarters or more respondents do not view securities lending (80%) and securities borrowing (75%) as either a current or future STP focus area.

Not surprisingly, the core trade flow processes: trade order management, trade processing, trade settlement, have the most impact on STP and have increased in terms of investment focus.

Business Functions of Focus for STP Investment Base: Total Sample

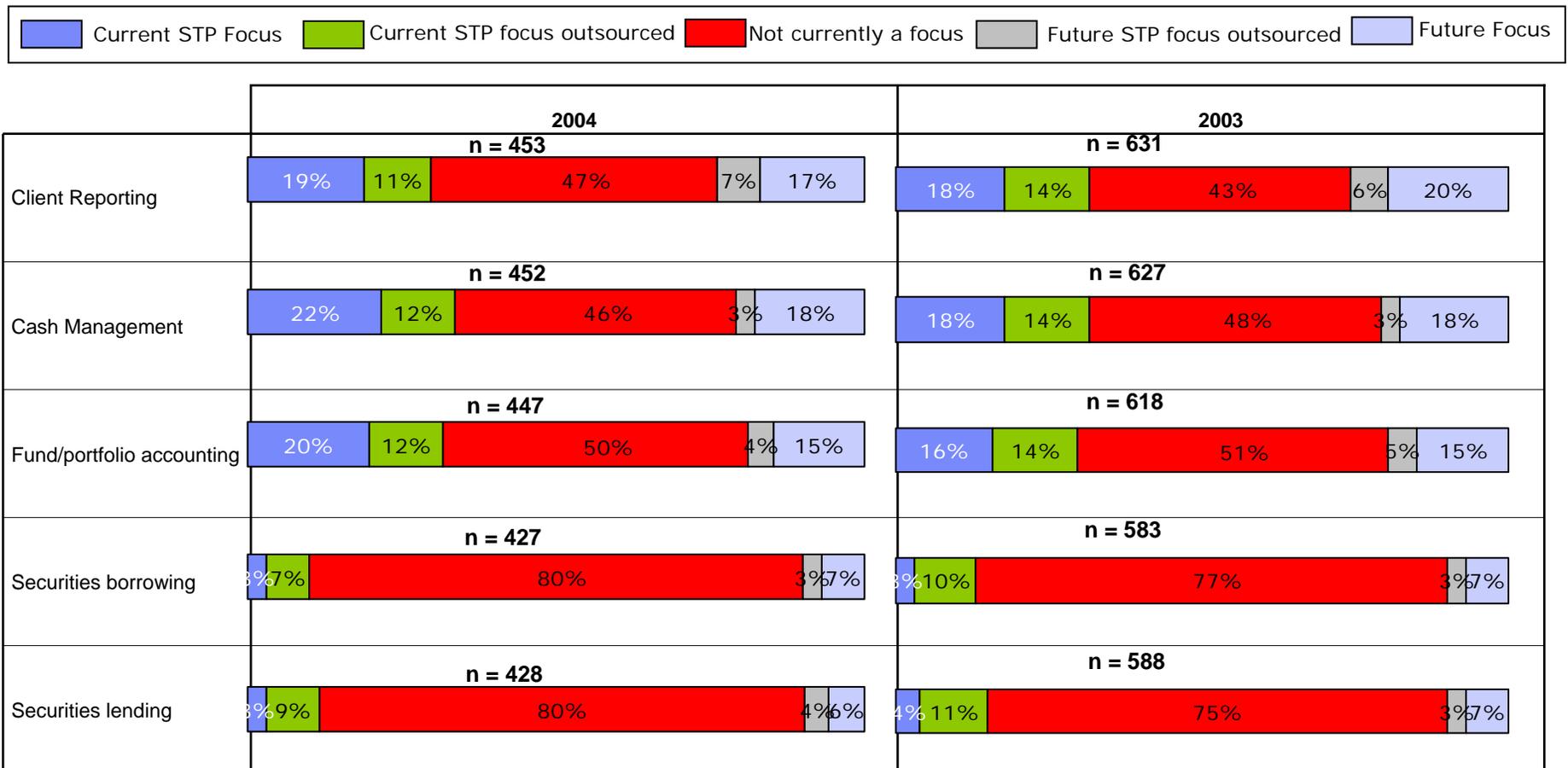


↑ Significant increase compared with 2003

Question 11. What are the business functions of focus for your STP investment? STP focus areas includes systems, organizational changes, and/or reference data management.

Non core processing functions remain as areas outside of the current focus.

Business Functions of Focus for STP Investment Cont'd Base: Total Sample



Question 11. What are the business functions of focus for your STP investment? STP focus areas includes systems, organizational changes, and/or reference data management.

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Degree of Automation

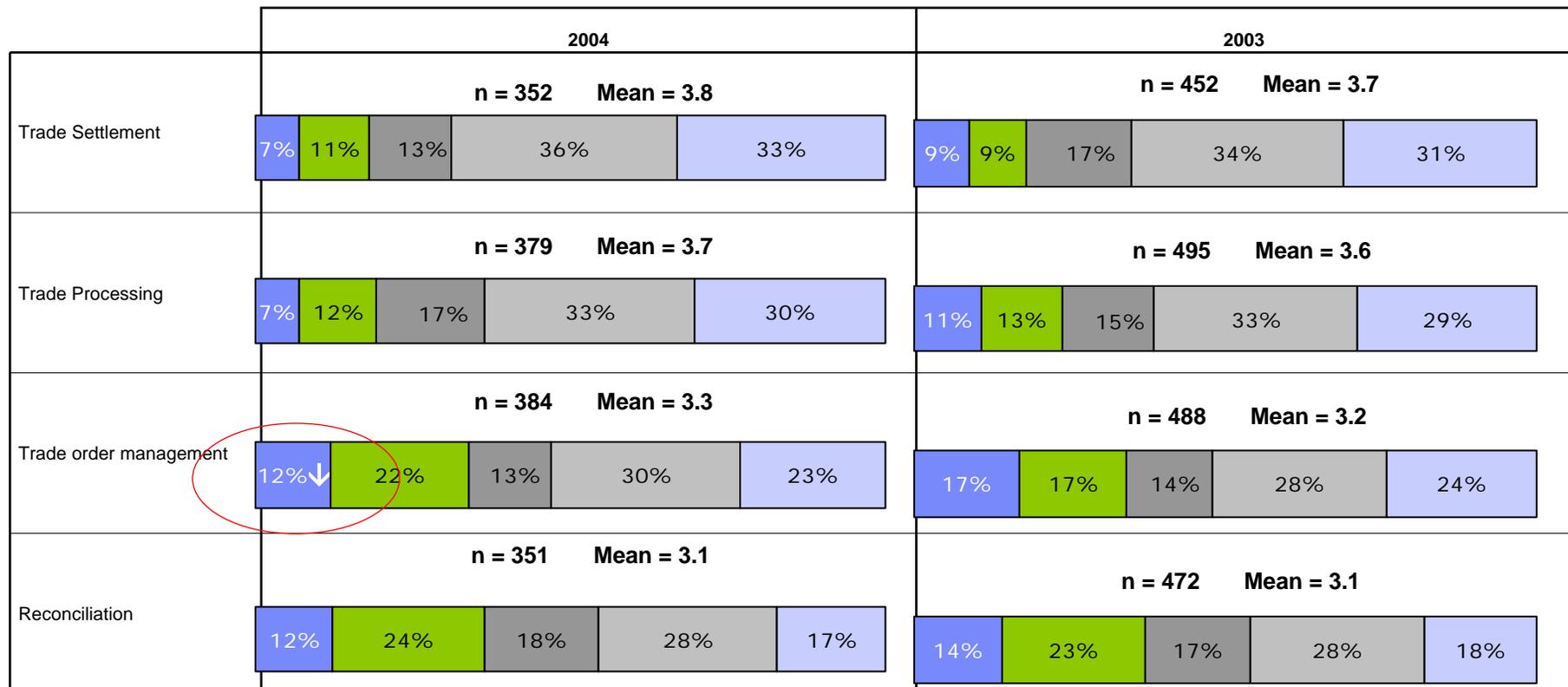
- More than one-half of respondents who provided a response (i.e. did not respond don't know/not applicable) report that their organization's trade settlement (69%), trade processing (63%), and/or trade order management functions (53%) are mostly/highly automated (data presented on following two slides).
 - Forty percent of those responding state that their securities borrowing process is completely/manually manual.
- Compared with 2003, a smaller proportion of respondents' organizations in 2004 has a completely manual trade order management function (12% versus 17%).
- A greater proportion of respondents in large firms report that their core trade flow processes are mostly/highly automated.

Year over year there is a positive trend to a higher degree of automation. The area of trade order management reports the largest reduction of manual processing.

Degree of Automation

Base: Total Sample

Completely Manual
 Most Manual
 50% Automated
 Mostly Automated
 Highly Automated



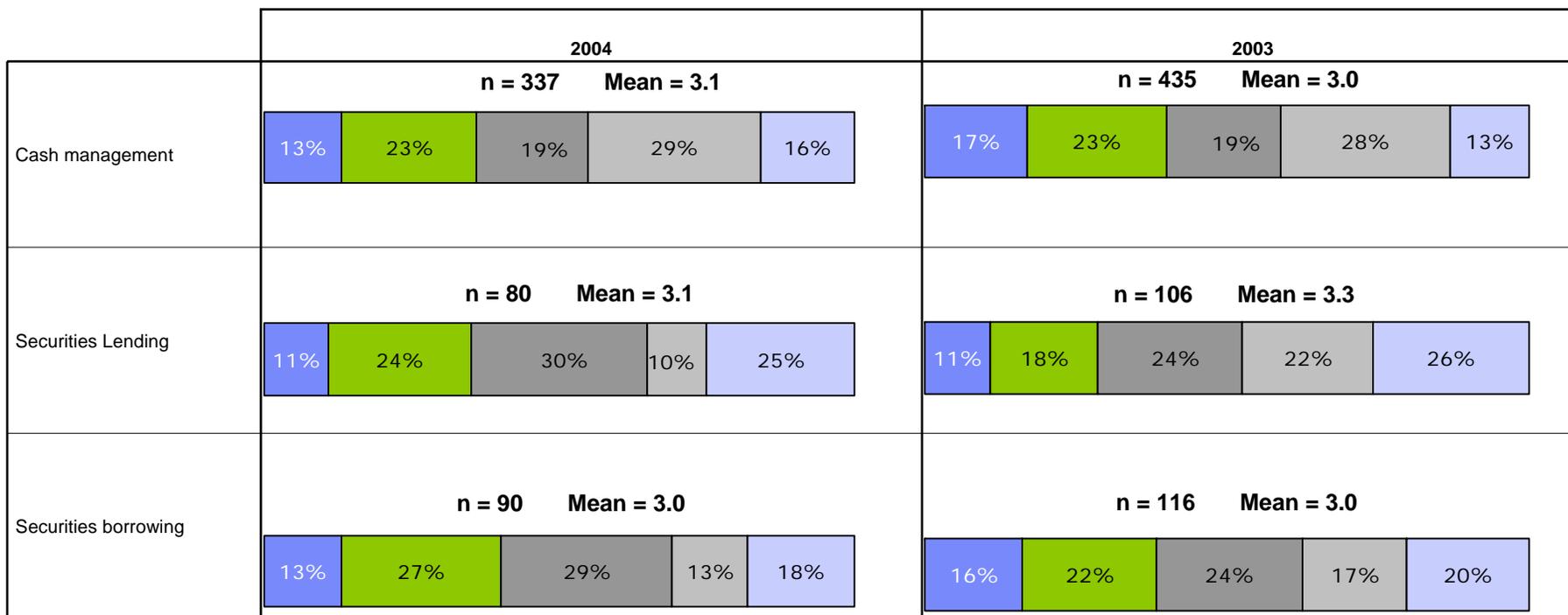
↓ Significant decrease compared with 2003

Question 12. For each of the functions listed below, please indicate the degree of automation within [Name of Company].

Non core trade flow areas remain the same in terms of degree of automation.

Degree of Automation Cont'd

Base: Total Sample

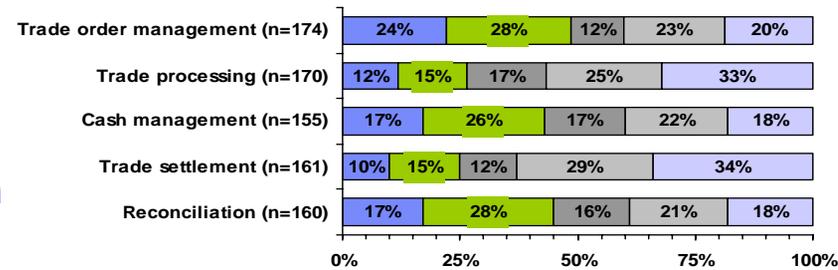


Question 12. For each of the functions listed below, please indicate the degree of automation within [Name of Company].

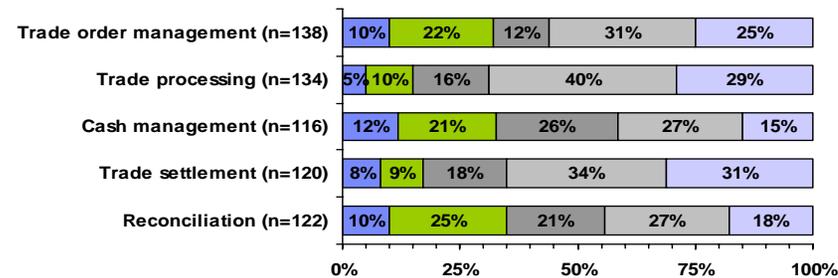
Regardless of company size, trade flow process (trade order management, trade processing, trade settlement) have the highest degree of automation, with large companies being the most automated. No change was observed from 2003 to 2004.

Degree of Automation – By Company Size

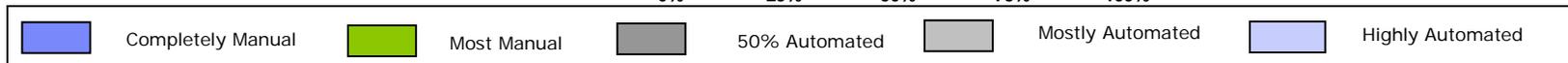
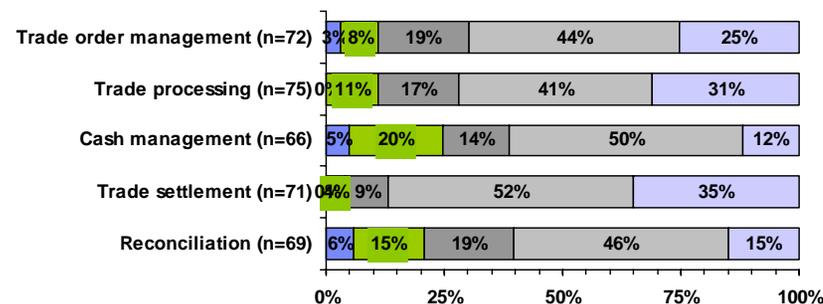
Small Sized Companies



Medium Sized Companies



Large Sized Companies



Question 12. For each of the functions listed below, please indicate the degree of automation within your Company as cross tabbed with Question 2. Approximately how many people are employed by your company. Company size is defined by employee size not by volume of transactions. ** * Tabulated results that yield less than 50 responses may be affected by an undetermined amount of non-response bias.

Type of Processing

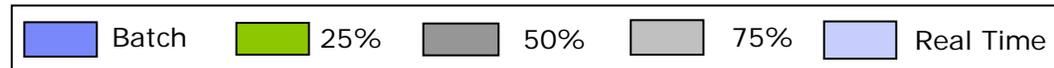
- Close to six-in-ten individuals (57%) who provided a response (i.e. did not respond/not applicable) report that their organization's trade order management function operates in real time/approaching real time (data presented on following two slides).
 - Nearly one-half of respondents state that their cash management (46%), trade settlement (45%), and/or trade processing (44%) functions operate in real time/approaching real time.
- A larger proportion of respondents in 2004 than in 2003 reports that their reconciliation function operates in real time/approaching real time (36% versus 27%).
- Proportionally fewer individuals who work within large firms (29%) report that their trade settlement function operates in batch/near batch mode, when compared with small firms (47%) or medium firms (46%). Large companies perceive themselves as having automated settlement processes.
- It appears that reconciliation is moving towards a more real-time environment.

Question 13. For each of the functions listed below, please indicate the type of processing within your firm. Introducing brokers should only respond for the "Trade order management" and "Cash management" functions, if applicable.

There still appears to be a significant amount of non real-time activity for trade processing with the largest reduction in real-time processing reported within the IC/portfolio managers and mutual fund categories.

Type of Processing

Base: Total Sample



| | 2004 | 2003 |
|------------------------|--|--|
| Trade Order Management | n = 323 Mean = 3.4 32% Batch, 4% 25%, 7% 50%, 12% 75%, 45% Real Time | n = 414 Mean = 3.4 27% Batch, 6% 25%, 10% 50%, 10% 75%, 47% Real Time |
| Cash Management | n = 266 Mean = 3.1 34% Batch, 5% 25%, 15% 50%, 14% 75%, 32% Real Time | n = 348 Mean = 2.9 34% Batch, 8% 25%, 19% 50%, 12% 75%, 27% Real Time |
| Trade Settlement | n = 257 Mean = 3.0 37% Batch, 4% 25%, 14% 50%, 13% 75%, 32% Real Time | n = 390 Mean = 2.8 40% Batch, 7% 25%, 16% 50%, 10% 75%, 28% Real Time |
| Trade Processing | n = 294 Mean = 2.9 40% Batch, 5% 25%, 11% 50%, 12% 75%, 32% Real Time ↓ | n = 428 Mean = 3.2 34% Batch, 6% 25%, 11% 50%, 10% 75%, 40% Real Time |

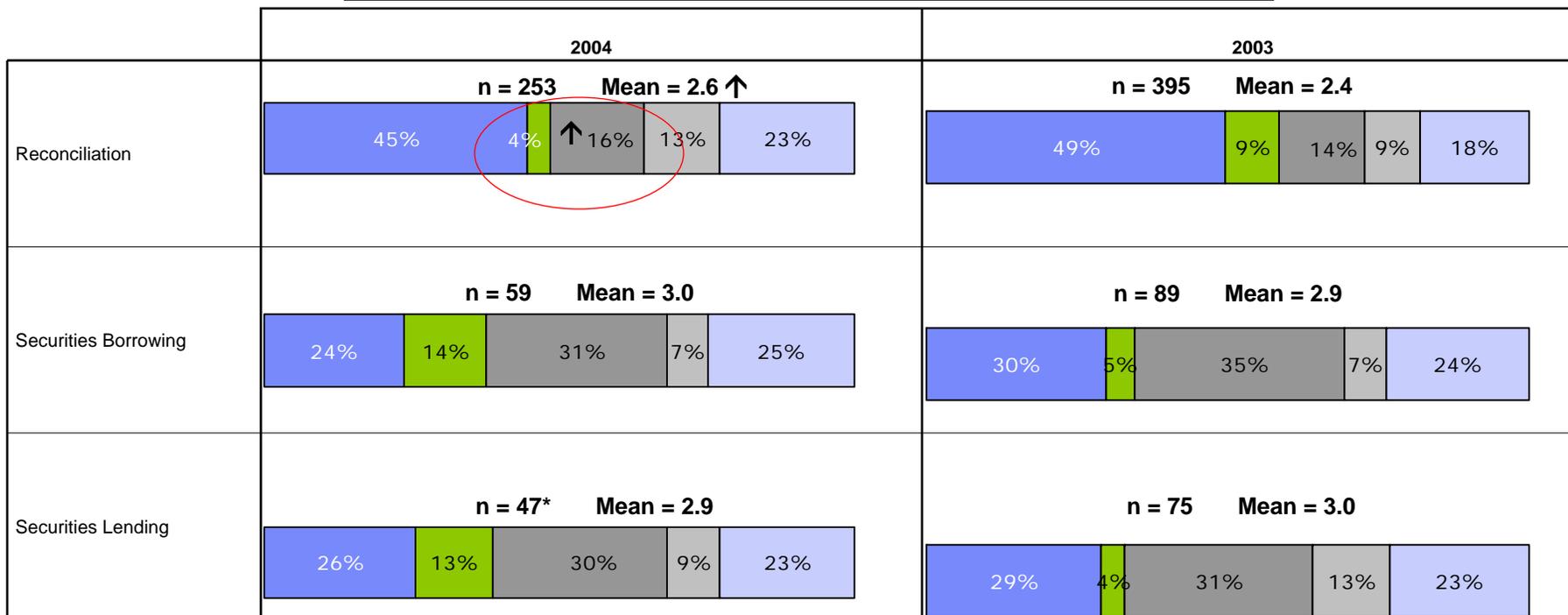
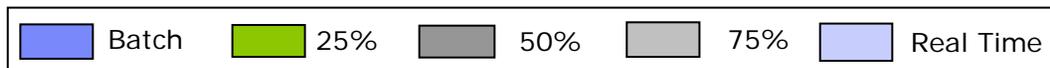
↑ Significant increase compared with 2003
 ↓ Significant decrease compared with 2003

Question 13. For each of the functions listed below, please indicate the type of processing within your firm. Introducing brokers should only respond for the "Trade order management" and "Cash management" functions, if applicable.

It appears that reconciliation is moving more towards a more real-time environment.

Type of Processing Cont'd

Base: Total Sample



* Caution: Small base size (n<50)

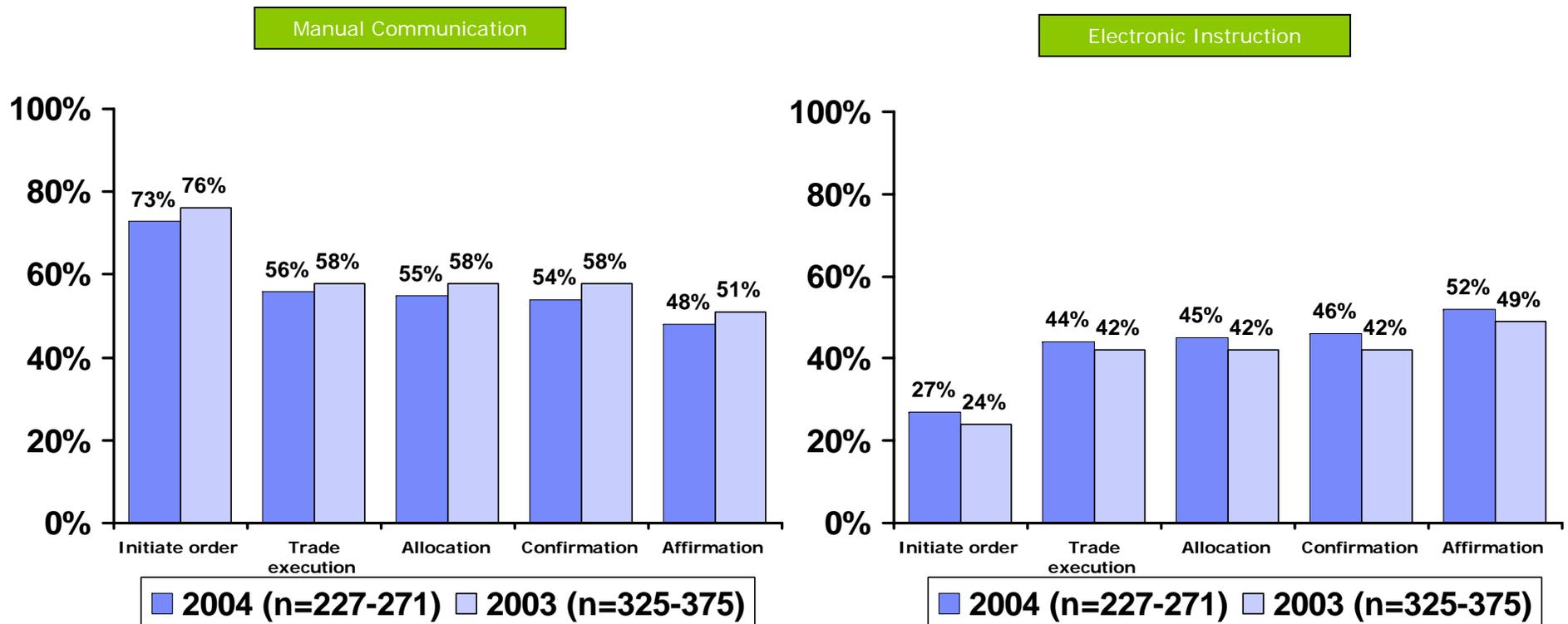
↑ Significant increase compared with 2003
 ↓ Significant decrease compared with 2003

Question 13. For each of the functions listed below, please indicate the type of processing within your firm. Introducing brokers should only respond for the "Trade order management" and "Cash management" functions, if applicable.

There is no significant increase in electronic instruction for institutional trades and over fifty percent remains manual. It remains the key focus for the STP initiative.

Degree of Manual Communication/Electronic Instruction for Institutional Trades

Mean Scores



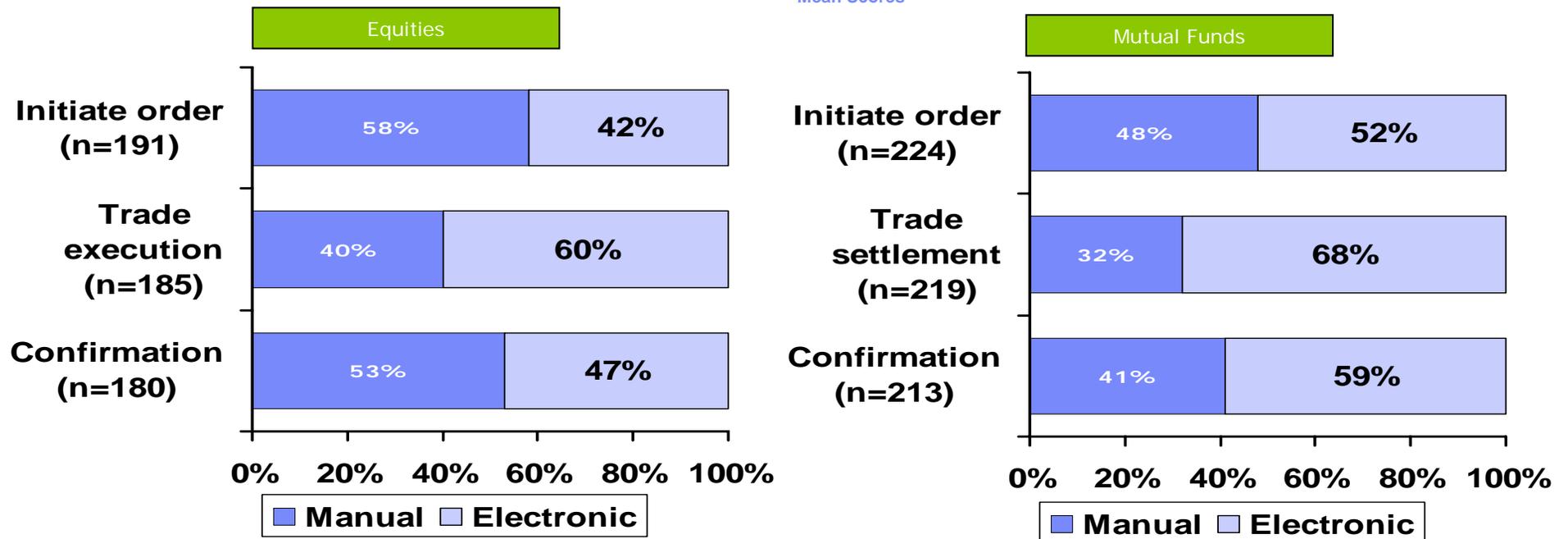
- On average, nearly three-quarters of orders are initiated manually (73%), and 27% are initiated electronically. For the other five process steps, around 50% are manually communicated and 50% are completed via electronic instructions.
- The mean percentage of trades executed manually is greater among small firms (65%), when compared with medium firms (50%) or large firms (46%).

Questions 14. For each of the process steps indicated below, please estimate the percentage of transactions completed by the following means of communication. Please complete all that apply, as it relates to your firm's activities.

Trade execution for Equities and trade settlement for Mutual Funds have a greater degree of electronic instruction compared to initiate order and confirmation.

Degree of Manual Communication/Electronic Instruction for Retail Trades (2004 only)

Mean Scores



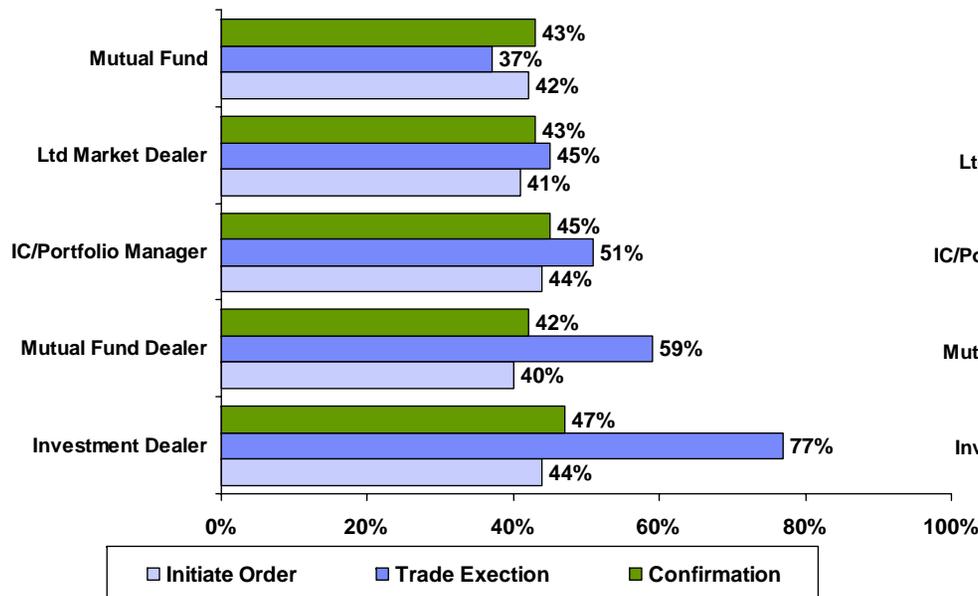
- These question(s) were modified in 2004 to distinguish the different trade flows for equities and mutual funds; because of this modification in 2004, no comparative findings have been presented.
- Overall, the average proportions of orders initiated electronically (equities, 61%; mutual funds, 68%) and mutual fund trades settled electronically (84%) are greater among large firms, when compared with small firms (40%, 47% and 54% respectively) or medium firms (33%, 46% and 70% respectively).

Questions 15, 16. For each of the process steps indicated below, please estimate the percentage of transactions completed by the following means of communication. Please complete all that apply.

Mutual Funds use a greater degree of electronic instruction than Equities with investment dealers being the furthest ahead.

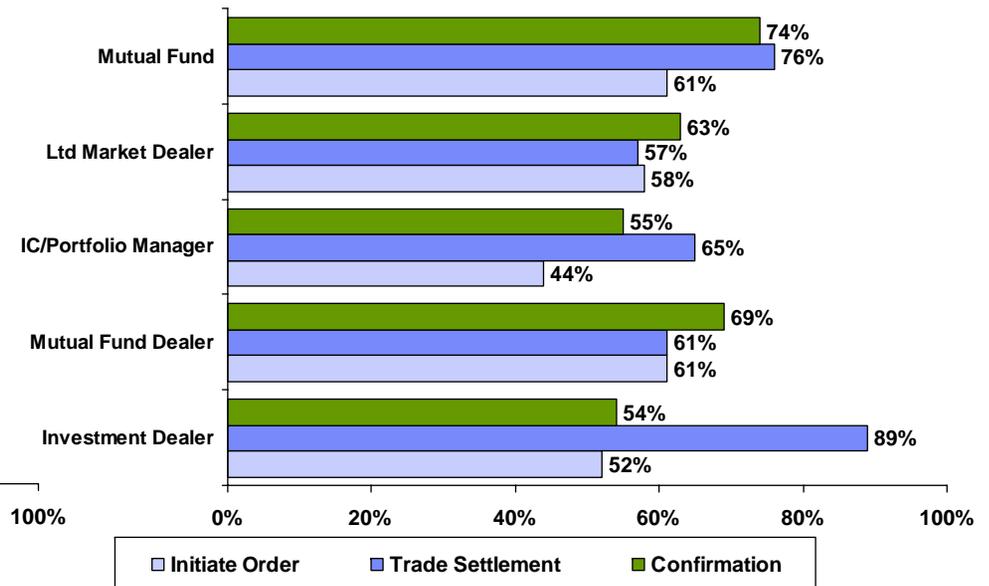
Degree of Electronic Instruction for Retail Trades Equities (2004 only)

Mean Scores



Degree of Electronic Instruction for Retail Trades Mutual Funds (2004 only)

Mean Scores



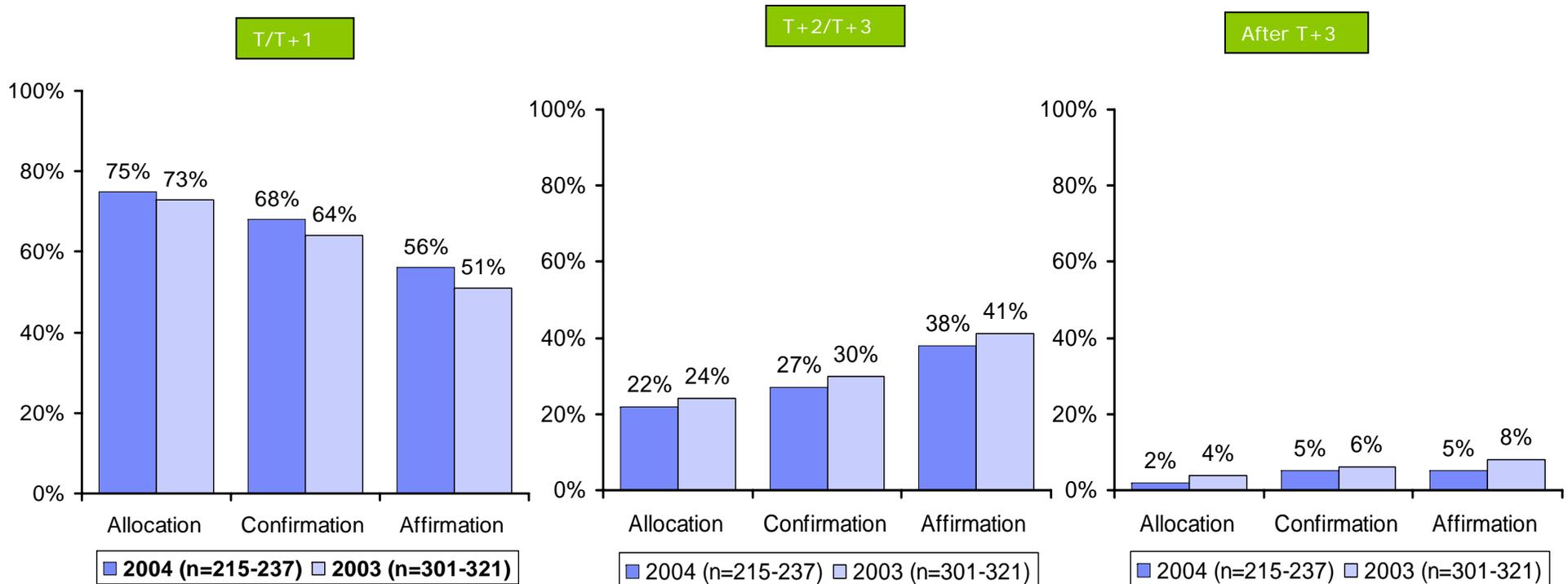
- For Equity trades, order initiation and confirmations appear to have similar electronic instruction across all regulatory categories.
- Investment dealers have the highest degree of electronic instruction for Trade execution (Equities) and Trade settlement (Mutual Funds)

Questions 15, 16. For each of the process steps indicated below, please estimate the percentage of transactions completed by the following means of communication. Please complete all that apply.

There are no significant differences in the completion timing of activities (allocation, confirmation, affirmation) for institutional trades.

Completion Timing for Activities for Institutional Trades

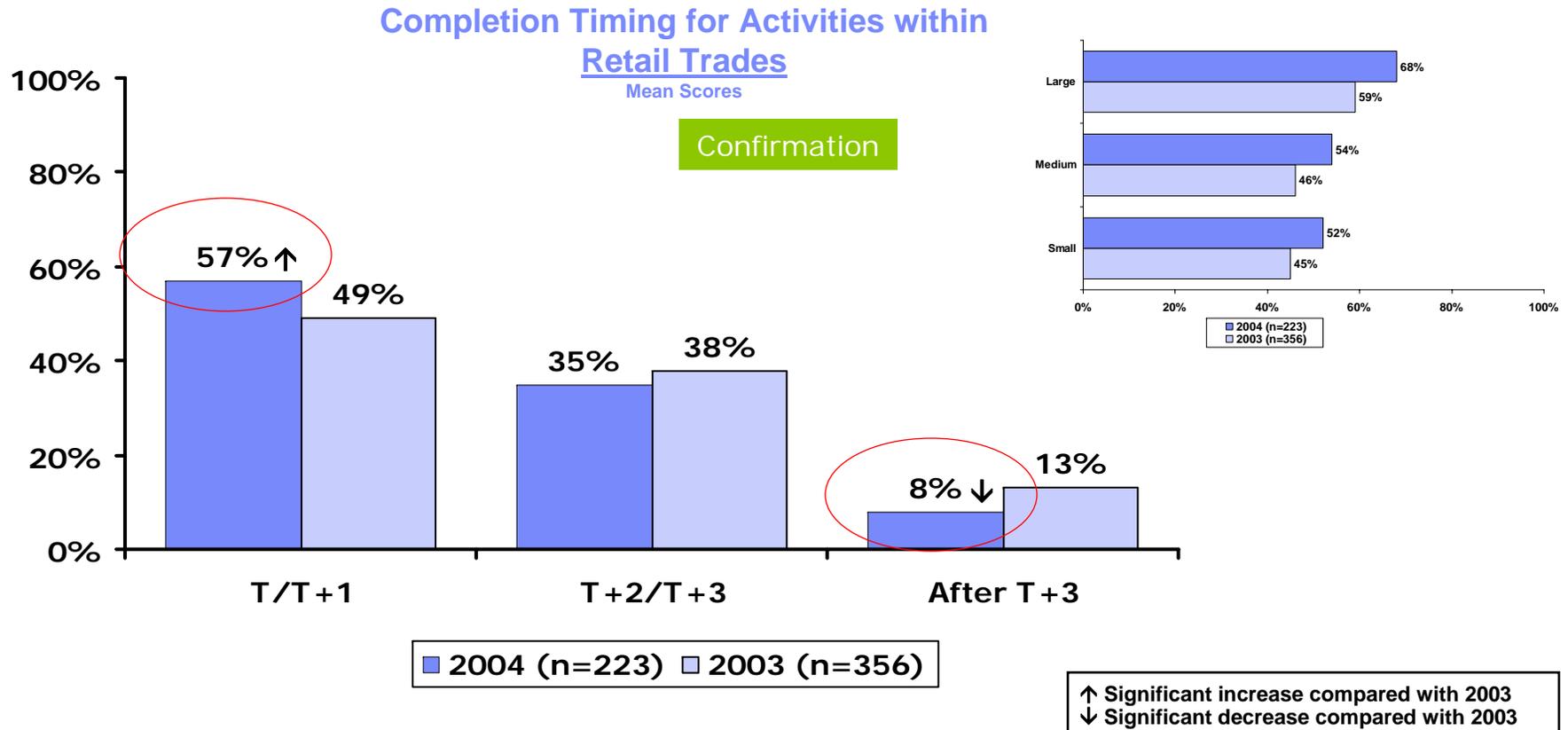
Mean Scores



- More than two-thirds of institutional trades are on average, allocated (75%) and confirmed (68%) by T/T + 1; 56% of affirmations are completed within the same period of time.
- There are no significant differences in the completion timing of activities for institutional trades, based on either the comparison years or company size.

Questions 17. Please estimate the percentage of completion for each of these steps within your firm.

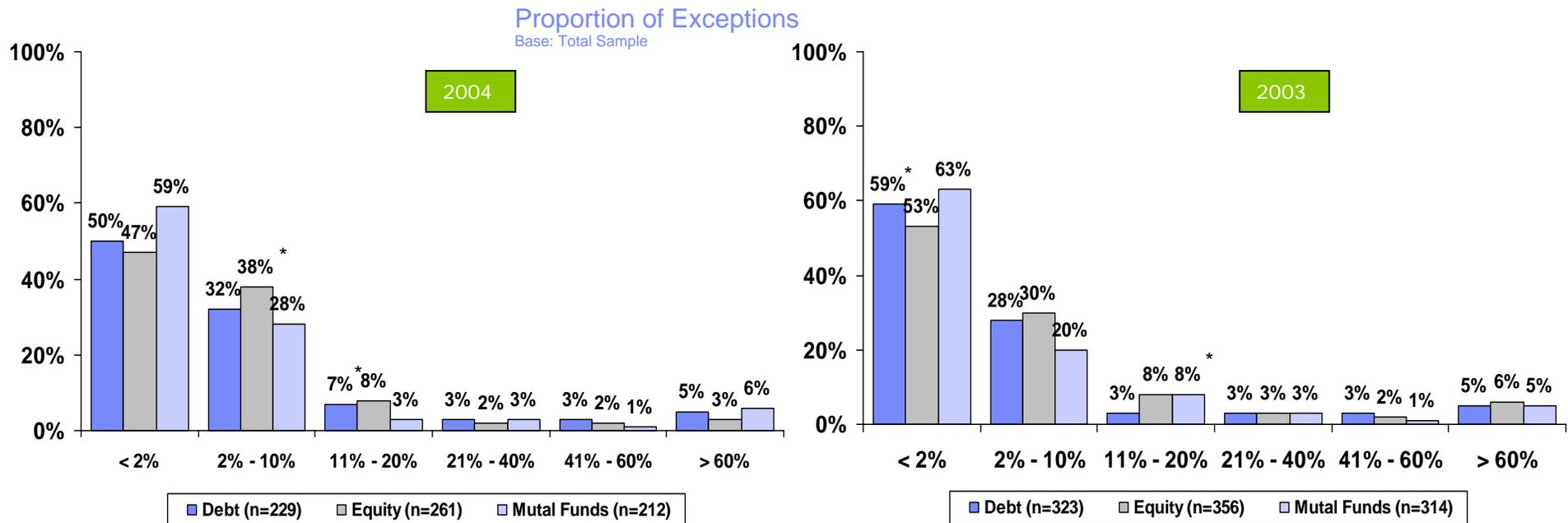
The completion timing of the confirmation activity for retail trades is improving. Year over year, more retail trades are completed by T/T+1, while the number of trades completed after T+3 has reduced.



- On average, nearly six-in-ten retail trades are confirmed by T/T + 1 (57%) while an average of 35% are confirmed by T + 2/T + 3.
- Compared with 2003, on average, proportionally more retail trades in 2004 are completed by T/T + 1 (57% versus 49%).
- On average, proportionally fewer firms that employ 100 or more staff confirm retail trades by T + 2/T + 3 (21%), when compared with firms that employ fewer than 10 staff or who employ 10 – 99 staff (40% each).

Questions 18. Please estimate the percentage of completion for the following step.

The proportion of exceptions in transactions has increased between 2003 to 2004. Exceptions in the 'less than 2%' range have decreased while exceptions in the '2% - 10%' range have increased.



- Close to one-half of respondents report that less than 2% of all of their firm's Canadian debt (50%), equity (47%), and mutual fund transactions (59%) are exceptions.
- When compared with the findings from 2003, proportionally fewer respondents in 2004 state that 2% or less of their debt transactions are exceptions (50% versus 59%) while proportionally more state that 2% - 10% of their equity transactions require intervention (38% versus 30%).
- Overall, proportionally more individuals who work within small firms state that less than 2% of their debt (66%), equity (57%), and mutual fund transactions (78%) are exceptions, when compared with those who work within medium firms (39%, 43% and 56% respectively) or large firms (36%, 33% and 37% respectively).

* Percentage is significantly higher than corresponding 2003/ 2004 value

Question 19. For each of your total Canadian debt, equity and mutual fund transactions, what percentage are exceptions? (Exceptions are defined as transactions, whether manual and/or electronic, requiring human intervention to correct a financial or non-financial error).

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- Appendix
 - **A – Glossary of Terms**
 - B – Questionnaire

Appendix A – Glossary of Terms

- **Affirmation:** The process by which a trade is submitted, reviewed and corrected (if necessary).
- **Agent:** An individual who conducts business on behalf of the dealer or who participates in the business of the dealer, who is (a) an employee of the dealer or (b) a person acting in similar capacity to an employee of the dealer.
- **Allocation:** The separation of a block trade into its component parts by client account.
- **Canadian Capital Markets Association (CCMA):** A federally incorporated, not-for-profit organization whose mandate is to identify, analyze, and recommend ways to meet the challenges and opportunities facing Canadian and international capital markets. CCMA's current priority is to promote straight-through processing (STP) strategies among Canadian capital market participants.
- **Canadian Securities Administrators (CSA):** An organization of the thirteen provincial and territorial securities regulators who (i) oversee Canada's capital markets and the dealers and advisers who sell and manage investments in them, and (ii) strive to protect investors from unfair, improper, and fraudulent practices while fostering a fair and efficient marketplace.
- **Cash management:** The management of cash and/or liquid securities so as to maximize the return and at the same time meet payment of obligations that are due.
- **Client reporting:** Requirement that a member firm send an account statement containing prescribed information elements (such as opening and closing balance, all debits and credits, account number), to each client at least once a year, once a month, or quarterly, depending on the account.
- **Compliance:** Demonstrated adherence by a firm to regulatory, legal standards and investment guidelines. (e.g. MFDA & IDA rules, OSC & SEC regulations)
- **Confirmation:** The process by which a market participant notifies its customers of trade details.
- **Discount broker (Quebec registrant category):** Someone who acts as an intermediary in the trading of securities without giving advice on the purchase or sale of securities.
- **Electronic instruction:** Orders or instructions initiated/submitted electronically.
- **Fund accounting:** Accounting performed by or for mutual fund companies to determine the Net Asset Value (NAVs) of their funds on a fund valuation date.
- **Portfolio accounting:** A mode of accounting that integrates portfolio maintenance, transaction history, performance reporting, and pricing of securities.
- **Initiate order:** Process where a client has made an investment decision and contacts the appropriate party with instructions to buy or sell securities.
- **Investment counsel and/or portfolio manager:** Someone who advises clients on investing in or buying or selling specific securities or who is registered under the *Securities Act* as an investment counsel and/or someone who manages the investment portfolios through discretionary authority granted by clients and who is registered for this purpose.
- **Investment dealer:** A member of the Investment Dealers Association of Canada (IDA) who trades in securities as an agent or principal, and who is registered under the *Securities Act* as an investment dealer.
- **Limited market dealer:** Someone registered with a Securities Commission under the *Securities Act* solely for the purpose of trading in exempt securities.

Appendix A – Glossary of Terms

- **Matching:** The process for comparing the trade or settlement details provided by counter-parties to ensure that they agree to the terms of the transaction.
- **Manual:** A trade process step completed by phone, mail, courier, fax and/or email.
- **Mutual fund:** An issuer of securities that entitle the holder to receive on demand (or within a specified period after demand) an amount computed by reference to the value of a proportionate interest in the whole or in a part of the issuer's net assets, including a separate fund or trust account.
- **Mutual fund dealer:** A person or company that trades in the shares or units of mutual funds, and that is registered under the *Securities Act* as a mutual fund dealer.
- **Real Time:** An information system which maintains files of information in a form which is immediately accessible for either the acceptance of input transactions or the reporting of information through a device which is connected to the main computer system
- **Reconciliation:** The process of bringing into balance two or more related accounts or statements.
- **Reference data management:** Management of semi-permanent data elements underlying and defining the clients, securities and transactions that flow through the systems of industry participants.
- **Regulatory category:** Category of license/approval received from a government regulation.
- **Securities borrowing:** Securities borrowing involves the temporary borrowing of securities for cash or other securities of an equivalent or greater value (collateral) with a contractual obligation to re-deliver a like quantity of the same securities at a future date.
- **Securities lending:** Securities lending involves the temporary loan of securities for cash or other securities of an equivalent or greater value (collateral) with a contractual obligation to re-deliver a like quantity of the same securities at a future date.
- **Settlement:** The completion of a transaction by the delivery and crediting to the appropriate securities ledger and funds accounts of securities and payment respectively.
- **Straight-through processing (STP) Industry Wide:** Seamlessly passing financial information electronically, on a system-to-system basis, to all parties in the end to end securities transaction chain without manual handling or redundant processing.
- **T+1, T+2, T+3:** Trade date plus one (settlement), Trade date plus two (settlement), Trade date plus three (settlement). T signifies the day a trade is executed and the numeral the number of days subsequent to that day.
- **Trade date:** The date on which a trade/bargain is executed (made).
- **Trade execution:** The process of completing an order on an exchange or with a counterparty, includes mutual fund transactions.

Appendix A – Glossary of Terms

- **Trade order management:** A process that can include: order creation, compliance, placement, fills and allocations. Trade order management is often aided by a Trade Order Management System that facilitates the execution of trading decisions quickly and accurately.
- **Trade processing:** Trade processing involves the completion of activities from the execution of a trade straight through to settlement.
- **Trade settlement:** The completion of a transaction by the delivery and crediting to the appropriate securities ledger and funds accounts of securities and payment.
- **Unrestricted practice dealer (Quebec registrant category):** An unrestricted practice dealer examines a client's overall financial situation, gathers information, makes a plan based on the client's objectives, provides advice, and buys and sells securities for the client.

Content

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 - **B – 2004 Questionnaire**

2004 Questionnaire

CSAACVM

Canadian
Securities
AdministratorsAutobacs,
Cagelances,
en valeurs mobilières.

STP Readiness Assessment Survey

Introduction is still to come...

Will include a [link](#) to the glossary and a [link](#) to the survey...

Thank you for your input. Your opinion counts!

PROGRAMMER NOTE

- At the bottom of page 1, beneath the reset button include:

If you have any questions about completing this survey please e-mail us at
survey@in-2591.net@survey.ibm.com

PROGRAMMER NOTE

- BROWSER WINDOW TITLE BAR SHOULD READ: STP Readiness Assessment Survey

- On the first page of the survey include the SurveySite logo at the top of the page with the CSA logo. Please use the CSA logo only as a header for subsequent pages.

- The name of the respondent's legal entity (company) will be inserted throughout the questionnaire where noted (INSERT COMPANY NAME) and will be obtained from the password file. Please print the name of the legal entity in capital letters and in a slightly larger font.

- Present codes 6, 7 only to respondents from Quebec list

- Allow for a maximum of three items in q1. If more than 3 items selected, use error message.

1. Identify which of the following regulatory categories apply to INSERT COMPANY NAME. Please select a maximum of three regulatory categories. [CHECKBOX]

| | Sh. | S.F.S. |
|--|-----|--------|
| <input type="checkbox"/> Investment dealer | 1 | |
| <input type="checkbox"/> Mutual fund dealer | 2 | |
| <input type="checkbox"/> Investment counsel and/or Portfolio manager | 3 | |
| <input type="checkbox"/> Limited market dealer | 4 | |
| <input type="checkbox"/> Mutual fund | 5 | |
| <input type="checkbox"/> Discount broker | 6 | |
| <input type="checkbox"/> Unregistered practice dealer | 7 | |

2. Approximately how many people are employed (including agents) at INSERT COMPANY NAME? Please include all locations in Canada only. [RADIO BUTTON - VERTICAL]

| | Code | Sh. | S.F.S. |
|-------------------------------------|------|-----|--------|
| <input type="radio"/> Fewer than 10 | 1 | | |
| <input type="radio"/> 10 - 24 | 2 | | |
| <input type="radio"/> 25 - 49 | 3 | | |
| <input type="radio"/> 50 - 99 | 4 | | |
| <input type="radio"/> 100 - 499 | 5 | | |
| <input type="radio"/> 500 - 999 | 6 | | |
| <input type="radio"/> 1,000 - 4,999 | 7 | | |
| <input type="radio"/> 5,000 or more | 8 | | |

PROGRAMMER NOTE

- Insert page break here

Current STP Progress

Now we would like to ask you a few questions to help us understand your current progress and commitment to STP implementation.

3. Which of the following best describes INSERT COMPANY NAME's level of preparedness for implementing STP plans? Please select all that apply. [CHECKBOX]

| | Sh. | S.F.S. |
|---|-----|--------|
| <input type="checkbox"/> Know industry is talking about this but we are not sure how this applies to us | 9 | |
| <input type="checkbox"/> Senior officers aware of industry commitments towards STP implementation | 10 | |
| <input type="checkbox"/> Have received information about STP from vendors/ service providers and are in discussions | 11 | |
| <input type="checkbox"/> Resources assigned to assess STP impact | 12 | |
| <input type="checkbox"/> Cost benefits of STP are understood in our organization | 13 | |
| <input type="checkbox"/> Business case(s) are being developed for STP related initiatives | 14 | |
| <input type="checkbox"/> STP business and technical projects identified | 15 | |
| <input type="checkbox"/> Business case done, no projects/ budget required | 16 | |
| <input type="checkbox"/> Budget secured for STP initiatives | 17 | |
| <input type="checkbox"/> Major projects for STP implementation are well underway | 18 | |

2004 Questionnaire

PROGRAMMER NOTE:
 - Randomize options (except code 28) in q4
 - If S.N. 28 selected in q4, S.N. 19 - 27 cannot be selected. Use error message.
 - Allow for a maximum of three items in q4. If more than 3 items selected, use error message.

4. Which of the following, if any, do you perceive to be the major issues that impede adoption of STP in **INSERT COMPANY NAME**? Please select a maximum of **three** issues. **[CHECKBOX]**

| | S.N. | S.F.S. |
|---|------|--------|
| <input type="checkbox"/> Unsure of outside vendors / service providers' plans and timing for STP delivery | 19 | |
| <input type="checkbox"/> Lack of common reference data | 20 | |
| <input type="checkbox"/> System and process issues (e.g. Integration between front and back office, legacy systems) | 21 | |
| <input type="checkbox"/> Lack of industry standards driving minimum requirements | 22 | |
| <input type="checkbox"/> Lack of knowledge about STP in your organization | 23 | |
| <input type="checkbox"/> Lack of regulatory requirements | 24 | |
| <input type="checkbox"/> Won't commit investment until we understand if all players will comply | 25 | |
| <input type="checkbox"/> Lack of adequate funding for STP | 26 | |
| <input type="checkbox"/> Lack of perceived benefits vs cost | 27 | |
| <input type="checkbox"/> Low sense of urgency relative to other business imperatives | 28 | |
| <input type="checkbox"/> No significant impediments | 28 | |

PROGRAMMER NOTE:
 - If S.N. 34 selected in q5, S.N. 29 - 33 cannot be selected. Use error message.
 - If no responses provided in q5 continue to q6
 - Insert page break here

5. How is **INSERT COMPANY NAME** currently organized for STP implementation? Please select **all** that apply. **[CHECKBOX]**

| | S.N. | S.F.S. |
|---|------|--------|
| <input type="checkbox"/> Steering committee formed | 29 | |
| <input type="checkbox"/> Dedicated team in place | 30 | |
| <input type="checkbox"/> Part-time resources used | 31 | |
| <input type="checkbox"/> Technical resources subcontracted | 32 | |
| <input type="checkbox"/> Third party support used for STP assessment and planning | 33 | |
| <input type="checkbox"/> No plans at the moment | 34 | |

PROGRAMMER NOTE:
 - If S.N. 34 selected in q5, skip to q7

6. Approximately how many full-time equivalent employees (including subcontractors) are dedicated to enabling STP readiness? **[RADIO BUTTON - VERTICAL]**

| | Code | S.N. | S.F.S. |
|-------------------------------------|------|------|--------|
| <input type="radio"/> None | 1 | 35 | |
| <input type="radio"/> Less than one | 2 | | |
| <input type="radio"/> 1 - 5 | 3 | | |
| <input type="radio"/> 6 - 10 | 4 | | |
| <input type="radio"/> 11 - 20 | 5 | | |
| <input type="radio"/> Over 20 | 6 | | |

2004 Questionnaire

PROGRAMMER NOTE:
- Insert page break here

Cost Protections for STP Readiness

We would like to gather some industry information on the potential costs associated with STP readiness. Recognizing that a firm's technology (hardware and software) and process investments may have more than one driver, include all investments where STP readiness was at least one objective.

7. What was **INSERT COMPANY NAME's** investment related to STP in **2003**? **[RADIO BUTTON - VERTICAL]**

| | Code | SH. | S.P.S. |
|---|------|-----|--------|
| <input type="radio"/> No investment | 1 | 36 | |
| <input type="radio"/> Less than \$100,000 | 2 | | |
| <input type="radio"/> \$100,000 - \$999,999 | 3 | | |
| <input type="radio"/> \$900,000 - \$999,999 | 4 | | |
| <input type="radio"/> \$1,000,000 - \$5,000,000 | 5 | | |
| <input type="radio"/> More than \$5,000,000 | 6 | | |
| <input type="radio"/> Don't know | 9 | | |

8. What is your forecasted investment related to STP in **2004**? **[RADIO BUTTON - VERTICAL]**

| | Code | SH. | S.P.S. |
|---|------|-----|--------|
| <input type="radio"/> No investment | 1 | 39 | |
| <input type="radio"/> Less than \$100,000 | 2 | | |
| <input type="radio"/> \$100,000 - \$999,999 | 3 | | |
| <input type="radio"/> \$900,000 - \$999,999 | 4 | | |
| <input type="radio"/> \$1,000,000 - \$5,000,000 | 5 | | |
| <input type="radio"/> More than \$5,000,000 | 6 | | |
| <input type="radio"/> Don't know | 9 | | |

9. What is your anticipated investment related to STP in **2005**? **[RADIO BUTTON - VERTICAL]**

| | Code | SH. | S.P.S. |
|---|------|-----|--------|
| <input type="radio"/> No investment | 1 | 36 | |
| <input type="radio"/> Less than \$100,000 | 2 | | |
| <input type="radio"/> \$100,000 - \$999,999 | 3 | | |
| <input type="radio"/> \$900,000 - \$999,999 | 4 | | |
| <input type="radio"/> \$1,000,000 - \$5,000,000 | 5 | | |
| <input type="radio"/> More than \$5,000,000 | 6 | | |
| <input type="radio"/> Don't know | 9 | | |

PROGRAMMER NOTE:
- Insert page break here
- Retate options in q.10

Your organization's vision for STP

We would now like to understand **INSERT COMPANY NAME's** business drivers behind the STP initiatives.

10. Please rate the importance of the following drivers, if any, to your firm's STP initiatives? **[RADIO BUTTON TABLE]**

| | Unimportant | Somewhat Unimportant | Neither Unimportant nor Important | Somewhat Important | Important | | |
|---|-----------------------|-----------------------|-----------------------------------|-----------------------|-----------------------|-----|--------|
| | [Code] | [Code] | [Code] | [Code] | [Code] | SH. | S.P.S. |
| | 1 | 2 | 3 | 4 | 5 | | |
| Cost reduction | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 39 | |
| Risk reduction | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 40 | |
| Competitive pressure/ consistency with industry standards | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 41 | |
| Revenue generation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 42 | |
| Customer service improvements | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 43 | |

2004 Questionnaire

PROGRAMMER NOTE:
- Insert page break here

11. What are the business functions of focus for your STP investment? STP focus areas include systems, organizational changes, and/or reference data management. Please select all applicable business functions and indicate if any of these functions are currently being outsourced or if you expect to outsource these functions in the future. [RADIO BUTTON TABLE]

| Business Functions | Current STP focus | Current STP focus, outsourced | Future STP focus | Future STP focus, expect to outsource | Not currently a focus | | |
|--|-----------------------|-------------------------------|-----------------------|---------------------------------------|-----------------------|-----|--------|
| | [Code] | [Code] | [Code] | [Code] | [Code] | Sh. | S.A.S. |
| | 1 | 2 | 3 | 4 | 5 | | |
| Trade order management | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 44 | |
| Trade processing (includes: allocation, margining) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 45 | |
| Cash management | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 46 | |
| Trade settlement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 47 | |
| Securities lending | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 48 | |
| Securities borrowing | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 49 | |
| Compliance | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 50 | |
| Reconciliation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 51 | |
| Fund/Portfolio Accounting | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 52 | |
| Client Reporting | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 53 | |

PROGRAMMER NOTE:
- Present text in black in scale in Q12 in question; present blue text after respondent clicks on the item.

12. For each of the functions listed below, please indicate the degree of automation within **INSERT COMPANY NAME**. For a detailed definition of each of the scale items below, please click on the appropriate item. [RADIO BUTTON TABLE]



| | Completely Manual Paper based, minimal electronic capture | Mostly Manual Some automation to capture and manage data electronically, batch processes | At least 50% of processes are Automated | Mostly Automated Some manual steps (i.e. minimal re-keying of data, manual reconciliation etc.) | Highly Automated Data is Inputted and STP and to end process near real-time processing | Don't Know/ Not Applicable | | |
|------------------------|---|--|---|---|--|----------------------------|-----|--------|
| | [Code] | [Code] | [Code] | [Code] | [Code] | [Code] | Sh. | S.A.S. |
| | 1 | 2 | 3 | 4 | 5 | X | | |
| Trade order management | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 54 | |
| Trade processing | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 55 | |
| Cash management | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 56 | |
| Trade settlement | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 57 | |
| Securities lending | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 58 | |
| Securities borrowing | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 59 | |
| Reconciliation | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | 60 | |

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13. For each of the functions listed below, please indicate the type of processing within your firm. Introducing brokers should only respond for the "Trade order management" and "Cash management" functions, if applicable. [RADIO BUTTON TABLE]

| | Batch | 25% | 50% | 75% | Real Time | Not Applicable | | |
|------------------------|--------|--------|--------|--------|-----------|----------------|----|--------|
| | [Code] | [Code] | [Code] | [Code] | [Code] | [Code] | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | SH | S.A.S. |
| Trade order management | 0 | 0 | 0 | 0 | 0 | 0 | 61 | |
| Trade processing | 0 | 0 | 0 | 0 | 0 | 0 | 62 | |
| Cash management | 0 | 0 | 0 | 0 | 0 | 0 | 63 | |
| Trade settlement | 0 | 0 | 0 | 0 | 0 | 0 | 64 | |
| Securities lending | 0 | 0 | 0 | 0 | 0 | 0 | 65 | |
| Securities borrowing | 0 | 0 | 0 | 0 | 0 | 0 | 66 | |
| Reconciliation | 0 | 0 | 0 | 0 | 0 | 0 | 67 | |

PROGRAMMER NOTE:

- Insert page break here
- For q14 - 18 please ensure that all rows with data entered to equal 100%

STP Process - Current State

The next series of questions will help us determine the degree of manual communication supporting the different trade process steps listed below. These questions relate only to trading activity (i.e. exclude private placements). Please note, we have selected some of the key steps that we believe will be impacted by STP. Please estimate the percentages requested below to the best of your ability and please ensure that the row equals 100%. Note: Equity does not include derivatives or convertible debt.

14. **Institutional trades:** For each of the process steps indicated below, please estimate the percentage of transactions completed by the following means of communication. Please complete all that apply, as it relates to your firm's activities. [NUMERIC TEXT BOXES, 3 DIGITS]

| | Institutional (Debt and Equity) | | % | S.A.S. |
|-----------------|---|------------------------------|----|--------|
| | Manual (e.g. phone, courier, fax, e-mail) | Electronic Instruction (STP) | | |
| | SH | SH | | |
| Initiate Order | 66 | 64 | 70 | |
| Trade Execution | 71 | 72 | 73 | |
| Allocation | 74 | 75 | 76 | |
| Confirmation | 77 | 78 | 79 | |
| Confirmation | 80 | 81 | 82 | |

15. **Retail trades - Equities:** For each of the process steps indicated below, please estimate the percentage of transactions completed by the following means of communication. Please complete all that apply. [NUMERIC TEXT BOXES, 3 DIGITS]

| | Retail - Equities | | % | S.A.S. |
|-----------------|---|------------------------------|----|--------|
| | Manual (e.g. phone, courier, fax, e-mail) | Electronic Instruction (STP) | | |
| | SH | SH | | |
| Initiate Order | 83 | 84 | 85 | |
| Trade Execution | 86 | 87 | 88 | |
| Confirmation | 89 | 90 | 91 | |

16. **Retail trades - Mutual Funds:** For each of the process steps indicated below, please estimate the percentage of transactions completed by the following means of communication. Please complete all that apply. [NUMERIC TEXT BOXES, 3 DIGITS]

| | Retail - Mutual Funds | | % | S.A.S. |
|------------------|---|------------------------------|-----|--------|
| | Manual (e.g. phone, courier, fax, e-mail) | Electronic Instruction (STP) | | |
| | SH | SH | | |
| Initiate Order | 113 | 112 | 120 | |
| Trade Settlement | 121 | 122 | 123 | |
| Confirmation | 124 | 125 | 126 | |

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PROGRAMMER NOTE:
- Insert page break here

17. **Institutional trades:** Please estimate the percentage of completion for each of these steps within your firm. [NUMERIC DATA BOX - 3 DIGITS]

| | Institutional | | | % | S.P.S. |
|--------------|---------------|------------|----------|----|--------|
| | Ter T+1 | T+2 or T+3 | After T3 | | |
| | sh. | sh. | sh. | | |
| Allocation | 00 | 00 | 00 | 00 | |
| Confirmation | 00 | 00 | 00 | 00 | |
| Affirmation | 00 | 00 | 00 | 00 | |

18. **Retail trades:** Please estimate the percentage of completion for the following step. [RADIO BUTTON TABLE]



| | Retail | | | % | S.P.S. |
|--------------|---------|------------|----------|----|--------|
| | Ter T+1 | T+2 or T+3 | After T3 | | |
| | sh. | sh. | sh. | | |
| Confirmation | 00 | 00 | 00 | 00 | |

19. For each of your total Canadian debt, equity and mutual fund transactions, what percentage are exceptions? [Exceptions are defined as transactions, whether manual and/ or electronic, requiring human intervention to correct a financial or non-financial error]. [RIGHT JUSTIFIED DROP-DOWN BOX TABLE]

PROGRAMMER NOTE - SCALE TO BE USED IN DROP-DOWN BOX BELOW:

| | Code |
|---|------|
| <input type="checkbox"/> Less than 2% | 1 |
| <input type="checkbox"/> 2% - 10% | 2 |
| <input type="checkbox"/> 11% - 20% | 3 |
| <input type="checkbox"/> 21% - 40% | 4 |
| <input type="checkbox"/> 41% - 60% | 5 |
| <input type="checkbox"/> More than 60% | 6 |
| <input type="checkbox"/> Not Applicable | 7 |
| <input type="checkbox"/> Don't Know | 8 |

| | Drop | sh. | S.P.S. |
|-------------|------|-----|--------|
| Debt | 00 | 00 | |
| Equity | 00 | 00 | |
| Mutual Fund | 00 | 00 | |

PROGRAMMER NOTE:
- Insert page break here

2004 Questionnaire

20. Currently, how prepared is **INSERT COMPANY NAME** for STP implementation?
 [RADIO BUTTON-HORIZONTAL]

| Unprepared | Somewhat Unprepared | Somewhat Prepared | Prepared | Don't Know | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----|--------|
| [Code] | [Code] | [Code] | [Code] | [Code] | | |
| 1 | 2 | 3 | 4 | 5 | Sh. | S.A.S. |
| <input type="radio"/> | 167 | |

PROGRAMMER NOTE:
 - For respondents that select checkbox below, please ensure that their e-mail address is read to the data file.

If you are not receiving STP related information from the Canadian Capital Markets Association, but would like to, please provide your e-mail address below. Your e-mail address will not be linked to your answers in this survey. [LARGE TEXT AREA]

| | | |
|-------------------|-----|--|
| [LARGE TEXT AREA] | Sh. | |
| | 161 | |

Thank you for your participation in this survey!

PROGRAMMER NOTE - PLEASE USE STANDARD THANK YOU PAGE WITH LINKS TO CSA, [HTTP://WWW.CSA-ACVM.CA/], IBM [http://www.ibm.com/ca/en/] AND SURVEYSITE.



| | | |
|--------|-----|--------|
| ENDREC | Sh. | S.A.S. |
| | 1 | |
| | 6 | |
| | 3 | |

Company Id - ca14

ENDREC - : 16 5

RESERVED Triple Digit S/Ns: 111-114, 117

Double Digit S/Ns: 127-132,

Single Digit : 115, 134-161

survey160 - slide argument passed from URL (1 - Fr; 2 - Eng)

survey162 - number of From-page when working incremental save

survey163 - number of To-page when working incremental save