Accelerated Settlement

The T+1 Playbook

Preparation, migration and the future

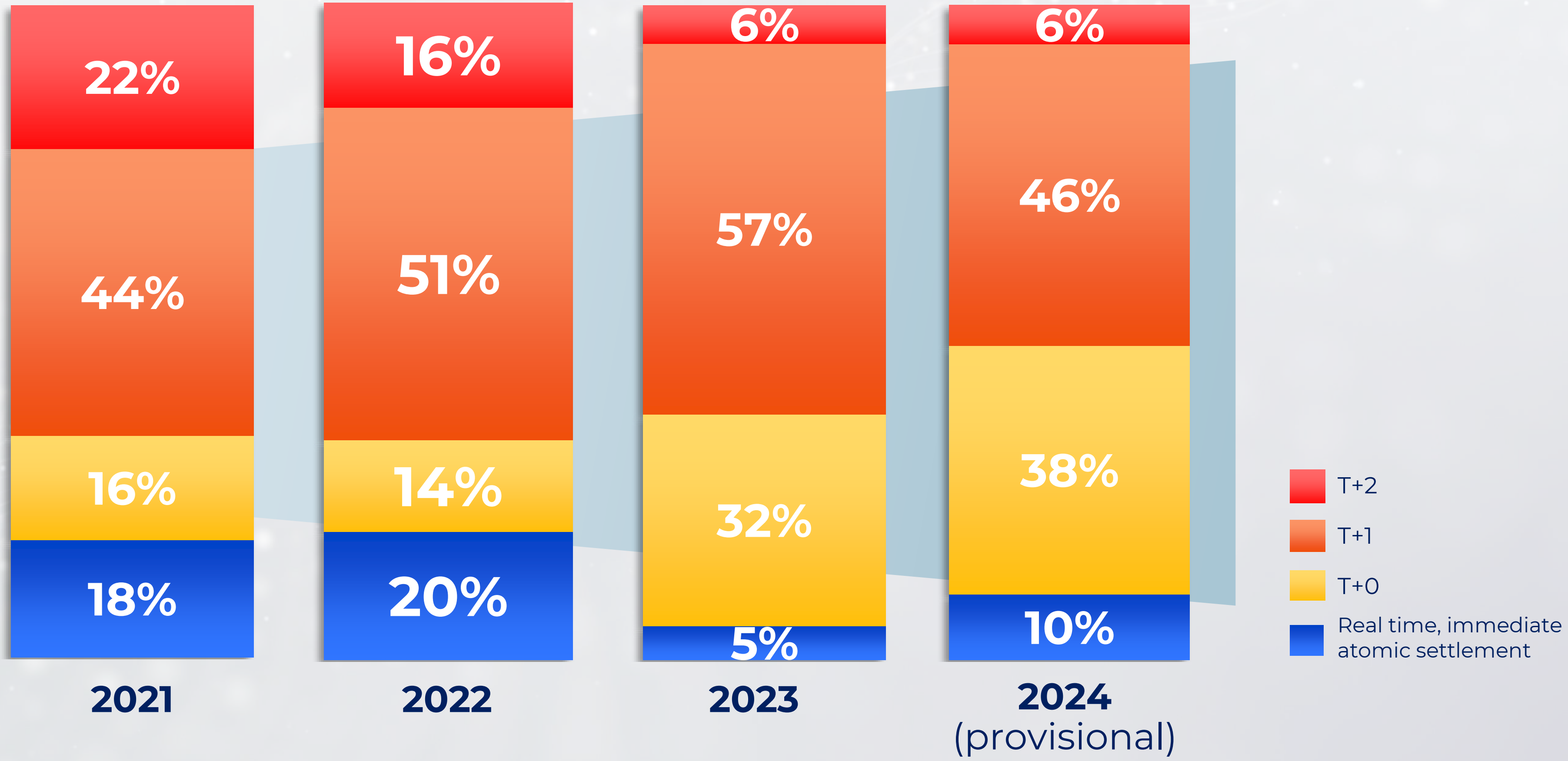
the ValueExchange

Accelerated settlements are happening fast

THE FUTURE OF SECURITIES SETTLEMENT

What do you expect to be the prevailing settlement timeframe for equities in your major market in 5 years?

89% of the market expects to **move away from T+2** in the next five years



The VX effect

How are we supporting 48% of the world's market capitalisation in their T+1 journeys?

Global awareness and Impact analysis	Issue resolution	Information sharing	Debrief
Supporting key FMIs (including DTCC and TMX) in engaging with a global community of over 350 firms and market participants. Providing statistical analytics on readiness and impact across the world	Bringing the industry together to answer critical execution questions and to drive best practice	Providing real-time, immediate feedback on the impacts of T+1 on global operations	Providing statistical clarity on the direct and hidden impacts of T+1 globally

T+1 transition
(in Argentina, Canada, Jamaica, Mexico, Peru and the USA)

Transition

Wrap-up

February **2023** – Operationalizing T+1

September **2023** – Operationalizing T+1 Pulse survey

January **2024** – Operationalizing T+1 December 2023 Pulse survey

January to May **2024** – T+1 Issues Forum 2024

June **2024** – T+1 War Room North America; T+1 War Room Europe; T+1 War Room Asia Pacific

August **2024** – Operationalizing T+1 Pulse survey

The T+1 Playbook

Accelerated Settlement

Lessons from North America

T+1's impact	The T+1 Journey	The T+1 Project Plan	The T+1 Transition	After the T+1 transition	Looking ahead
T+1 directly impacts 97% of the global industry	Only 46% of firms were engaged on T+1 with 8 months to go	87% of firms chose process changes over automation for T+1	Affirmations and regulatory rules dominated the T+1 query agenda	Funding gaps were the main area of stress during the T+1 transition	Our T+1 pulse will measure the true cost of T+1 in Aug / Sep 2024
T+1 has a high impact on 6 steps of the trade cycle	Only 25% of offshore investors were engaged on T+1 with 8 months to go	CTM, FX models and cash management were the key project areas for T+1	Core transition risks were in affirmations, FX and SBL recalls	Affirmation rates rose to >95% globally	Market decisions are due from Australia, UK and Europe in H2
Onshore brokers and offshore custodians and investors are most touched by T+1	66% of firms struggled to fund T+1 due to competing projects	25% of firms changed their staff locations for T+1	51% exception handling was due to be managed manually after T+1	Fails rates actually decreased versus pre-transition levels	The smooth transition is triggering more markets to look at T+1 with urgency
T+1's impact depends on where you are globally: from Middle Office to Funding	50% of offshore investors were struggling to prepare for T+1 with 4 months to go	28% of T+1 projects happened after transition	35% of small firms were still not engaged on T+1 within months of transition	FX, funding and SBL risks were successfully mitigated – mainly through simplification	
T+1 costs a mid-tier firm around USD600k to prepare	Funding and FX were the central challenge for overseas firms		Only 50% of firms planned any BCP-testing before T+1 go live	A true debrief on North America's T+1 transition will need more time	

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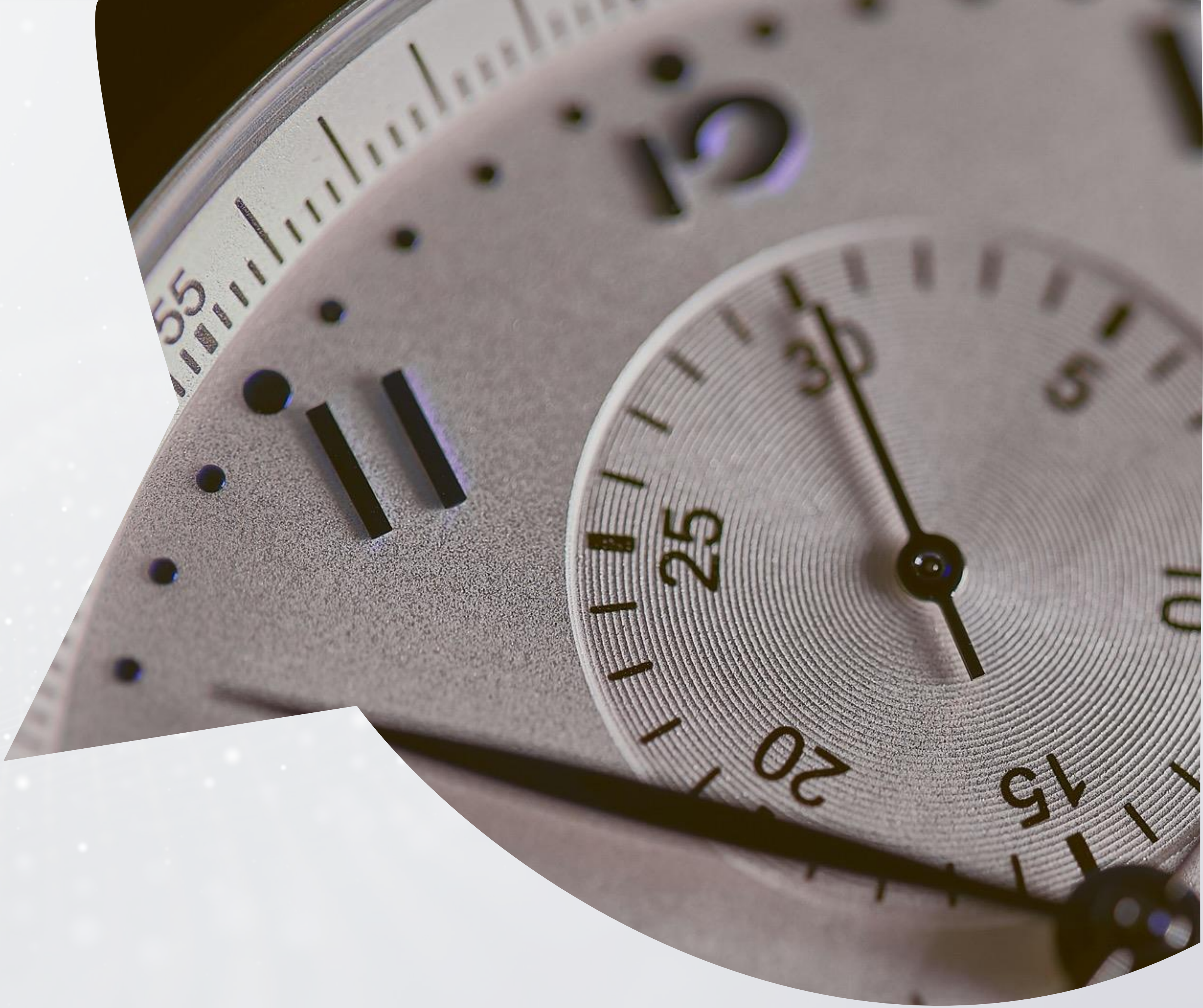
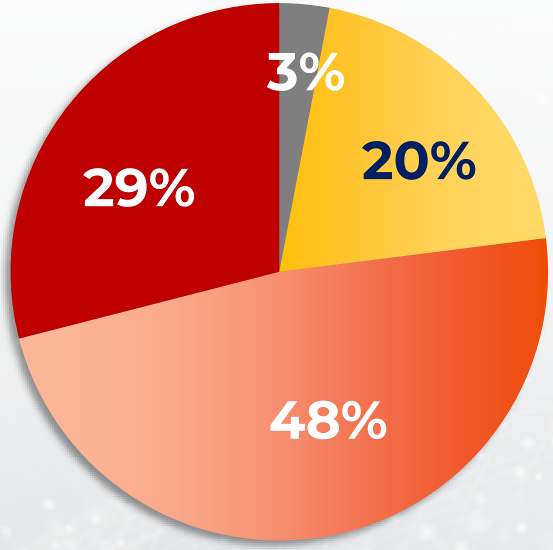
T+1's Impact



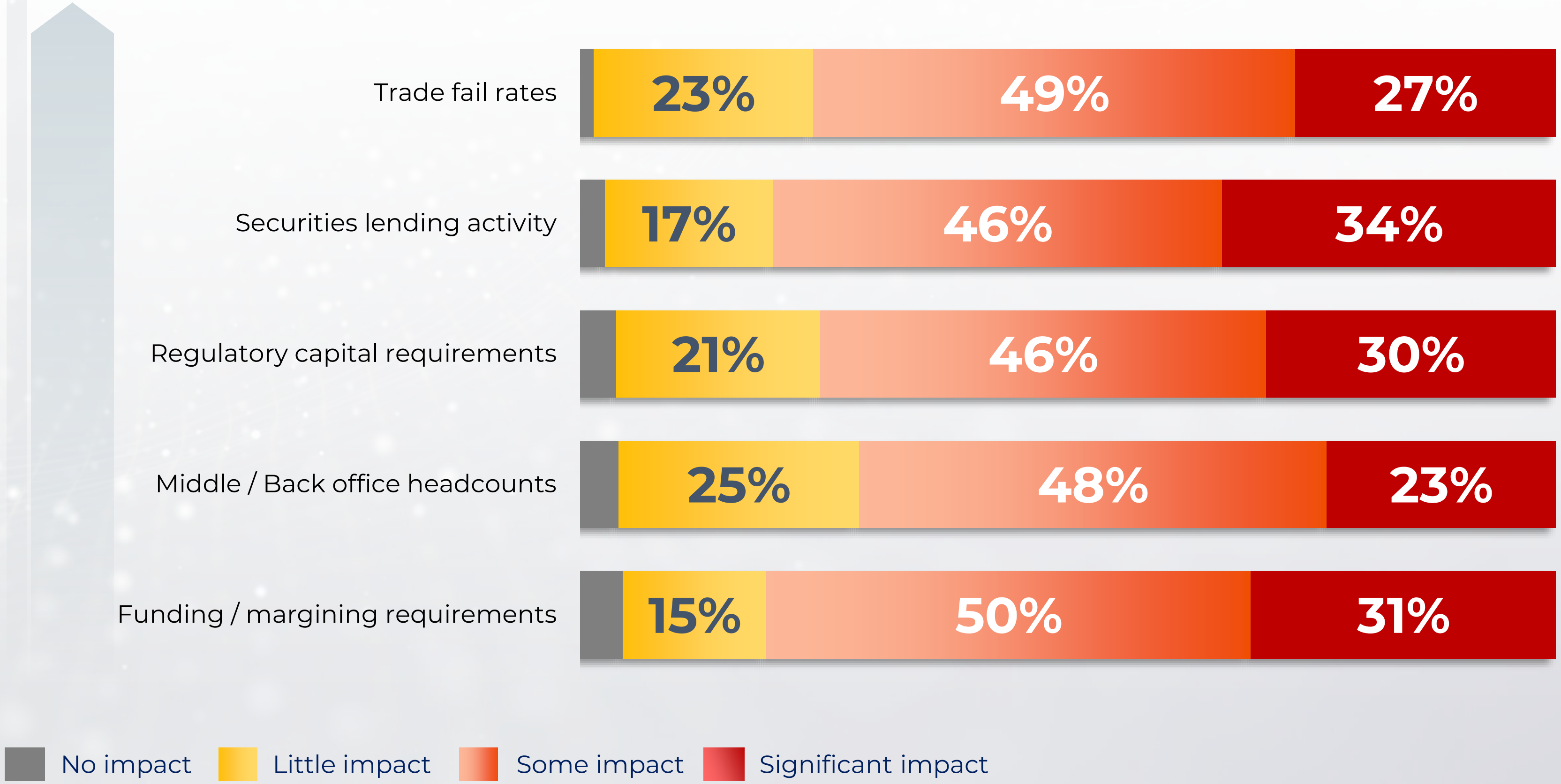
Where and how does T+1 impact us?

How are we supporting 48% of the world's market capitalisation in their T+1 journeys?

T+1 directly impacts 97% of the global industry

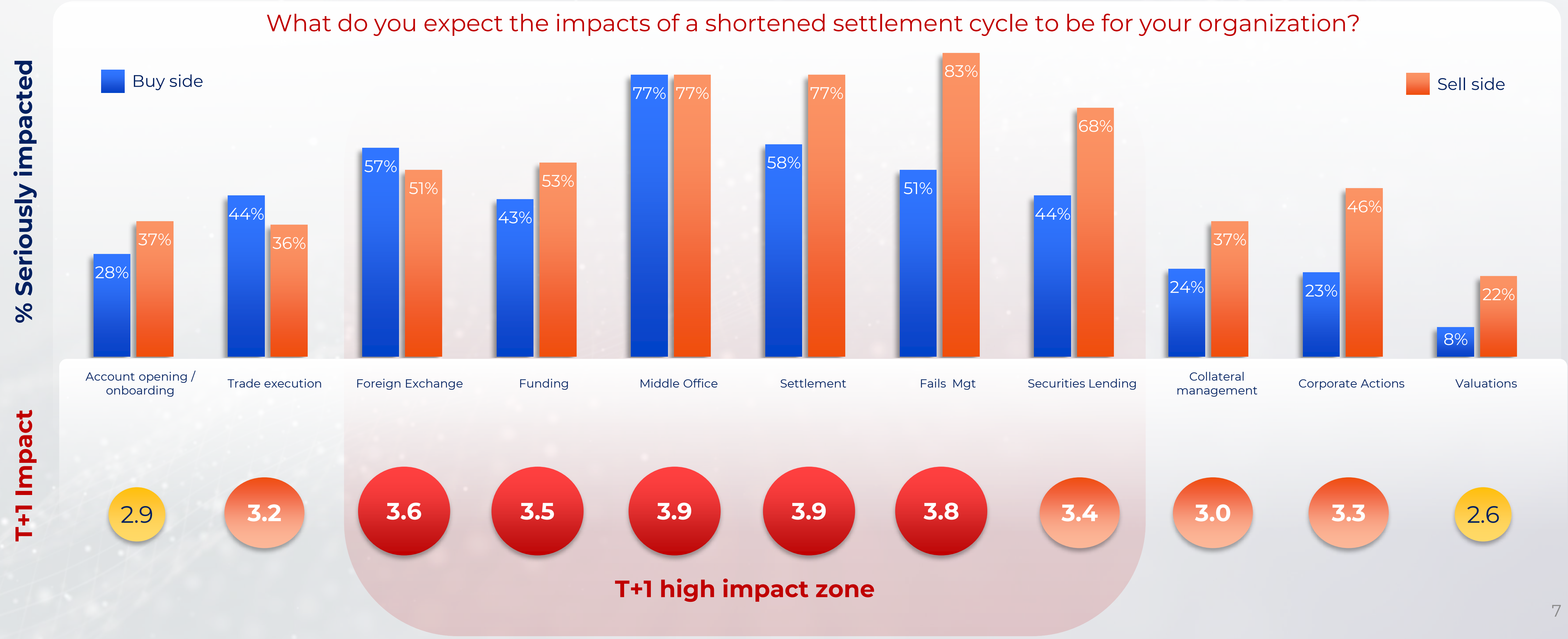


What do you expect the impacts of a shortened settlement cycle to be for your organization?



Where does T+1 impact us

T+1 is about much more than settlements: it begins in the middle office and ends in securities lending



Who does T+1 impact?

Brokers and Service Providers shouldered the impact in North America – but Custodians and Investors carried a heavier burden overseas

T+1 impact by location of respondent (0-5 scale, January 2024)

	USA / Canada		Europe	Asia Pacific
Brokers	3.2	3.2	2.8	2.5
Custodians	2.8	3.3	4.7	4.7
Investors	2.7	2.8	3.7	3.3
Service Providers (software firms, consultants)	3.4	2.8	2.8	1.5

…and smaller firms are hardest hit by T+1

2.9	Tier 1
3.1	Tier 2
3.4	Tier 3

Where does T+1 impact us?

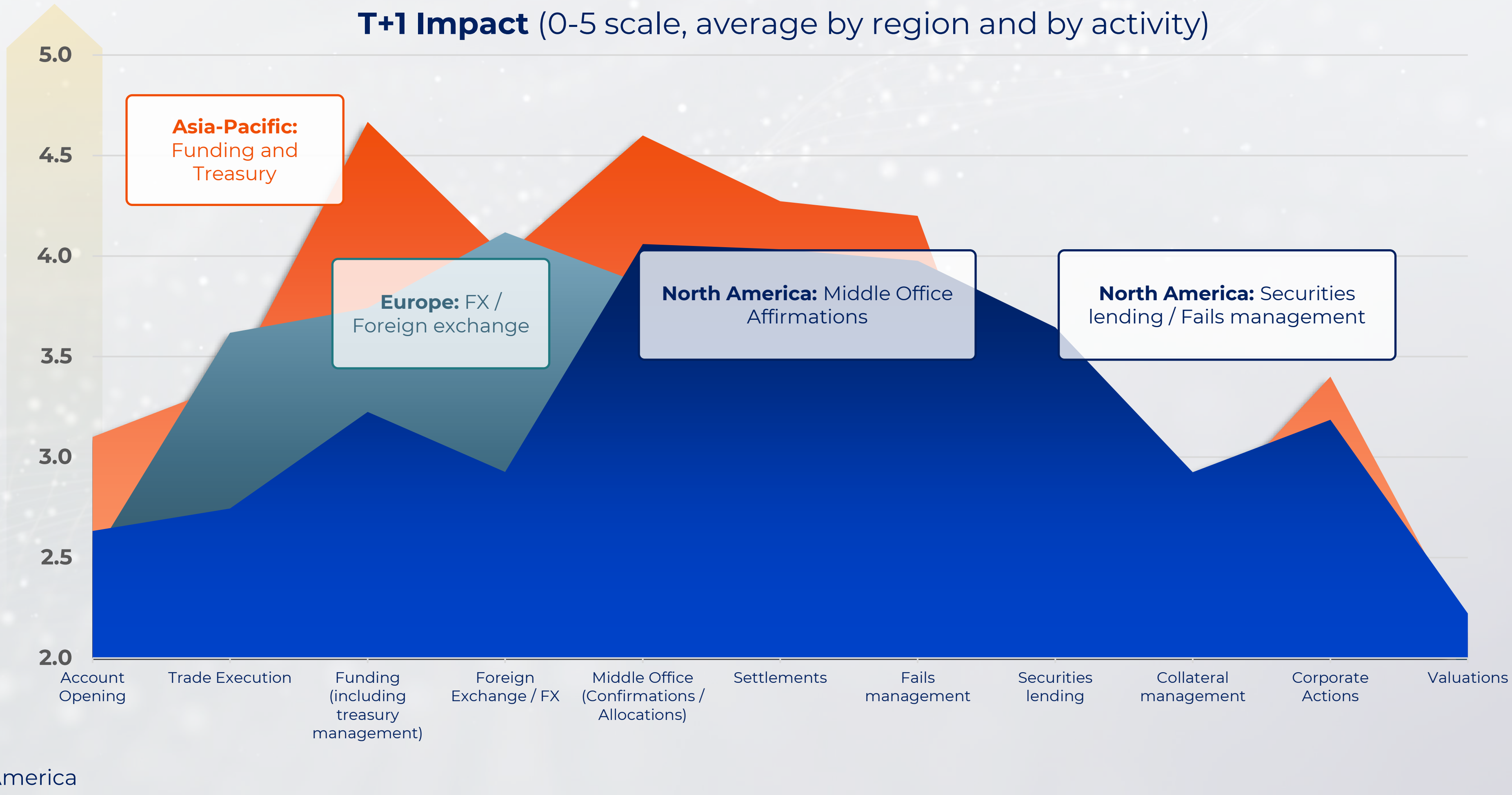
Trade processing in North America, Funding and Middle office in Europe and Asia

Time-zones are driving the T+1 impact

North America 3.2

Europe 3.3

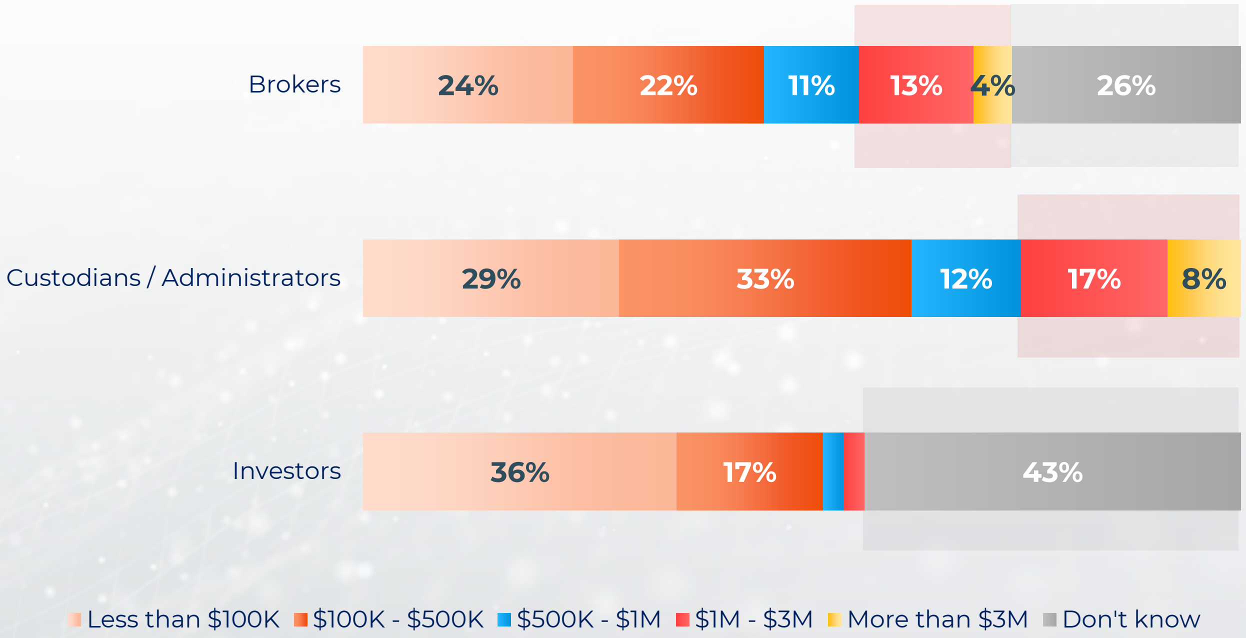
Asia-Pacific 3.5



How much was T+1 expected to cost us?

T+1 was expected to be a multi-million dollar investment for 20% of the sell side – but 43% of the buy-side were unclear on costs

Expected, average spend on T+1 projects
(% of respondents by spend, USD – January 2023)



Tier 2 firms expected to shoulder a heavy cost for T+1

	Broker	Custodian	Investor
Tier 1	**$450k**	**$840k**	N/a
Tier 2	**$579k**	**$572k**	**$278k**
Tier 3	**$22k**	**$521k**	**$234k**

Average Expected Spend on T+1 projects (USD, January 2023)

The Evolving case for T+1

	North America		...next market		...next market	
	Brokers / Custodians	Investors	Brokers / Custodians	Investors	Brokers / Custodians	Investors
Benefits	Margin benefits at CCP (30%)	Cost avoidance (@USD0.5 per settlement for those who do not affirm)	Margin benefits at CCP (0.5%)	Funding (Removal of 1 day of overnight funding vs North American markets)	Margin benefits at CCP (0.5%)	Funding (Removal of 1 day of overnight funding vs T+1 markets)
	Avoidance of SEC penalty risk (TBC)	Avoidance of SEC / Broker offloading risk (TBC)				
Costs		SSI clean up		SSI clean up		SSI clean up
		Allocations on T+0		Allocations on T+0		Allocations on T+0
	Client messaging automation	Affirmation process/ CTM connectivity	Client messaging automation	Affirmation process/ CTM connectivity	Client messaging automation	Affirmation process/ CTM connectivity
	Client messaging automation	Trade-date FX booking	Client messaging automation	Trade-date FX booking	Client messaging automation	Trade-date FX booking
	FX margin increase (netted -> bilateral)	FX margin increase (netted -> bilateral)	FX margin increase (netted -> bilateral)	FX margin increase (netted -> bilateral)	FX margin increase (netted -> bilateral)	FX margin increase (netted -> bilateral)
		Pre-funding		Pre-funding		Pre-funding
	SBL client repapering	**Funding** (+1 day of overnight funding vs T+2 markets)	SBL client repapering	**Funding** (+1 day of overnight funding vs T+2 markets)	SBL client repapering	
	CCP margin increase (for trades missing CNS cut off)		CCP margin increase (for trades missing CNS cut off)		CCP margin increase (for trades missing CNS cut off)	
	SBL messaging / inventory updates	SBL messaging / inventory updates	SBL messaging / inventory updates	SBL messaging / inventory updates	SBL messaging / inventory updates	SBL messaging / inventory updates
	Batch to real-time inventory management	Settlement message automation	Batch to real-time inventory management	Settlement message automation	Batch to real-time inventory management	Settlement message automation

Increasing returns on investments into trade-date processing

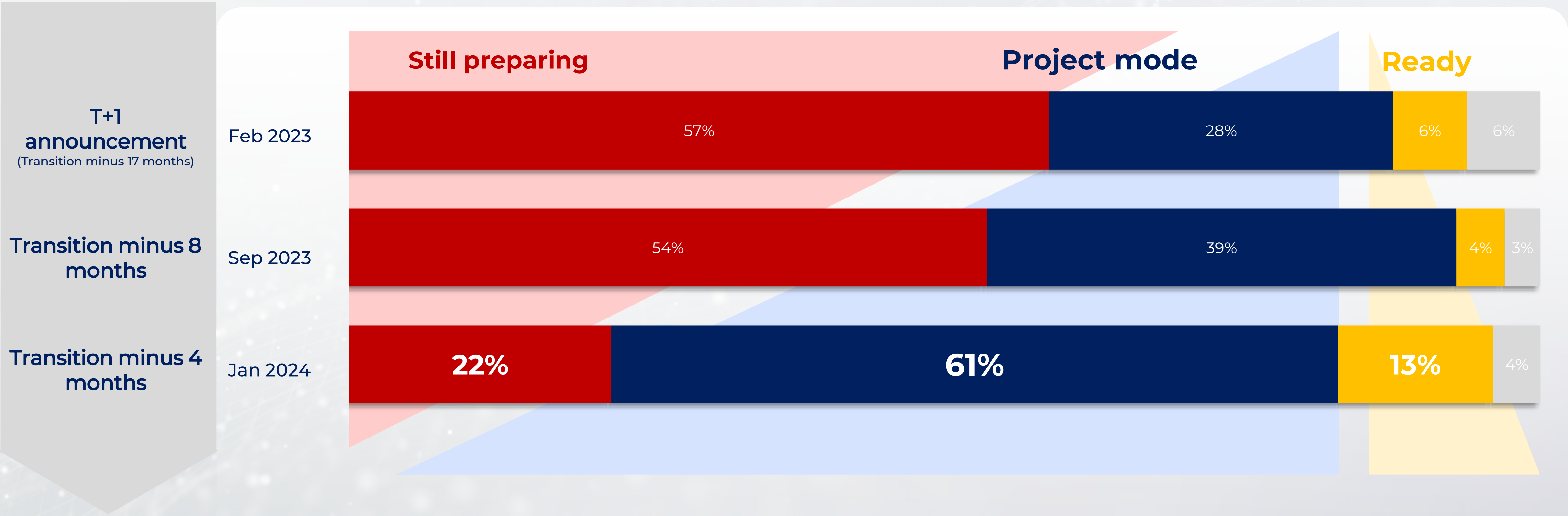
02

The T+1 Journey

The readiness journey

Substantial engagement on T+1 began in the 6 months before transition, but few felt ready even in May 2024

Global Readiness for the May Transition to T+1 (Survey date)



Who engaged on T+1

Whilst custodians were the global champions of T+1, offshore investors were the last to engage

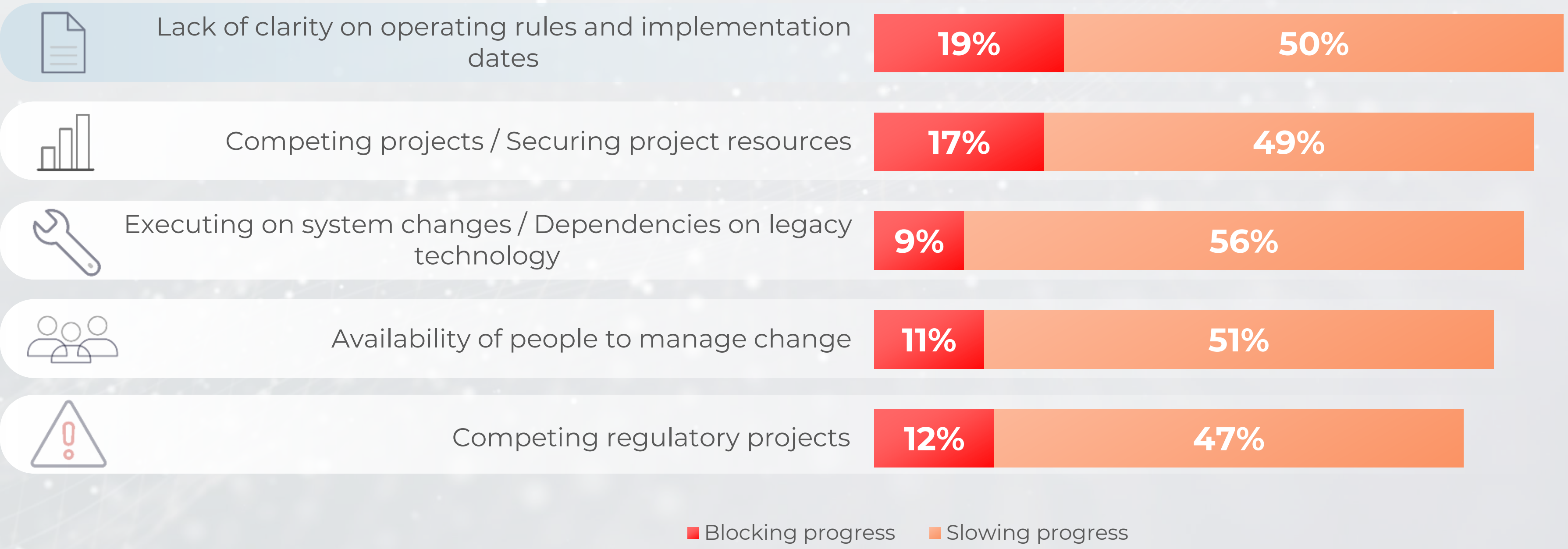
T+1 readiness (September 2023)
(% of respondents per segment/region who are in project, testing or fully prepared modes for T+1)

	North America	Europe	Asia-Pacific
Investors	88%	57%	25%
Custodians	83%	67%	100%
Brokers	90%	83%	18%

Why did people struggle to mobilise early on T+1?

Not enough time: T+1 had to be funded, resourced and live within one budget-cycle – putting huge pressure on industry bodies, on competing projects for resources and creating significant market uncertainty

% of respondents facing T+1 preparation issues that either block or slow their progress, broken down by issue (February)



The "Don't Know" problem (Jan 2023)

- 20% **Prime Brokers**
- 26% **Institutional investors**
- 36% **Custodians**
- 37% **Executing brokers**
- 48% **Wealth managers**
- 50% **Universal banks**

% of respondents who don't know when they will be ready for T+1 – by industry segment

Where did we struggle to prepare?

Distance matters: Asia-Pacific faced the strongest challenges, notably in accessing needed expertise

Key challenges and scale per region

Home markets (ET)	**ET + 7 hours**	**ET + 12-16 hours**
North America: Legacy platforms	**Europe:** Dislocation in funding	**Asia-Pacific:** Education and Subject matter expertise

Who struggled to prepare?

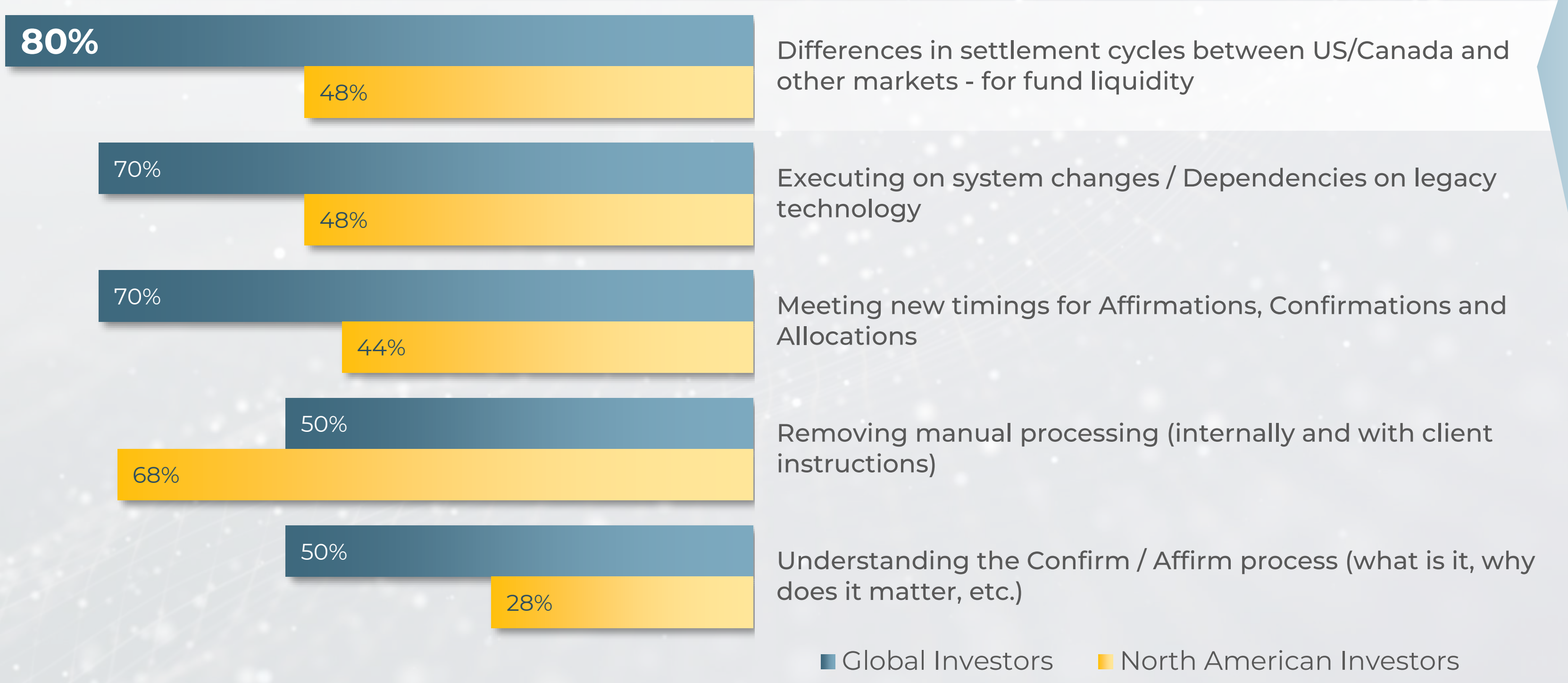
50% of offshore fund managers were seriously struggling shortly before transition

% of firms facing blocking issues in their preparations for T+1 (Jan 2024)

Who struggled to prepare?

Funding issues were a T+1 readiness challenge for 80% of global investors

% of North American and Overseas investors facing issues (blocking and inconvenient) **ahead of T+1**



"When I sell in a T+2 market and I buy in a T+1 market, I have an overnight funding cost of more than 2bps per day"

ETF managers and European mutual fund managers running US investments face a similar problem with T+2 and T+3 subscription cycles

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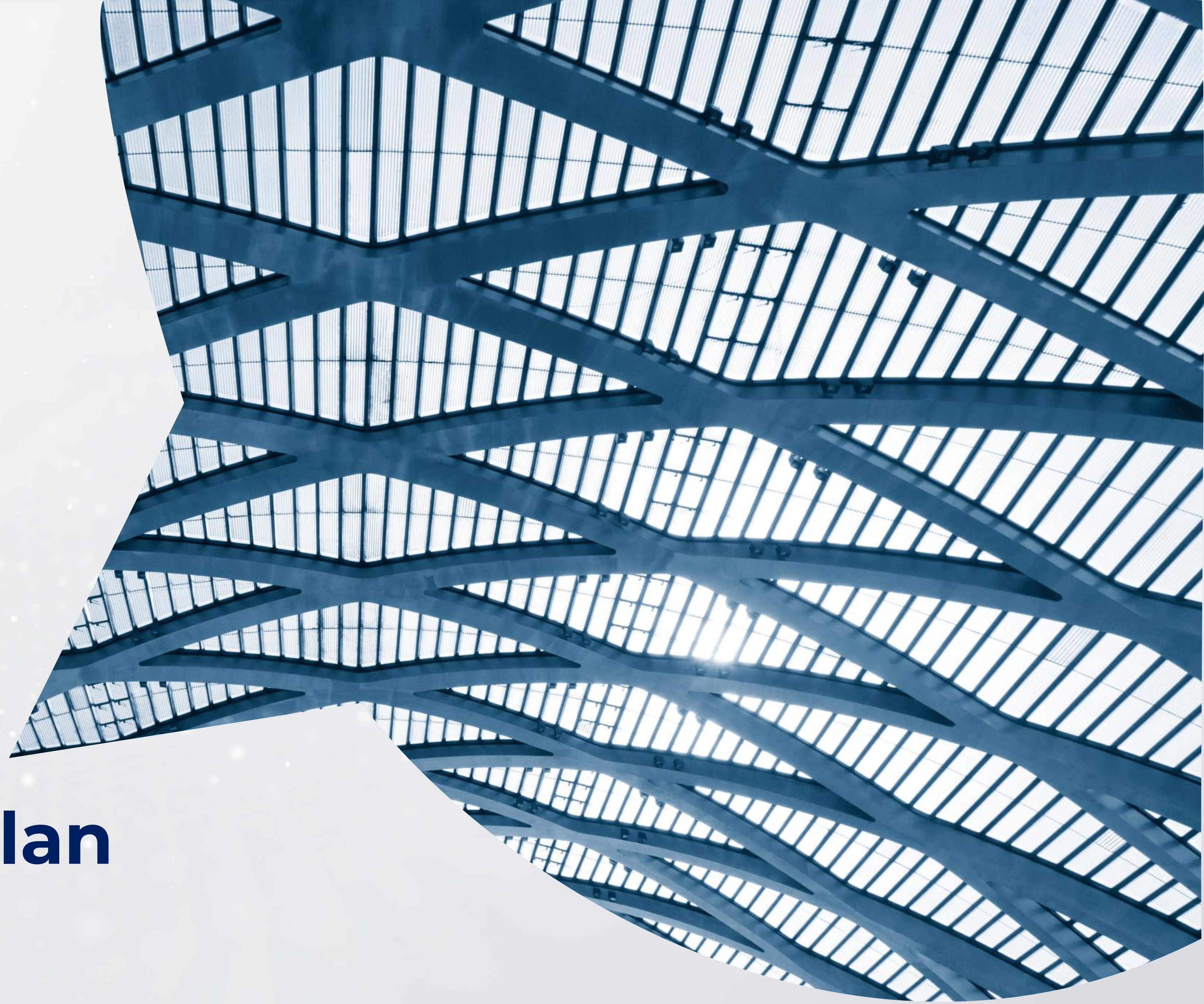
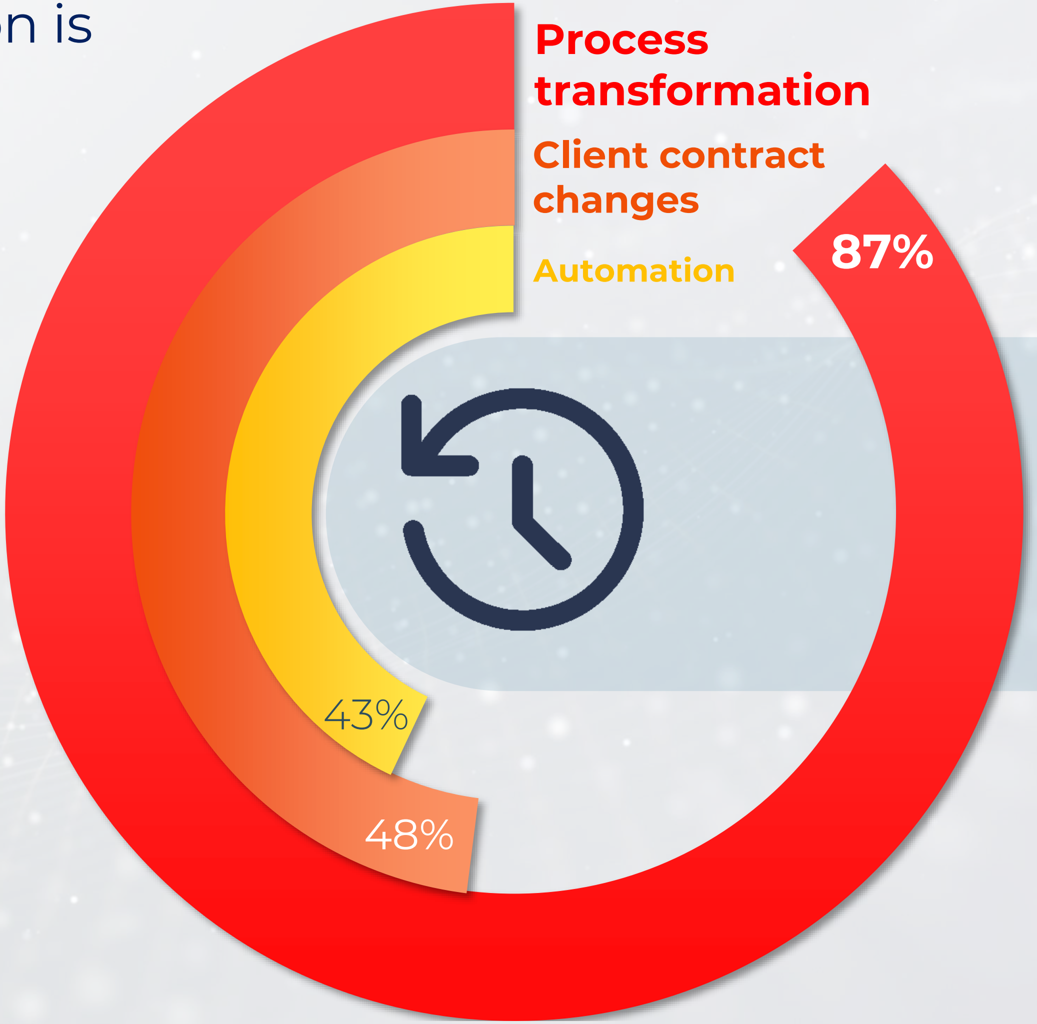


The T+1 Project plan

What did we do to prepare for T+1

Process transformation is twice as important as automation for T+1



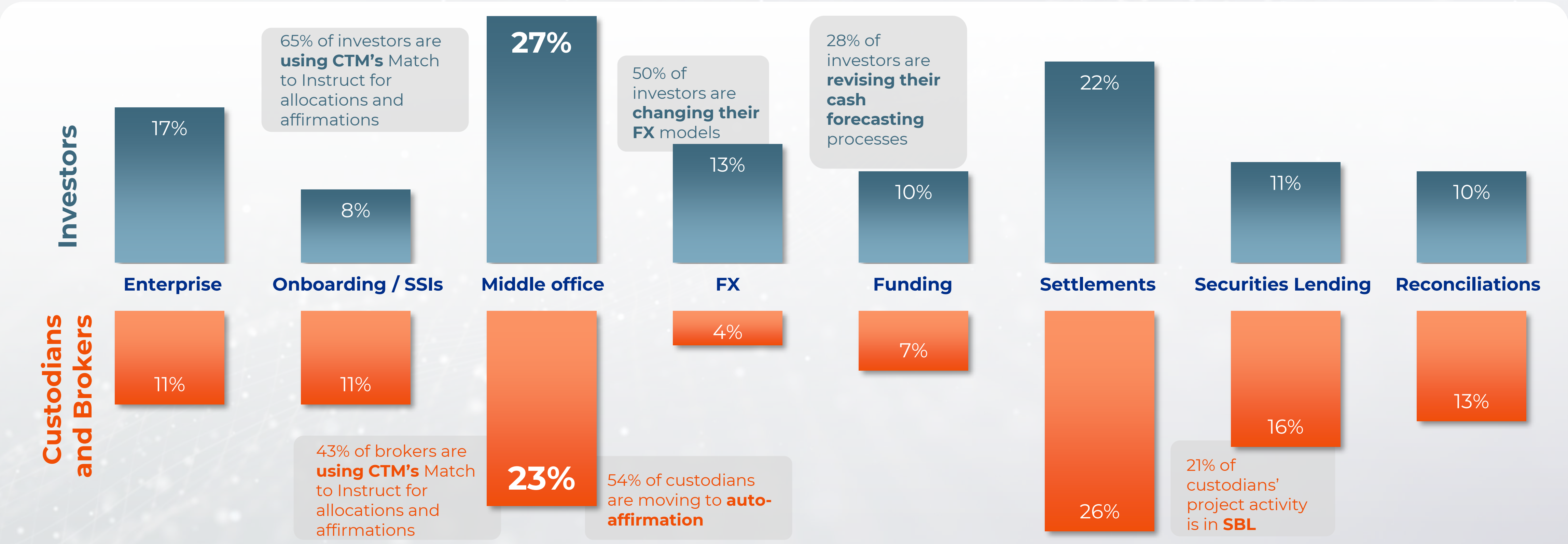
Where is our T+1 activity?

(% of respondents working on each area pre T+1)

What did we do to prepare for T+1?

CTM, FX and Cash management

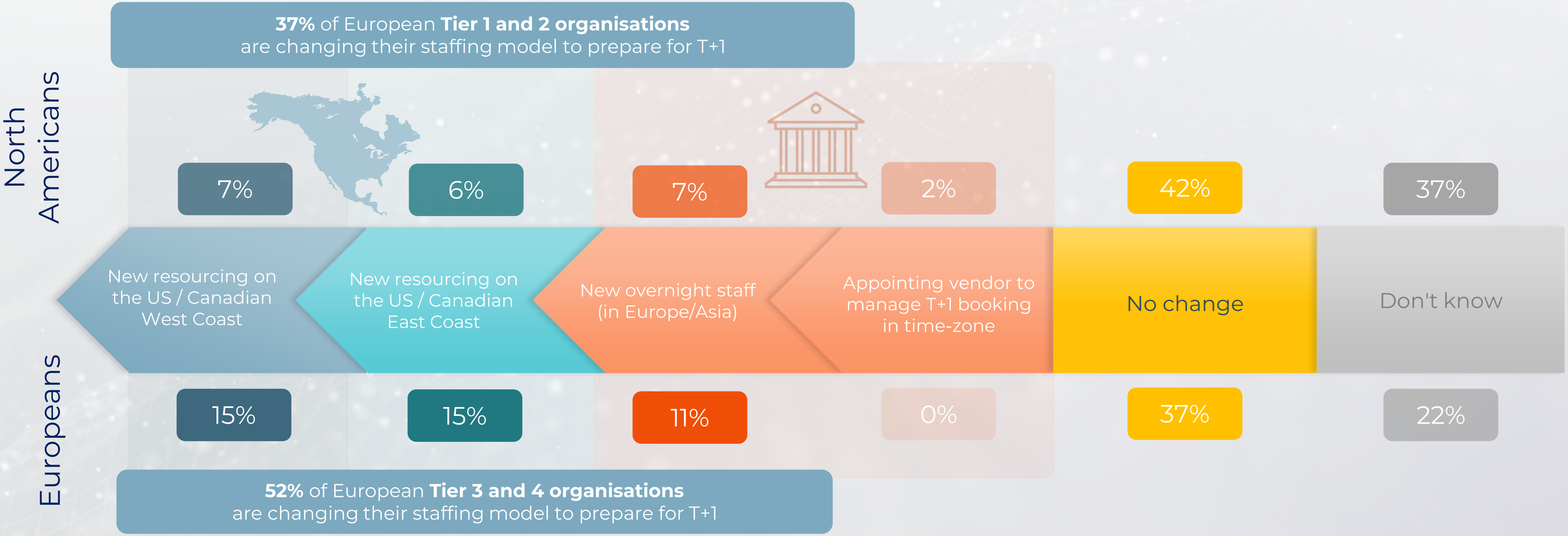
Distribution of T+1 automation activity (% of T+1 project activity per segment, January 2024)



How did we adapt our footprints to cater for T+1?

T+1 is a footprint and staffing issue for 25% of the industry

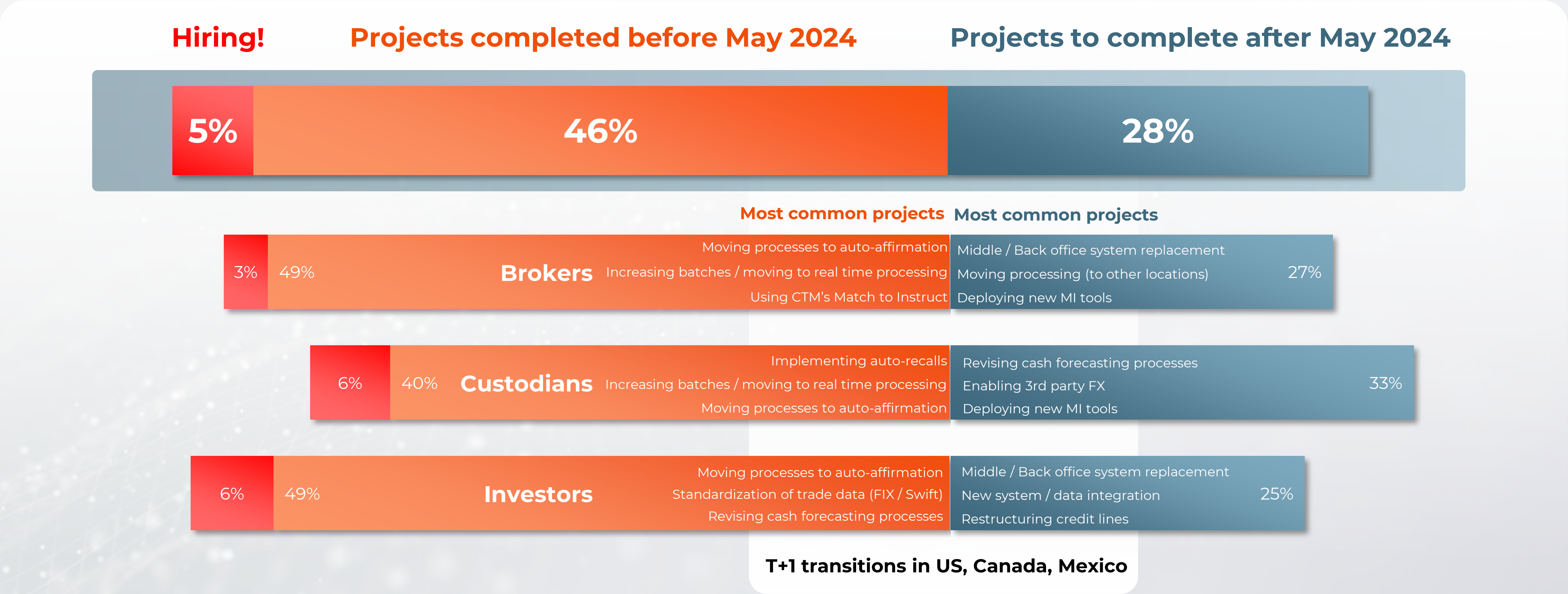
% of respondents making changes to their location and staffing strategy as part of their T+1 preparations (Sep 2023)



When did we prepare for T+1?

Get live, assess then optimise: 28% of project activity was scheduled after go-live

Project plans for T+1 (% of respondents by project time-frame, excludes respondents with no project activity)



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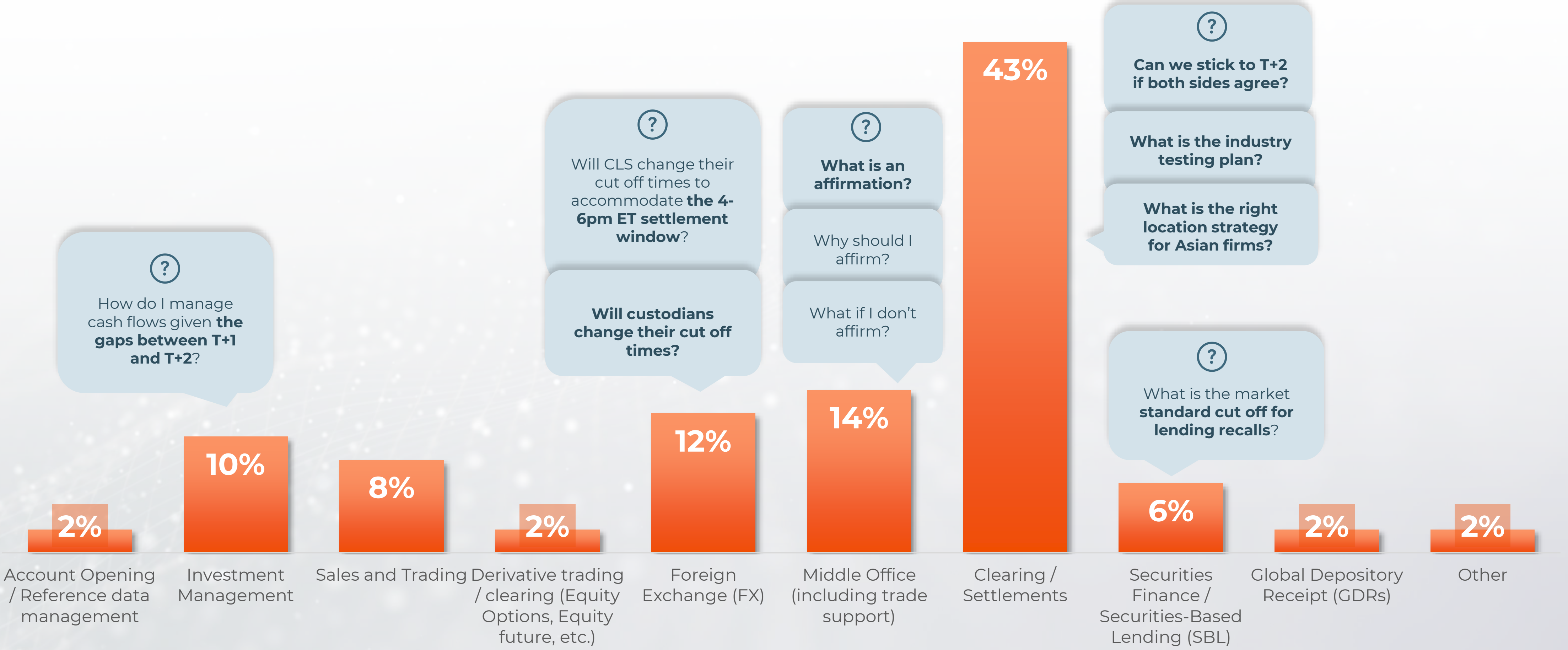
T+1 Issues Forum 2024

The T+1 transition

Where did the industry need help?

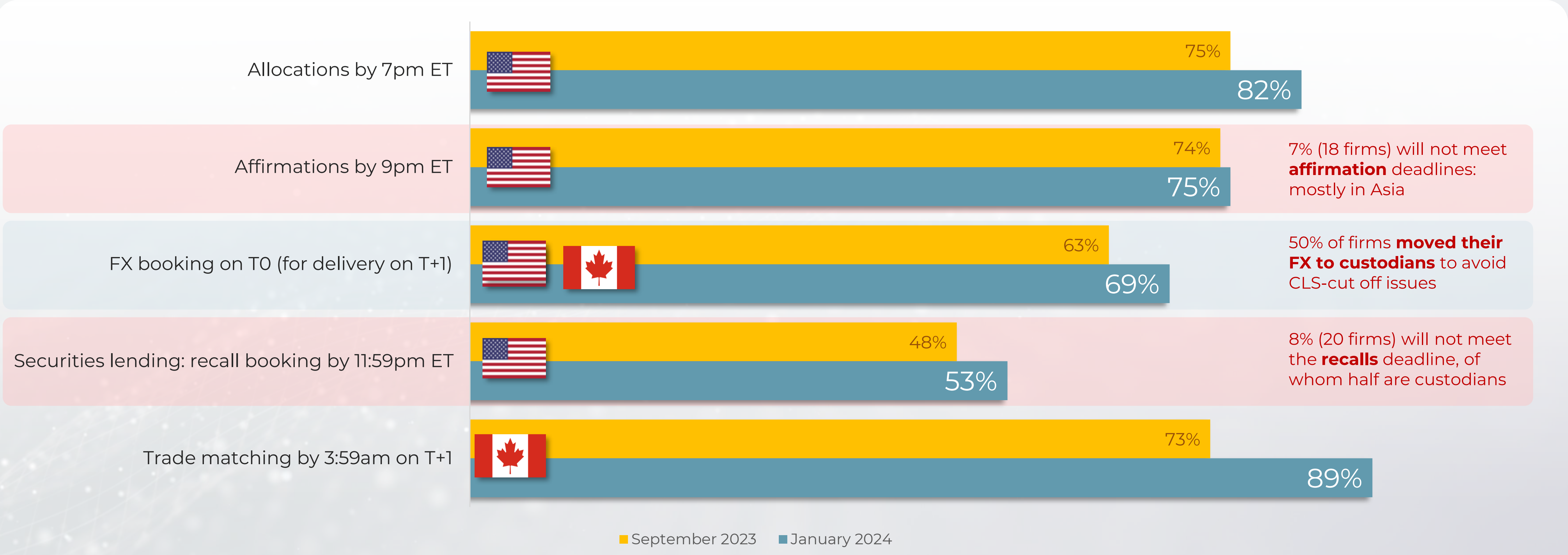
% distribution of high-impact T+1 queries raised (Jan-May 2024)



Where were our key implementation T+1 risks?

Affirmations, FX and SBL

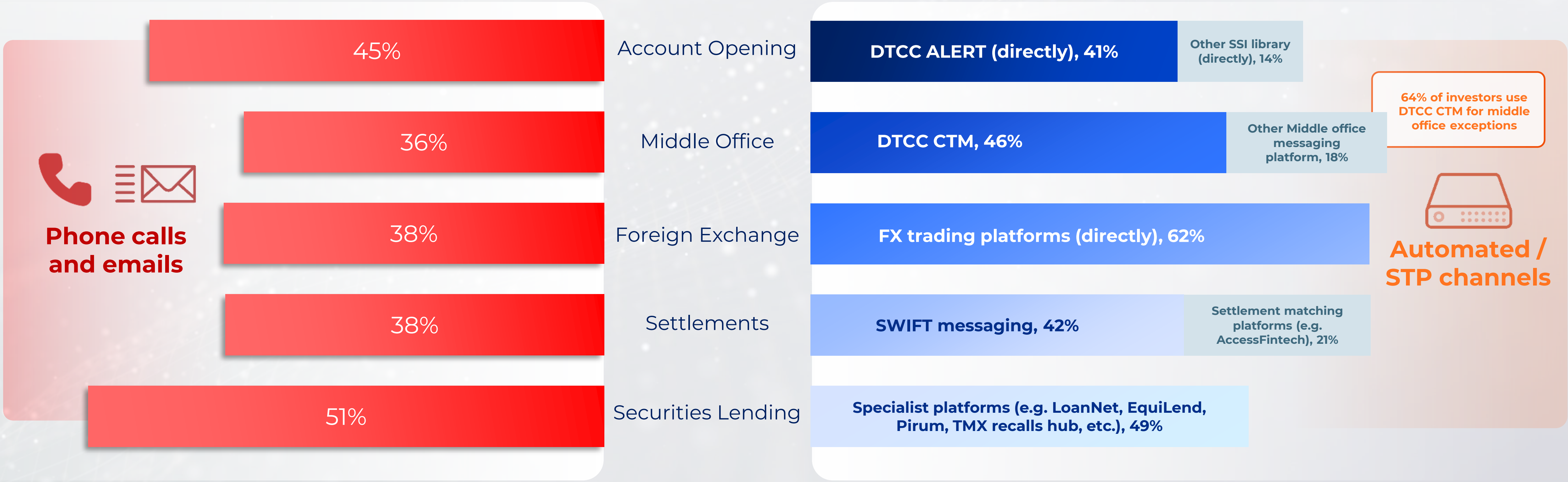
Project plans for T+1 (% of respondents by project time-frame, excludes respondents with no project activity)



Where were our key implementation T+1 risks?

Up to 51% of exceptions being handled manually after T+1, although automated platforms are clearly available

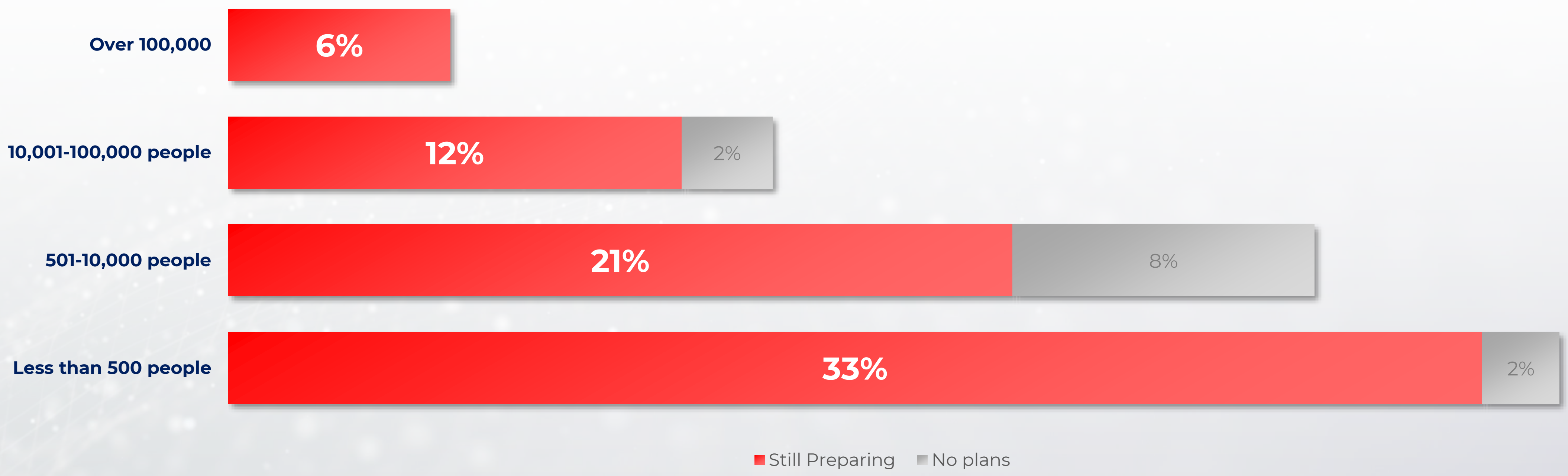
Planned means of managing exceptions in T+1



Where were our key implementation T+1 risks?

35% of small firms were still not engaged within months of transition – creating market uncertainty for all players

% of respondents still in scoping phases or taking no action for T+1 (January 2024)



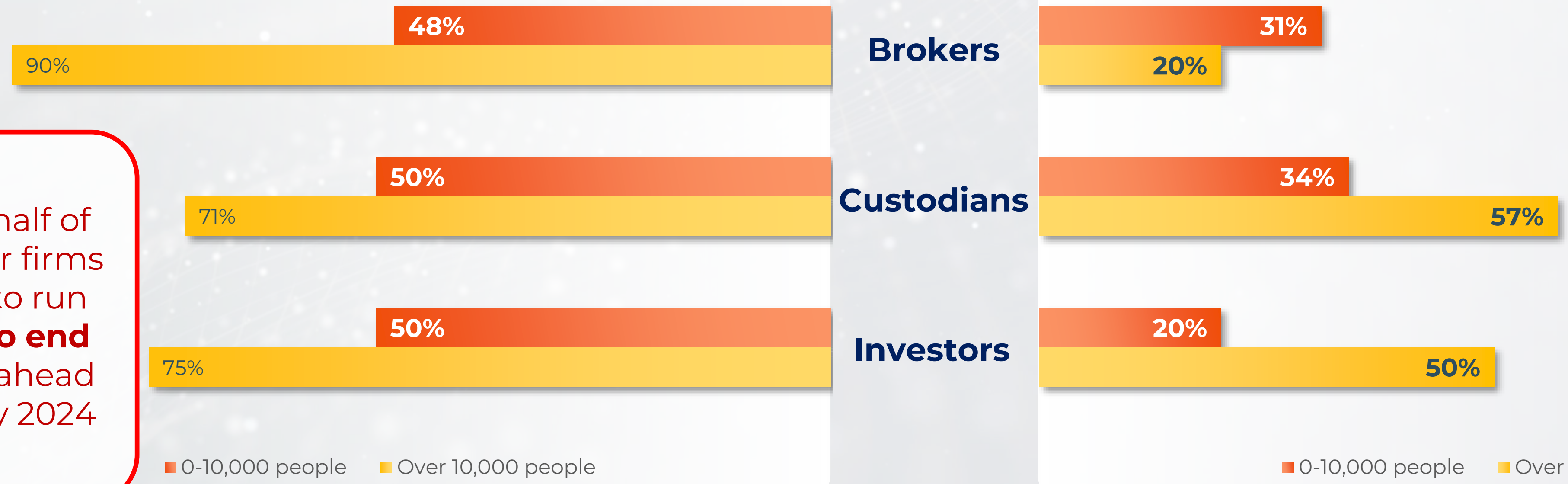
Where were our key T+1 implementation risks?

Only half of smaller firms planned to fully test; with limited BCP/worst-case testing industry-wide

% of respondents still in scoping phases or taking no action for T+1

% of respondents planning to run **end to end testing** with service providers / clients

% of respondents planning to run **BCP / Worst case testing** with all parties



Only half of smaller firms plan to run **end to end tests** ahead of May 2024

Less than one in two major firms **plans to test BCP / worst case scenarios** before May 2024

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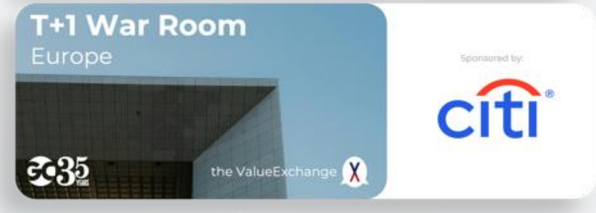
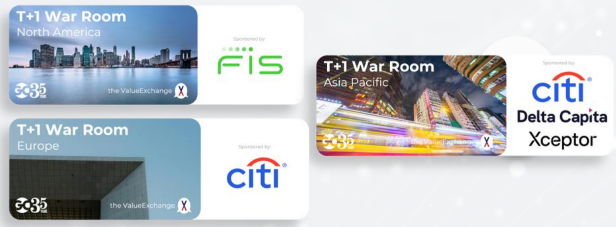


After the T+1 transition

What happened during transition?



What happened?

- The US saw a market affirmation rate of 93-95%, well above earlier forecasts and expectations.
- Margin requirements for clearing participants were reduced by 30-40% - within the target, forecasted range.
- Custodians reported normal settlements on all days, with no major or systemic issues presenting themselves.
- Trading volumes were comparable to normal days of trading (i.e. no evidence of throttling by institutional investors)
- There was been very limited use of bilateral settlement extensions (i.e. T+2), only 0.5% of total volumes.
- Fail rates across the market did not dramatically increase, although some saw a small uptick in fails

What didn't we expect?

- **Minor system issues** in the DTCC (USA) and Canada (CDS) on day one of settlements, which slowed processing but had limited market impact. Both issues were related to internal, inter-system connectivity and not directly T+1 or volume-related.
- **On the client side**, one fund manager anecdotally had their request for extended settlement declined by their custodian bank (citing FINRA margin rules), causing concerns in the market, as this kind of settlement extension is a core risk mitigant (last option) for many fund managers.
- One custodian saw up to 25% of their daily volumes **settling (gross) in the day cycle** –although this issue was soon resolved
- Spreads for **European ETFs** investing into the US grew – especially on Thursdays – due to higher funding costs

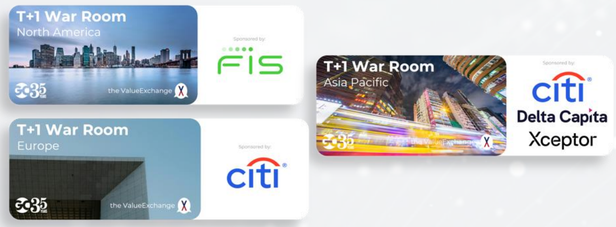
What happened under the surface?

Manual processes: New processes and changes to timelines around T+1 were creating a number of micro-requirements for manual intervention throughout the new settlement cycle. In particular, issues with FX booking (pre and post CLS cut off) and with the processing of settlement extensions (where both traders have to manually rebook trades to include the cost of funding @ 2bps).

Increased gross settlement? Where clients are struggling to match / settle in time, a growing number of brokers were offering to book trades after the T+0 affirmation cut off, with the aim of settling (on a gross / un-netted basis) on the morning of T+1 during the US day cycle. This helps fund managers to lock in the executed price, without incurring any additional market risks - despite the significant additional costs of this method in terms of fees and margin requirements.

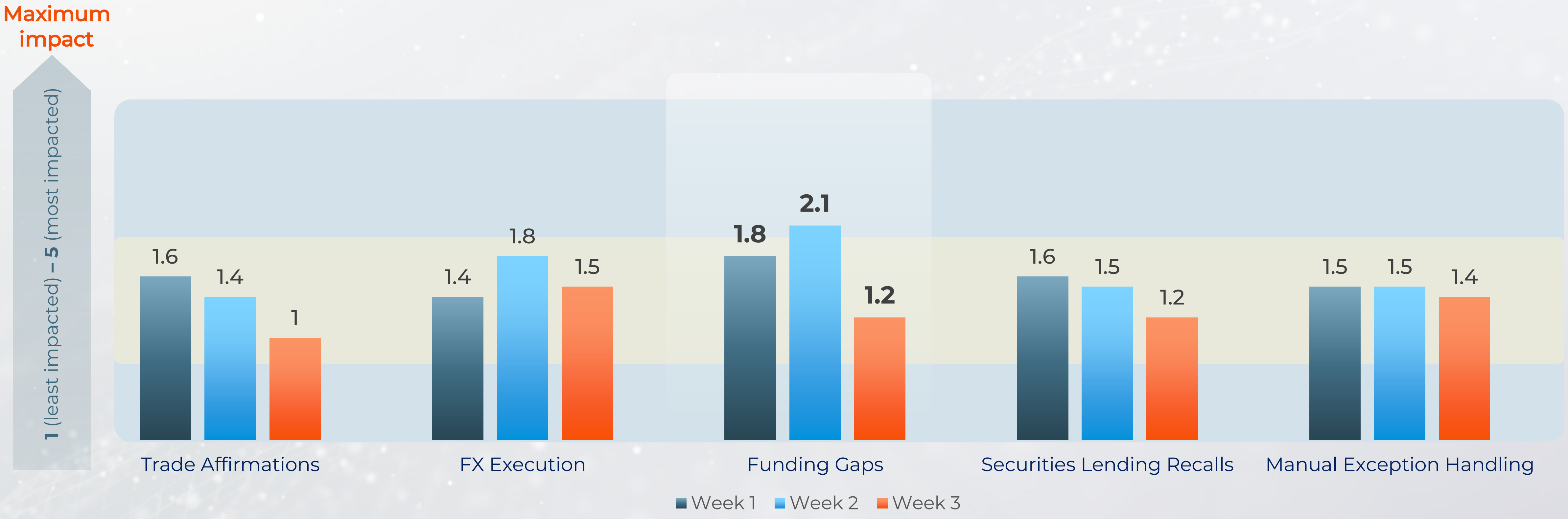
Asian systems preventing affirmations? Whilst affirmation rates increased, we continued to see comparatively lower levels of affirmations from Asian clients - due to local systems in Asia being unable to release trades in time for the 9.30pm ET (9:30am SGT/HKT) cut off.

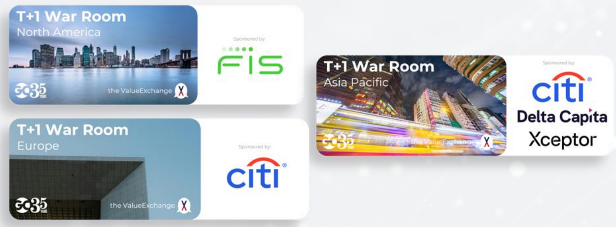
Blind affirmations: concerns were raised by the SEC and others around the use of Blind Affirmations / Single Sided Settlements by clients to facilitate accelerated settlements. The SEC and SIFMA are apparently keen to avoid seeing these models take hold.
FX booking: The majority of (European / offshore) fund managers were mainly booking one FX at the close of their European day (based on trade executions) and then doing a minor FX later for variance.



Where were we most challenged?

T+1 impact was much lower than expected, although funding gaps caused the biggest challenge



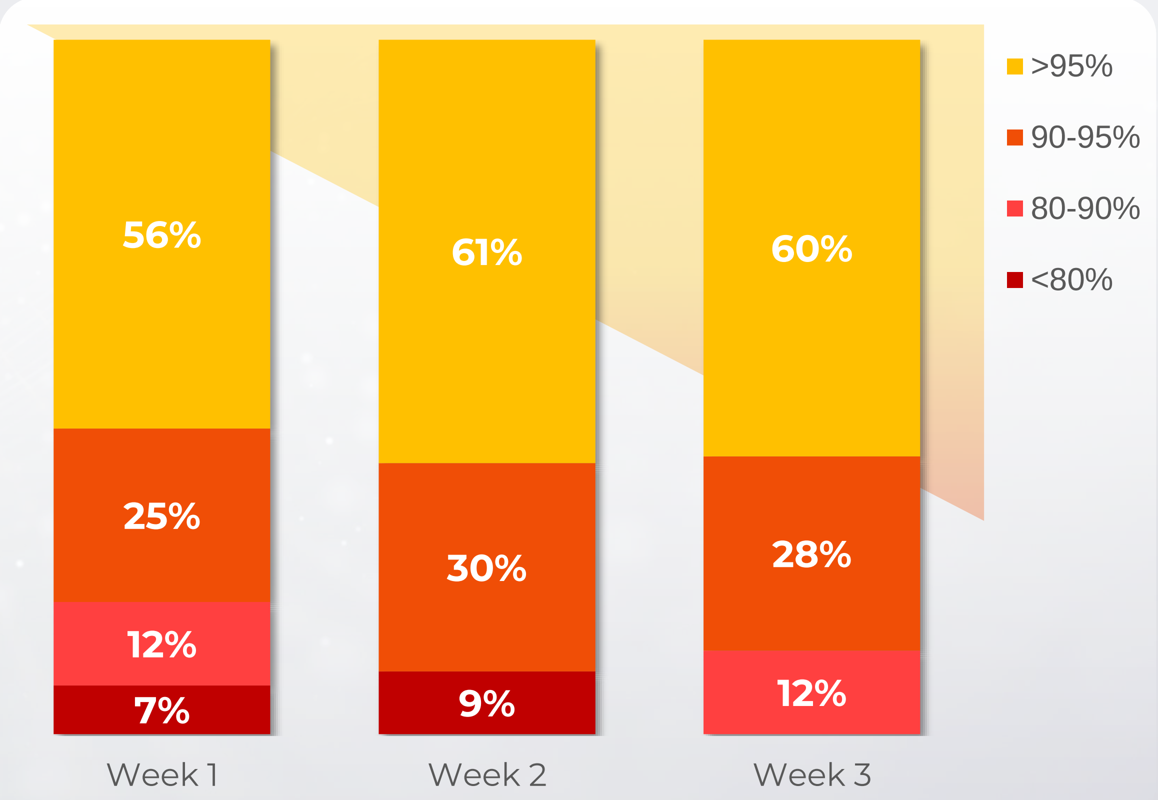


Focus on Affirmation Rates

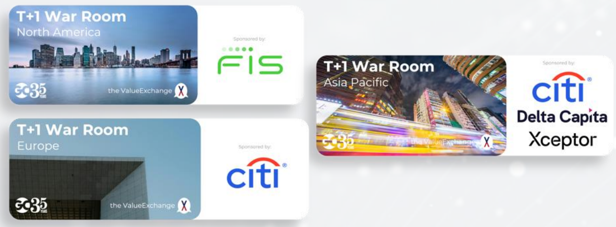
From biggest challenge to key enabler

- Affirmations were one of the **key enablers of a successful transition.**
- While not a guarantee of settlement, sharing validated, **quality settlement information by 7pm on T+0** has helped to reduce settlement fails.
- **DTCC's M2I was a huge facilitator** of the improved affirmation rates, allowing investors to auto-affirm their transactions
- **Asia reported lower affirmation rates on Friday**, due to a lack of staff to complete manual processes on a Saturday morning

Affirmation rates during the first month of T+1



How did we manage the big risk areas?



Foreign Exchange, Funding Gaps and SBL

☑ Foreign Exchange

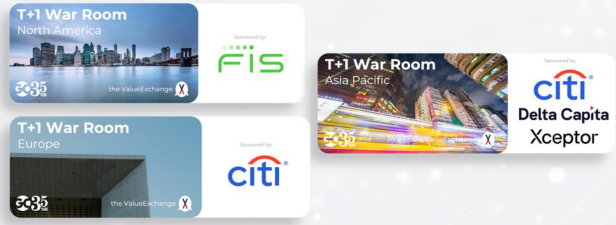
- 50% of firms chose **simplification over best execution** and opted to use their custodian for FX
- This allowed use of existing **long balances and/or credit facilities** held with the custodian
- **A key risk mitigant was the use of USD as the base currency of many Asian funds** reducing the impact booking FX on T+0
- **Earlier allocations** by investors were also a key enabler in being able to execute FX pre-4pm ET when there is reduced liquidity
- The **extended cut-offs offered by the global custodians** to offset CLS not changing their own deadline was seen as a large factor in the success of the migration from an FX perspective

☑ Funding

- Majority of investors have manged the misalignment of settlement cycles by bilaterally agreeing to **extend or shorten settlement** with their broker
- **Pre-funding, credit facilities, overdrafts (where allowed) and use of derivatives** are other ways investors are managing the funding gap – although many of these options are creating new, manual processes
- Signs of **ETFs trading at a slight premium** to accommodate the additional funding requirements. Trade volumes might reduce slightly on a Thursday due to the weekend funding requirements

☑ Securities Lending

- Lending agents implemented more conservative inventory management prior to T+1, including proactive measures such as restricting deletion names from their programmes to handle known index rebalances,
- There is still a **lack of market consensus around recall deadlines** with most firms treating 3pm ET as their deadline.
- While custodians have reported higher than normal lending fails, this has not had a material impact to overall fail rates

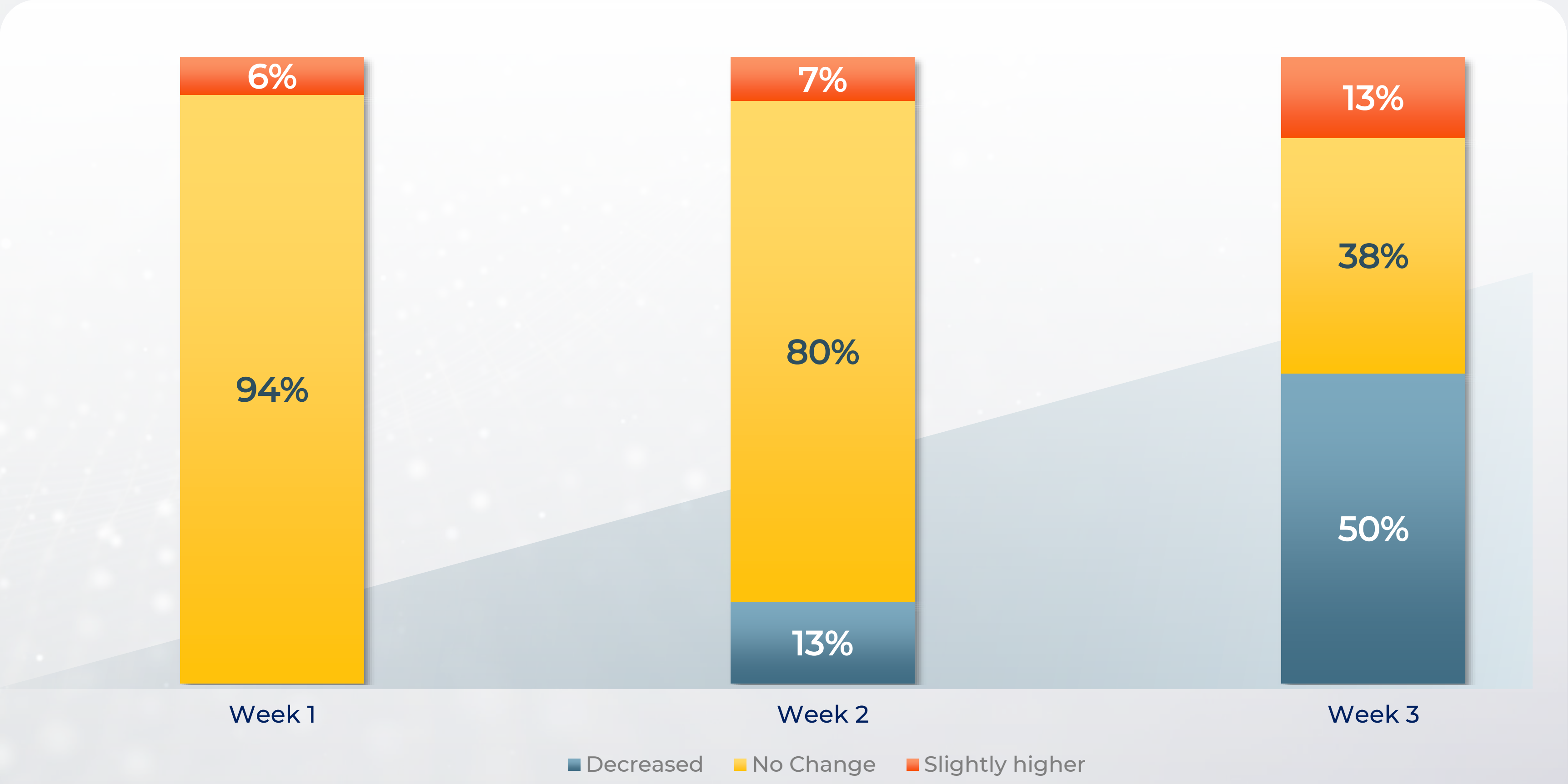


What happened to trade fail rates?

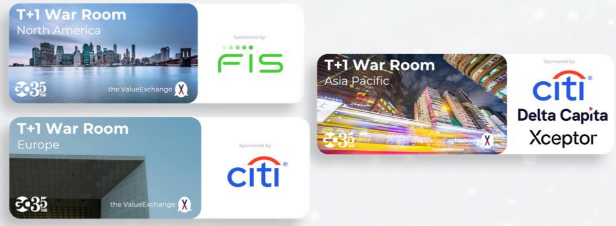
A positive outcome for T+1 as trade fails fell after transition

Improved affirmation rates, along with the careful management of the transition to T+1 has allowed for improved settlement rates

Average trade fail rates during the first 3 weeks of T+1 (VX poll)



Why was the T+1 transition a success?



There were many reasons

What worked?

Clarity: Picking a date and sticking it was seen as essential to a smooth transition

Communication, communication, communication: extensive, global outreach to all profiles of firm - by CSDs and industry associations – was a major driver in offshore engagement

Affirmations: Widely considered to be the key enabler of a successful migration to T+1. DTCCs M2I has been pivotal in better-than-expected affirmation rates.

Preparation and collaboration: Firms over prepared, collaborated with their peers and educated their clients and installed a hyper-care approach over the migration

Industry testing: The industry and individual firms ran multiple front to back tests to understand their system capabilities

What could we do differently?

Penalties and sanction: A lack of clarity around down-side risk of non-compliance with (US) rules slowed early engagement by non-US firms

Market timings: Continuing lack of market consensus on securities lending recall deadlines is continuing to cause a challenges for borrowers

Market infrastructures: In order to avoid uncertainty, all market infrastructures (across funding, FX, lending, etc.) need to be clear on how they will support T+1 from day one.

Looking beyond the transition: what next?

A thorough debrief in 3-6 months

Measuring Success

- Firms agree that it is still too early to truly measure the impact of moving to T+1.
- The industry also needs to review the success versus the original objectives of the migration
- We should have a clearer picture after seeing 3-6 months of data

Automation

- Multiple firms are still completing their post T+1 reviews
- Some have put in place temporary solutions to manage the transition - and will look to implement long term automated solutions after reviewing their performance data.

Remediation

- Multiple firms are tracking their counterparties performance across affirmation rates, loan recalls, failed trades etc.
- These firms are working with counterparties that are under-performing post-transition, and in some cases may terminate relationships

Costs

- We cannot call T+1 a complete success until we can assess the cost to the industry.
- Firms have observed increased funding costs, wider FX spreads, less best-execution (due to automated FX solutions), and higher lending expenses.
- A comprehensive analysis is needed to fully understand the overall cost implications of implementing T+1

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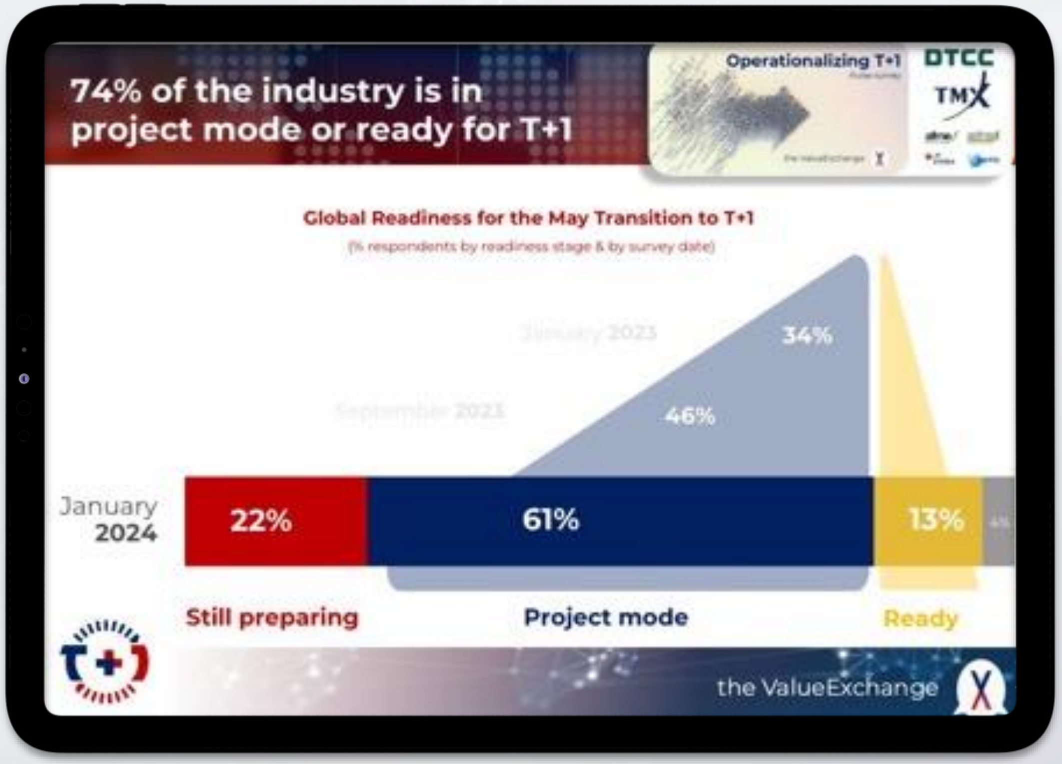
Looking ahead

T+1 Pulse check

August / September 2024

In August 2024, the ValueExchange in partnership with DTCC, TMX and over 10 industry associations, will be launching our latest pulse check on **T+1, in order to provide statistical, global clarity on**:

- The true cost and (indirect) impacts of T+1
- Today's T+1 operating model: what has changed and what is still to come?
- Key enablers of T+1 success
- Readiness for and challenges with future market transitions



The global wave of T+1

Already T+1 for cash equities
(or shorter)

- **Argentina** (T+1)
- **Canada** (T+1)
- **China** (T+0)
- **India** (T+0, T+1)
- **Jamaica** (T+1)
- **Mexico** (T+1)
- **Peru** (T+1)
- **USA** (T+1)

Coming soon
(including VX projected live date)

United Kingdom

2027

The UK Accelerated Settlement Task Force (AST) has a **mandate to move to T+1 settlement by end of 2027.**

In Phase 1 of the transition expected by **end of 2025** operational changes will be implemented to prepare the market to move to T+1. These changes include mandatory standards for opening accounts, electronic processes for sharing SSIs and extended operating hours of CREST. The AST expects to release a report in September 2024 containing a draft of the industry action plan for 2025.

European Union

2027

The European Securities and Markets Authority (ESMA) are expected to finalise a report in Q4 2024, detailing the feasibility, costs and benefits of moving to T+1, ahead of submitting to the European commission in January 2025.

One of the major considerations ahead of moving to T+1 is the complexity of the diverse EU market infrastructures; as well as potential alignment issues with the UK.

Australia

2028

The Australian securities market is yet to announce a date by which they plan to move to T+1.

The ASX have begun industry consultation, looking to understand the benefits and risks of moving to T+1 and expect to summarize the feedback by August 2024.

The Australian move to T+1 will be further complicated by plans to enhance the CHESS settlement system.

Other markets

The smooth transition has also triggered or accelerated conversations in key Asian markets (including Hong Kong, Japan, Singapore and Taiwan). With task forces set up in several of these markets, Asian regulators are apparently keen to drive a conversation about a coordinated, Asia-wide transition to T+1.

Market discussions and debriefs continue in Brazil.

How can we empower your own T+1 journey?

Our T+1 partners

Engage with our global T+1 community

Engage beyond your borders with over 350 firms including global investors, brokers, custodians and associations

Drive transparent, statistical market engagement with a global community of T+1 experts

Benchmark your market readiness

Measure and define global market readiness for your own transition – to drive a transparent and data-driven market narrative on key issues

Leverage our T+1 experience

Leverage our extensive, front-row experience of the North American T+1 transition from start to finish – to help map out the right T+1 path for you

Leverage our neutrality

Make the most of our neutrality to brief stakeholders and regulators on the T+1 journey

The X effect:
Bringing together the global community to help 48% of the world's market cap to get T+1 right

Our T+1 partner associations

the ValueExchange

Thank you!

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