accenture

CAPITAL MARKETS VISION 2022

Relevance, Value and Growth in the Digital Era

MANAGEMENT SUMMARY

A trillion-dollar industry—but prone to disruption

Capital markets are booming once again. The industry generates around $1 trillion in net annual revenue and shows high profitability overall. But while these headline figures suggest an industry in strong health, Accenture's analysis reveals striking disparities under the surface. Other than buy-side players, only a few capital markets businesses are actually creating real shareholder value. Moreover, cost structures are highly fragmented—to an unsustainable degree—making the industry prone to future disruption.

Further change is coming to capital markets

That disruption will be driven, primarily, by three industry trends:

1. **A reshaping core**—price discovery is increasingly shifting to platforms and the traditional balance between sell-side, buy-side and market infrastructure is being reshuffled.

2. **Technology-led innovation**—new technologies will be the principal drivers of change, with artificial intelligence first and then distributed ledgers set to bring far-reaching disruption and radical new opportunities to the industry.

3. **Digital value chains**—electronic trading has just been the start; we see massive digitization needs and opportunities moving beyond top players throughout the whole industry in areas such as client management, advisory/sales and post trade.

While many people might expect that capital markets will "normalize" to look similar to the pre-financial crisis scenario, we believe that the picture for 2022 and beyond will be fundamentally different. Quantitative easing will also have tapered off by that point. The US Federal Reserve is already on its way to becoming a net seller of securities, and the European Central Bank and the Bank of Japan will likely follow soon.

The strategic implications of tapering, combined with the reshaping core and digital value chains as well as evolving technology in the industry, are profound. Revenue opportunities will shift between market counterparties, open up growth and consolidation opportunities for infrastructure players, and force institutions to reshape their investment bank (IB), corporate & investment bank (CIB) and trading models.

Finding new relevance... and thriving amid disruption

To adapt, every single player in the industry will need to find answers to three key questions: How is this new capital markets environment evolving? What will it take to thrive in that new environment? And what does the change journey for our own firm look like?

While the answers will likely differ for each business and each subsector, Accenture has developed a framework of 17 key considerations to guide all players' strategic thinking. Encompassing questions like how to transform investment products, how to enhance risk and compliance, and which location strategies to adopt, this framework offers a comprehensive structured methodology for shaping a successful journey to the new.

That journey needs to begin now. Industry players will have to move quickly in a race for relevance as value pools are redistributed. The winners will find a destination rich with new ideas for creating growth and value—for themselves and their customers—in a radically different kind of capital markets industry.

Methodology

For this report, we analyzed value pools bottom-up—based on individual players' results—to gain a clear view of profitability at an industry sector and subsector level, using FY2017 data as a baseline. We used economic profit as a yardstick, deducting credit losses, full operating costs, taxes and the cost of equity. In our analysis, we have focused on exploring the underlying profit dynamics end-to-end across all capital markets sectors and subsectors. This includes the sell-side (markets and investment banking activities of a broad set of IBs, CIBs and regional universal banks), market infrastructure and buy-side (including wealth managers, asset managers, hedge funds and illiquid alternatives managers). We have gone on to discuss with industry leaders the implications of this baseline and the likely development of these value pools. During these conversations, we have also identified the key management challenges indicated by our findings.

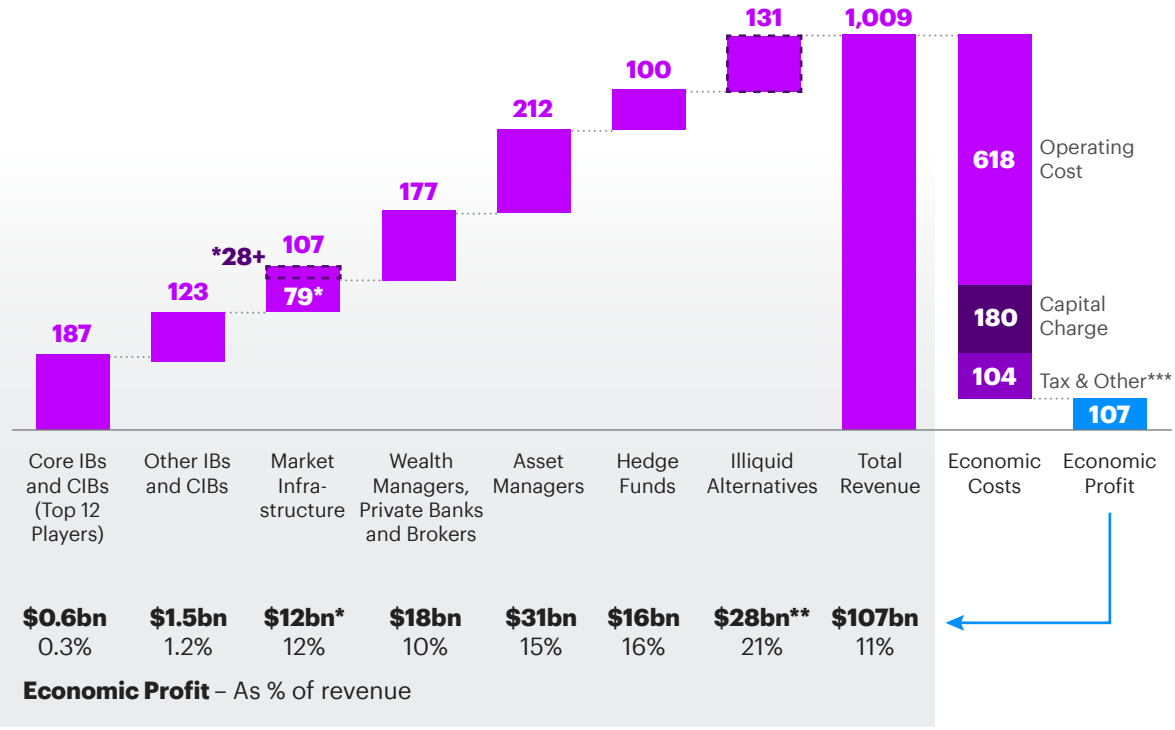
TAKING STOCK

A $1 Trillion Business Ripe for Change

The economics of capital markets are in flux

Capital markets was a highly profitable business in the mid 2000s. Then the financial crisis rocked the industry to its foundation. Now, 10 years later, the industry as a whole is back to being as profitable as ever—but with a different make up. Indeed, our research has found that, collectively, capital markets firms today earn about $1 trillion in revenue each year, translating to more than $100 billion in economic profit (see figure 1).[1] That means roughly 10 cents of every dollar earned in this industry creates shareholder value.

Figure 1: FY2017 economics by sector – $bn



* $79bn considered other players' contra revenue (hence additive), $28bn accounted for in other players' costs (non additive) – $12bn economic profit corresponding to full $107bn revenue

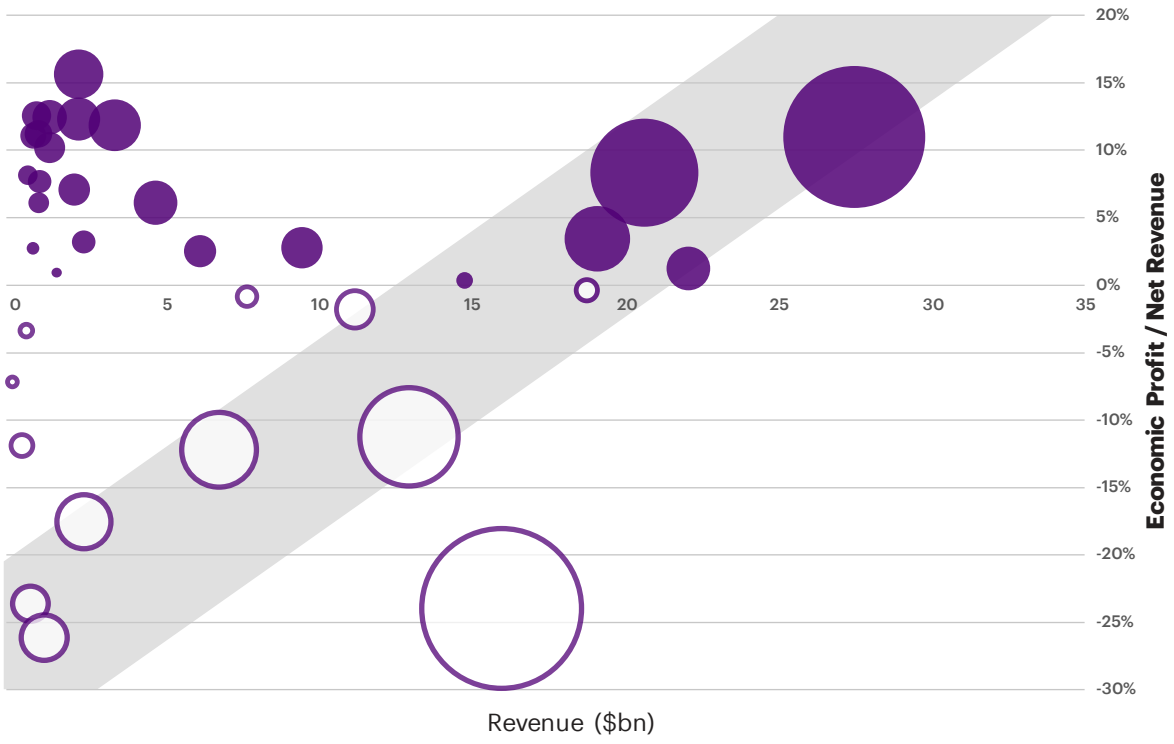
** Illiquid alternatives include private equity, venture capital, real estate and infrastructure funds

*** Taxes, loan losses, adjustments for market infrastructure economic profits accounted for in other players' cost

Source: Company Financial Statements; Accenture Research

But while the capital markets industry averages show profitability, it is not spread evenly across different segments. On the one hand, buy-side players are the most profitable, keeping 10 to 15 cents per dollar of revenue as economic profit, with illiquid alternatives managers registering a blockbuster year and breaking the 20-cent mark on this metric. On the other hand, investment banks show a diverse picture: some create substantial economic profits (both large as well as mid- and small-sized institutions) while others do not earn their cost of equity. Market infrastructure players, such as exchanges and custodians, sit somewhere in between. There is, however, substantial variation within each subsector, as some players thrive while others tread water.

Figure 2: IBs and CIBs economic profit dynamics per institution – FY2017



Note: Bubble size indicates size of economic profit (profit after taxes and cost of equity); hollow bubbles indicate negative profit

Source: Company Financial Statements; Accenture Research

Investment banks

The IBs and CIBs around the world are very diverse in terms of profit. Our research has found that the top four players, all US-domiciled, generate around $20 billion or more in annual revenue, which is turned into substantial economic profit (see figure 2). Other firms with full-scale investment banking offerings—mostly European and some Asian banks —are not earning their cost of equity. This is partly because they have not restructured their businesses fast enough (or are still in the process of doing so) or have not been able to afford necessary investments.

However, profitable niches exist for mid-sized banks with revenues under $5 billion. Hence, size is not a strict requirement for profitability. Similar to the biggest players, the most profitable mid-sized global banks turn 10 to 15 cents of every dollar of revenue into economic profit according to our analysis.

Figure 3: FY2017 economics by market infrastructure subsector – $bn

	Revenue	Pre-tax Margin
Exchanges including CCP and ATS	17	57%
Trading Platforms (D2D, D2C)	6	29%
Interdealer Broking Business	4	13%
Asset Servicing & Clearing excl. IFS	36	36%
Crypto Exchange & Servicing	16	64%
Sub Total	79	44%
Investment Funds Services	5	33%
Data & Information Services	23*	33%
Sub Total (typically booked as cost)	28	33%
Grand Total	**107**	41%

* Excludes broader universe of technology providers, rating agencies, and non-exchange group index providers

Source: Company Financial Statements; Accenture Research

Market infrastructure

Market infrastructure players sit somewhere between investment banks and buy-side players in terms of profitability (see figure 3). This market segment is made up of a very diverse set of businesses with very different economic logic and prospects. Our analysis has revealed that the most profitable are businesses such as regulated exchanges which often generate pre-tax margins of more than 50 percent.

However, their growth prospects within these value pools seem to be relatively modest. Opportunities are emerging around addressing needs in asset servicing, data services and trading platforms (both traditional and "crypto"), and most market infrastructure players are now exploring these areas. The profitability of these ventures will vary widely, but the "rotation to the new" is in full swing. For instance, in just a few years, crypto exchanges have exploded from virtually nowhere and now represent a substantial source of revenue. Indeed, revenue from crypto exchanges now matches that from traditional exchanges, albeit with a radically different composition of margin and turnover—differing by a factor of almost 1,000.

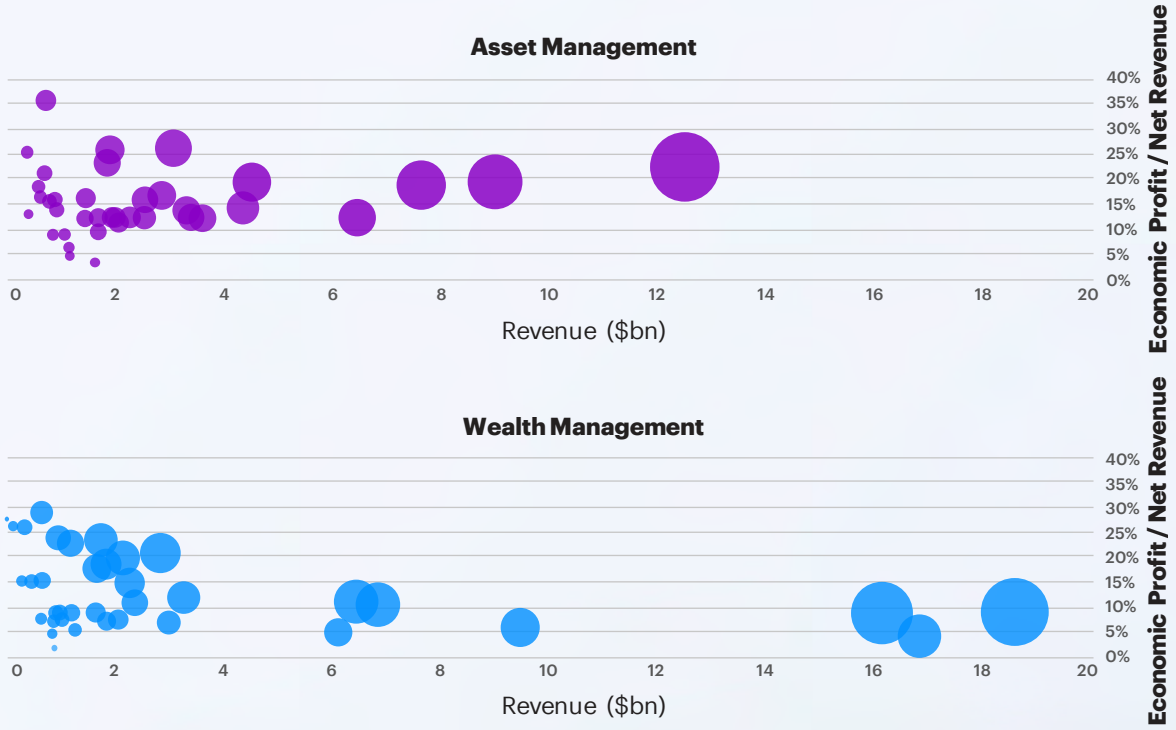
The interdealer brokerage business—the most traditional arm of the market infrastructure subsector—barely treads water on a pre-tax basis. On an economic profit level, most interdealer brokerages are actually destroying shareholder value. The nimblest players in this sector long ago moved away from pure brokerage models to running platforms. As elsewhere in the new digital economy, this approach has turned out to be much more lucrative.

Asset and wealth management

Asset and wealth management are two of the most profitable subsegments of the industry. They even seem to defy economic logic. While structurally these segments should be a scale game, in practice they are not. Our analysis has found that even the biggest asset managers create the same economic profit margin as some of their mid-sized peers (see figure 4). The same pattern can be observed in wealth management. This is absolutely counterintuitive, but it is an economic fact.

Nonetheless, we believe that all buy-side players, including asset and wealth managers, will need to truly industrialize their businesses and capture latent scale opportunities going forward to remain successful.

Figure 4: FY2017 economic profit dynamics – Asset Management and Wealth Management



Note: Bubble size indicates size of economic profit

Source: Company Financial Statements; Accenture Research

This analysis describes the status quo in capital markets today. But what are the driving forces that will shape the industry going forward? And, more importantly, what effects will they have on different market segments and their respective business models?

A catalyst for change: challenging the status quo

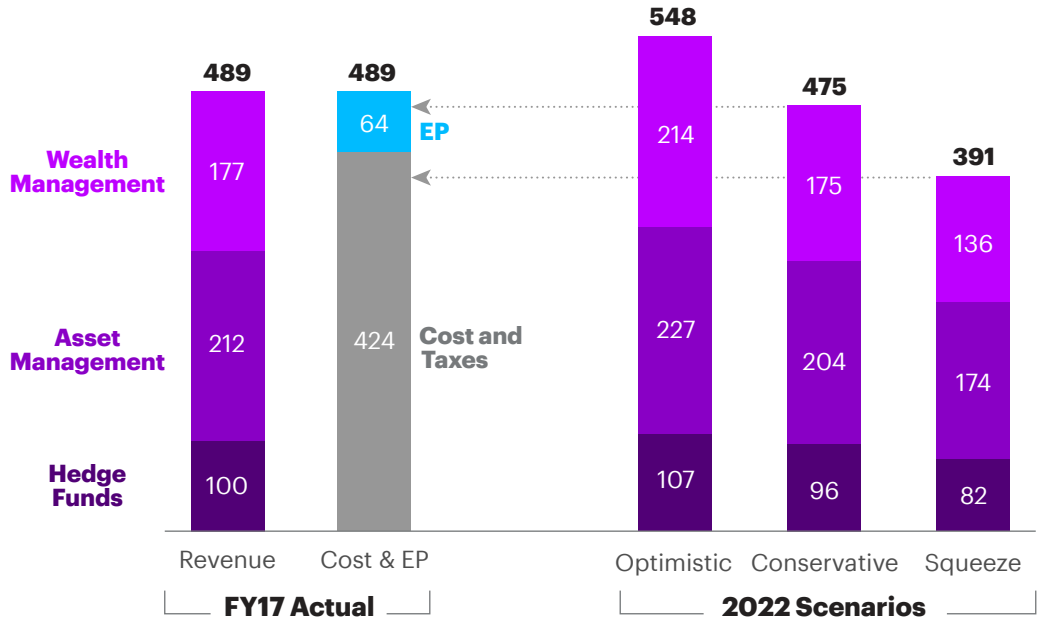
Shareholders, regulators and customers are exerting growing pressure on capital markets firms to deliver higher value at lower cost. Such pressure has been commonplace for sell-side and selected market infrastructure players in recent years. As catalysts for change emerge on all fronts, we see this development now expanding to include buy-side players as well. Every capital markets firm should expect to have its business and economic models challenged.

On the buy-side, there are numerous potential vectors for change that will challenge existing business and economic models. These include what companies are managing for (such as moves towards “100-year life” pension solutions), how they are managing (with continued shifts to cheaper core beta and quantitative smart beta solutions challenging active managers), and how they are being compensated (with continued fee pressure and first movers introducing zero-fee index funds).

That all translates into a single theme that will continue to dominate the industry: fee pressure. It is thus very likely that this fee contraction will offset —or even overcompensate—any future growth in assets under management (AUM) and will drive down economic profit. We believe that all buy-side players should prepare for a squeeze scenario in which volume will likely grow but margins will continue to shrink (see figure 5). The only questions are by how much and how quickly this will happen in the period leading up to 2022. This has four strategic implications for the industry as a whole:

- Continued growth opportunities for lower-cost and higher-value core services along with smart beta strategies.
- A much smaller cadre of managers being able to thrive on creating sustained “true alpha”.
- A stepped-up focus on efficiency gains and end-to-end industrialization, including truly capturing scale.
- An expectation that buy-side players will put pressure on their suppliers —market infrastructure and some sell-side players—for more efficiency, opening-up opportunities for market infrastructure and sell-side innovators to support the buy-side on their industrialization journey (much as automotive suppliers exerted substantial price pressure on their supply chains when they faced a similar market situation).

Figure 5: Buy-side revenue scenarios to 2022 – $bn



Estimated Margin (bps)				
Wealth Management	61	55	45	35
Asset Management	25	22	20	17
Hedge Funds	280	230	210	180

Assuming global AUM growth around 5% CAGR

Note: Due to rounding, some totals may not correspond with the sum of the separate figures

Source: Accenture Research

An unsustainable cost structure, prone to disruption

Taking a broader view, our analysis highlights numerous angles to change this picture across the industry. These include adapting underlying operating models, employing different strategies and translating scale into profit by cutting organizational complexity.

Indeed, organizational complexity represents a massive cost for the industry. Across all functions and industry sectors, the capital markets industry incurs costs of roughly $700 billion each year (including the cost of capital). This is due to industry structures that were built up over decades and born in a time of "lucrative inefficiency" in which there was little incentive to challenge or change the status quo. When growth was king, quick responses were required, and scalability was often only an afterthought. Regulatory requirements that followed industry developments have often made matters worse, further contributing to an inefficient cost structure in some areas.

Figure 6: E2E industry cost structure FY2017 (excluding illiquids) – $bn

Categories	Top IBs and CIBs	Other IBs and CIBs	Market Infrastructure	Wealth Managers & Private Banks	Asset Managers	Hedge Funds	Total
Investor Distribution	23	9	0	32	41	7	111
Investment Product Manufacturing	6	2	1	37	37	26	111
Corporate Advisory and Financing ECM and DCM	27	20	1	0	0	0	47
Trade Execution / Clearing / Risk Management	53	35	19	23	20	17	167
Asset Servicing / Settlements	25	13	27	19	33	14	131
Legal, Risk and Compliance	27	19	10	21	14	5	96
Overhead	6	6	5	6	12	3	39
Total (Operating Cost + Capital Cost)	**167**	**103**	**62**	**139**	**158**	**72**	**702**
Share of Core Value Added	**65%**	**52%**	**74%**	**23%**	**50%**	**37%**	**49%**

Sector core value added

Note: Includes operating cost and capital charges (difference to Figure 1 is due to exclusion of illiquids); due to rounding, some totals may not correspond with the sum of the separate figures

Source: Company Financial Statements; Accenture Research; Tricumen Data

Overall, core business accounts for a surprisingly small fraction of cost bases. This contrasts with other industries, such as the way a modern car manufacturer would focus its cost base on the true value added, while outsourcing supporting functions. Asset managers' core functions, for example, are manufacturing and distributing investment products. Yet only half of their cost base is aligned to these functions, with asset servicing, compliance and trade execution down the chain making up the other half. Even the top IB/CIBs that have invested strongly in restructuring their businesses still devote substantial parts of their cost base to non-core areas.

While many single players are working hard to reduce the cost base, some areas, like investment banking, are reaching the limit of what can be done individually. On an industry level, costs add up. Sometimes, industry-wide solutions or utilities might have a bigger leverage in further reducing the cost base.

For example, asset servicing costs the industry more than $130 billion. Yet specialized market infrastructure players (custodians and exchange groups) account for less than 20 percent of that cost. This means that 80 percent of the cost structure sits within IB/CIBs, asset managers, wealth managers and other players as they keep trying to reconcile different views on the same underlying information on holdings and trades. We believe this is highly inefficient. The industry as a whole is ripe for change, with digital being a key enabler.

The pressure to effect this change is building. The $1 trillion in revenue the industry is generating effectively means $1 trillion taken away from corporates and investors. Considered over the accumulation phase of an average pension plan, this could easily equate to the cost of a luxury car taken out of every pensioner's pocket.

And while some sectors are still, on average, creating shareholder value under a model of "lucrative efficiency", we believe change is heading their way too. Since most economic profit in the industry is concentrated on the buy-side, we need to watch developments there closely. Indeed, it is not a question of "if" buy-side economic profit will structurally shrink, but "when"—and how quickly the winners will be able to create new economic profit pools, just as the winners in investment banking have done.

DIGITAL DISRUPTION

Reshaping Capital Markets and Value Chains: 2022 and Beyond

How will capital markets be reshaped in the coming years? In the period through 2022, we see three major trends disrupting the industry as a whole, namely a reshaping "core", game-changing technologies and new digital value chains.

The core of the financial market system—where prices are set, liquidity is provisioned, and assets and financial contracts are serviced—is undergoing a fundamental transformation. In large part, this is due to advances in technology. We see distributed ledgers and artificial intelligence as the main drivers of disruption, leading to a digital transformation of value chains. This transformation will not only encompass electronic trading, but the entire industry.

Combined, these three trends will establish a new environment. Today's firms will need to recalibrate their strategies and overcome fundamental challenges to succeed in the capital markets industry of tomorrow.

A reshaping core

Three-quarters of all capital markets revenue is created by intermediaries —asset managers, wealth managers and corporate banks—who connect clients and provide access to the financial markets core (see figure 7). The core itself is mainly made up of two types of players: trading venues and IB/CIBs (providing liquidity and setting prices) and market infrastructure players (servicing financial assets and derivatives contracts).

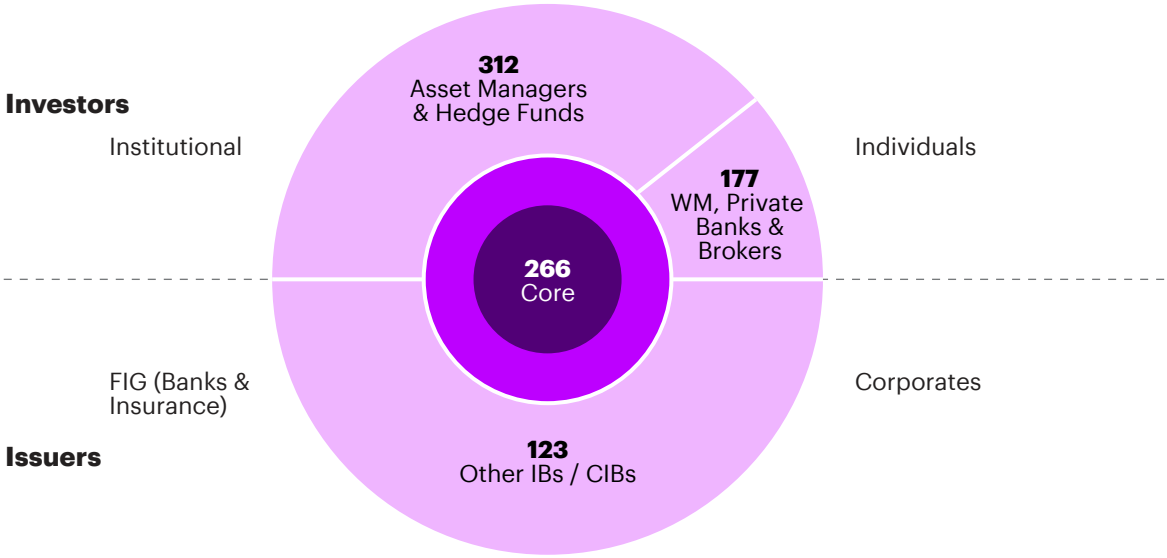
We believe that the balance between these different players has started to shift, and that this will accelerate going forward for three reasons (see figure 8):

1. Quantitative easing has fundamentally changed secondary trading over the last decade. A substantial share of primary issuance has been bought up by central banks.

2. This has led in turn to a de-risking and lower liquidity provision of IB/CIBs. The inventory of fixed income dealers has fallen dramatically in recent years. Derivatives have moved towards a cleared model—with a notable exception being foreign exchange (FX).

3. This leads us to the third reason for a balance shift: the tech-driven move away from pure over-the-counter (OTC) models towards an all-to-all model. In this new reality, investors dominate, and technology-driven players connect and enhance liquidity across price-discovering venues.

Figure 7: Core vs. intermediary revenue breakdown FY2017 – $bn



Core (Price Setters)

Exchanges and other central limit order book platforms and top IB/CIB players trading with a limited set of professional members and counterparties

Trading Venues	**Top IB/CIBs**	**Asset Servicing**
Central Limit Order Books	Integrated trading and sales	Not price setters but key conduits
43	187	36

Intermediaries (Price Takers)

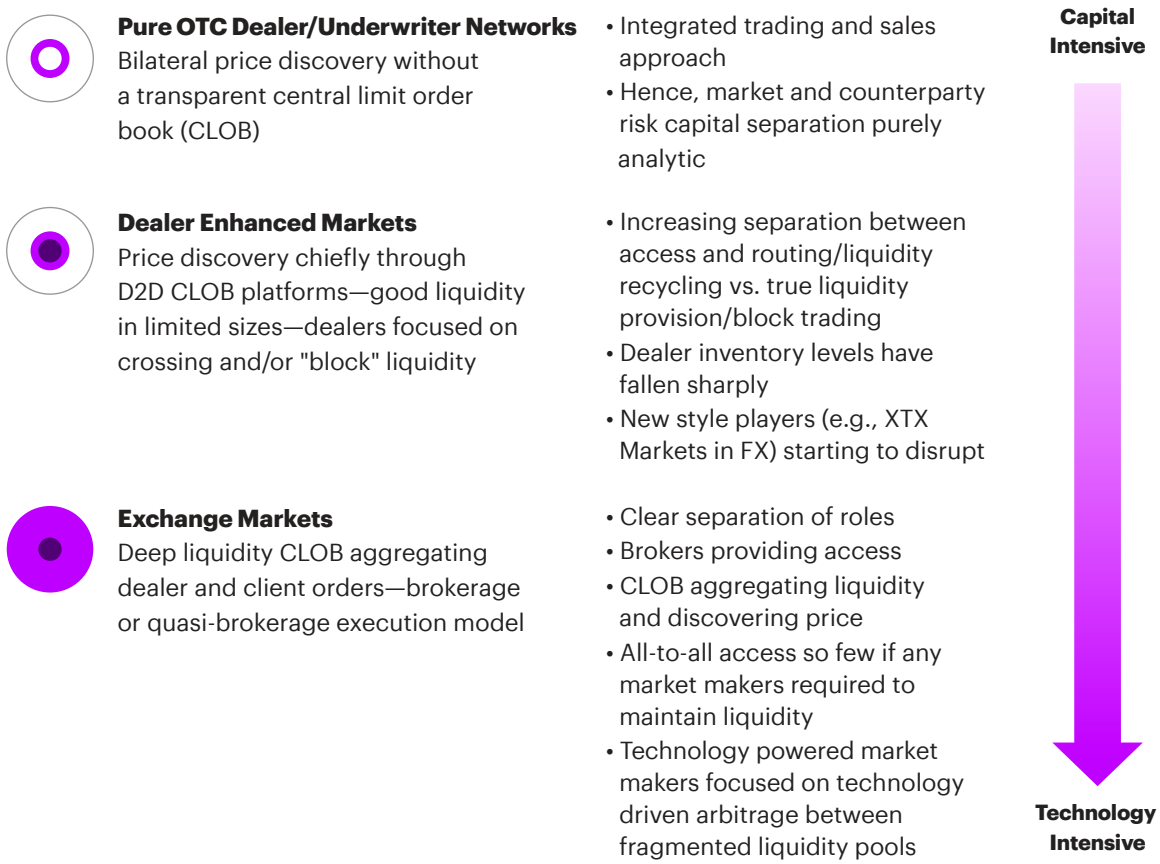
Providing access to the core for the broader set of issuers and investors

Asset Managers & Hedge Funds	**Private Banks, Wealth Managers & Brokers**	**Corporate Banks & Regional CIBs**
312	177	123

Note: Due to rounding, some totals may not correspond with the sum of the separate figures; total revenue of $878 bn excludes illiquid alternatives

Source: Company Financial Statements; Accenture Research; Tricumen

Figure 8: Core market structure archetypes



Source: Accenture Research

We observe this shift in both primary and secondary markets. In primary markets, initial coin offerings are picking up pace as an alternative funding vehicle. In coming to market as a direct listing, Spotify has demonstrated that a large-scale IPO is possible with a completely different set of roles being taken on by the banks and the firm.[2]

While the Spotify IPO has been a unique event so far, we foresee a much broader proliferation in the future. This would fundamentally transform debt and equity primary markets, just as secondary equity markets have already been changed. Those markets have gone through a fundamental transformation, moving from a traditional specialist model, through a fragmented liquidity model, to a technology-driven model where liquidity is primarily provisioned by the buy-side. Hence, new proprietary traders such as Virtu focus on arbitraging between liquidity venues and, as such, keep pricing in sync.

We see different plays, again technology-driven, in the foreign exchange space. Consider XTX, which has seemingly appeared from nowhere to become the third-largest liquidity provider on the Euromoney FX ranking —based on a technology-driven approach and limited balance sheet.[3] This illustrates the ongoing transformation from the OTC model to dealer-enhanced model, in which exchanges and dealer-to-dealer (D2D) trading venues discover prices for small tickets and dealers enhance liquidity for larger trades where required. We see that enhancing liquidity has become less and less important in many markets, admittedly driven in no small part by quantitative easing.

Technology has also driven a proliferation of trading platforms, both in the D2D space and the dealer-to-client (D2C) space, in which they provide more efficient access through request-for-quotes and streaming quotes. Three different types of players have already invested heavily in these trading platforms, namely exchange groups, data information players (such as Bloomberg and Reuters), and select inter-dealer brokers (e.g. NEX Group). Indeed, NEX Group's acquisition by CME Group suggests an interesting trend. We expect the market structure to evolve further, with FX possibly following an equities model and with a fundamental transformation in store for other asset classes.

As a potentially more efficient market structure competes with incumbents' interests in preserving the status quo, very different outcomes are possible. But, sooner or later, the paradigm will shift from lucrative inefficiency to digital innovation and disruption.

Technology game-changers

Technology is the fundamental driving force behind most of the changes in the capital markets industry. We see two technologies in particular with the potential to profoundly transform capital markets over the next few years: artificial intelligence (AI) and distributed ledger technology (DLT). Of the two, AI will probably impact the industry first. But DLT will likely cause larger changes over the long term (and its true significance will therefore take more time to unfold).

In capital markets today, the influence of AI can already be observed in alpha generation, alpha extraction and product generation. Indeed, quantitative hedge funds are using AI at scale. Other firms, including some fintechs, are pursuing its use in fields like signal mining.

But AI's influence on capital markets won't stop there. It will soon be used in knowledge-intensive tasks, such as research and risk analysis, and to automate the IB deal-making process. It also has powerful use cases relating to the monetization of data and services. Exchange and data groups are pursuing this vigorously, but we see even more potential in this area. Developments like data-driven client targeting and management, for instance, are still only in their infancy.

Likewise, nearly every player in the capital markets industry is experimenting with DLT or blockchain infrastructure. It has so many potential applications in the industry, from issuance (putting deal processes on a distributed ledger, redefining syndicates, and so on) to asset and wealth management (where it could be used to update reference data and create fractional and digital asset vehicles). Blockchain also has many uses in trading and market infrastructure.

A few of these use cases can already be seen in the exchange sector. The Australian and Toronto Stock Exchanges are using blockchain to replace legacy settlement systems, and the DTCC is rebuilding its credit default swaps processing platform with blockchain.[4] The Tel Aviv Stock Exchange is working on putting collateral management on a ledger.[5] And other exchanges are experimenting with tokenized assets beyond crypto.[6]

We believe that both AI and DLT have the potential to grow substantially as we head towards 2022 and beyond. Their use cases could extend not only to optimizing and mutualizing current processes, but also to unlocking value in existing data and assets and allowing the industry to target completely new revenue streams.

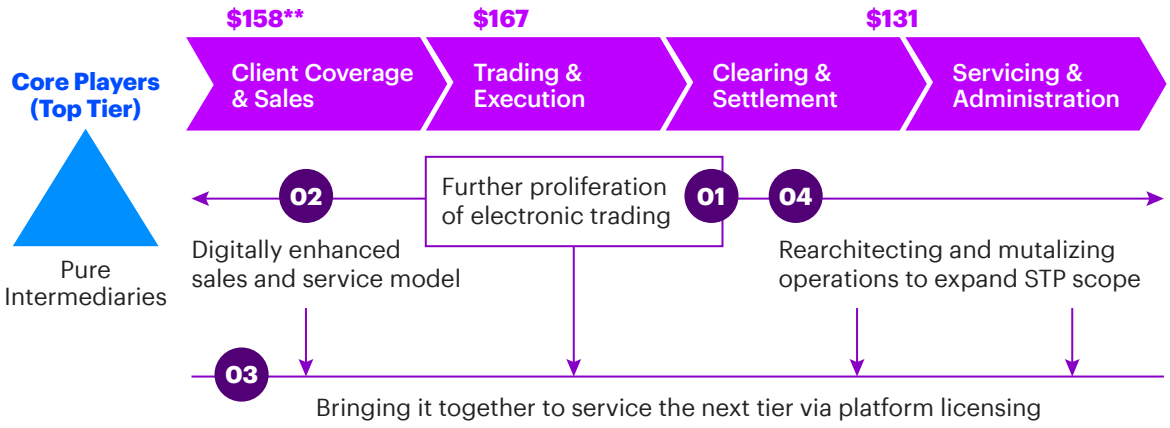
Digital value chains

Many people say that capital markets value chains have already been "digitized" over the last two decades. And with justification: the industry has been focused on electronic trading and the automation of post-trade processes for a long time. But we still believe that new digital technologies can transform and disrupt current industry value chains on an even more fundamental level, particularly with respect to the major costs of manual operations outside of automatic settlement and electronic trading (see figure 9).

These costs are particularly prevalent at the front end, towards client coverage and sales, and in broader applications throughout the universe of intermediaries and corporate investment banking players further down the value chain.

In electronic trading, substantial progress has already been made. Our analysis has found that many asset classes are now more than 50 percent electronic,

Figure 9: Core value chain cost base* and digitization thrusts – $bn



* Partial core value chain cost base excluding investment product manufacturing, legal/risk/compliance and corporate functions

** Investor distribution and corporate sales, finance and advisory

Source: Accenture Research

predominantly in D2C channels leveraging the traditional OTC model. In the FX market especially, price discovery has largely moved to D2D platforms. We expect this development to continue, even beyond the investments already made by leading IBs in the connectivity of single- and multi-dealer platforms.

However, we predict that some of these banks will have to rethink their efforts. For example, some players connect to over 600 different pieces of market infrastructure today. These firms have started to question the value of existing and further investments both in the multi- and single-dealer platform space.

As another example, electronic trading platforms have focused on capturing transactions digitally, and moving both order-taking and service functions to self-service. Yet there is still a substantial human component involved. Collectively, our analysis shows that the top asset managers still employ more than 35,000 sales and service people, and an equally large army of sales and service staff is employed by top investment banks. This will surely change in the future with new digital developments.

There is also substantial room to grow in user experience design. We've found that some industry players report a 30 percent uptake in FX volume after having redesigned their client experiences. AI can help reveal the true profitability of a client and allow a financial institution to customize its service model, differentiating it based on economic factors. AI can furthermore be used to develop the next generation of client relationship management and digital sales tools to track the metrics that truly matter. This offers huge potential to the industry.

These developments have mostly been unfolding at the biggest IBs and CIBs. Medium-sized and smaller players have usually focused their electronic trading capabilities on corporate portals and FX. They now need to play catch-up—especially the smaller players. Thousands of corporate banks are providing FX and interest rate management solutions. Many of these banks still employ very costly trading platforms and are now looking for more streamlined out-of-the-box solutions allowing them more efficient access to the core.

This opens up a substantial platform opportunity around licensing existing risk management platforms. Blackrock, for example, does this very successfully with the Aladdin platform in the asset management space.[7] Another example is State Street's acquisition of Charles River.[8] Other major IBs and CIBs are contemplating—and in some cases launching—similar moves to offer their risk and client management platforms to the market.[9] We believe there is a bigger play in developing white-label product-as-a-service client platforms for smaller players.

While massive investments have been made in the trade and post-trade automation chains, our research has found that about $150 billion of industry costs in this area are "pure" complexity costs that could be reduced significantly (see figure 10). The two key drivers of these costs are, firstly, redundancy, which stems from the lack of a "golden" source of truth, and, secondly, subscale operations for many players.

A combination of DLT and industry utilities can substantially reduce these costs, potentially close to zero. The timing of this reduction will depend on when DLT becomes the industry backbone. Utilities will play a significant role in solving the subscale problem. In fact, according to our research, more than $100 billion in cost savings are possible by leveraging DLT and utilities. However, this would require a well thought-through implementation of both DLT strategies and fit-for-purpose utilities that allow clients to capture a larger share of their back-office value chain.

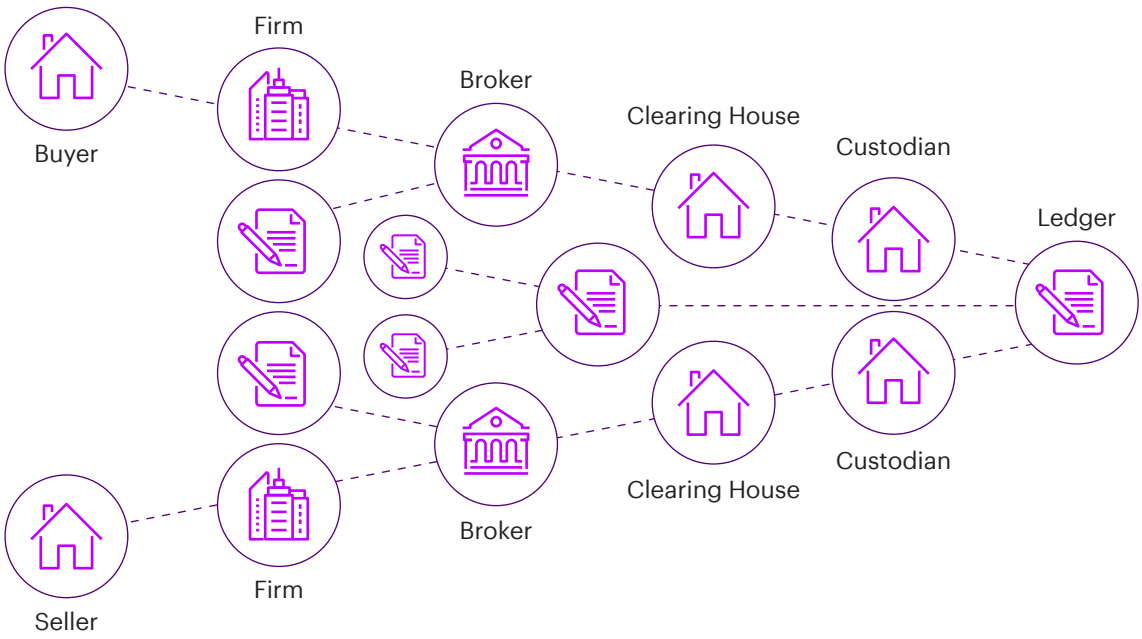
While many people might expect that capital markets will normalize to look similar to the pre-financial crisis scenario, we believe that the picture for 2022 and beyond will be fundamentally different. Quantitative easing will have tapered off by that point. The US Federal Reserve is already on its way to becoming a net seller of securities. The European Central Bank and the Bank of Japan will likely follow soon.

The strategic implications of tapering, combined with the reshaping core and digital value chains as well as evolving technology in the industry, are profound. Revenue opportunities will shift between market counterparties,

open up growth and consolidation opportunities for infrastructure players, and force institutions to reshape their IB, CIB and trading models.

Every single player in the industry will need to take a fresh view of their market segment, understand how volume and margins might develop, track key interactions in the marketplace, and outline requirements for success around the business and operating models of their trading platforms. To create a strategy to win, firms will also need to understand what is needed to stay competitive, decide whether the game is a ticket-to-play or a technology arms race, and focus their limited resources accordingly.

Figure 10: Industry trade and post-trade workflow and cost structure – $bn



	E2E Industry	Complexity Cost	
Function	**Cost**	**Cost**	**Share**
Trade Execution / Clearing Risk Management	167	30	15-20%
Asset Servicing / Settlement	131	100	~80%
Legal, Risk & Compliance	96	25	~25%
Other	308	-	
	702	**155**	**~20%**

Two Drivers of Complexity

Redundancy: Duplication of functions and reconciliations due to the lack of a universal source of truth

Subscale operation: Lack of cost mutualization and scale benefits

Source: Company Financial Statements; Accenture Research

STRATEGIC RESPONSES

Top Opportunities and Challenges

In forming our 2022 vision of capital markets, we held a series of in-depth conversations with executives at leading firms across the industry. A set of common themes have emerged from these discussions as front-of-mind priorities for investment and growth initiatives.

These themes have now been summarized in 17 strategic considerations for management teams, covering the top challenges and opportunities for 2022 and beyond. At the highest level, they can be considered within three key questions:

SHAPING the new

Shaping the new: what does the new operating environment look like, and what are the main catalysts for change?

OPERATING in the new

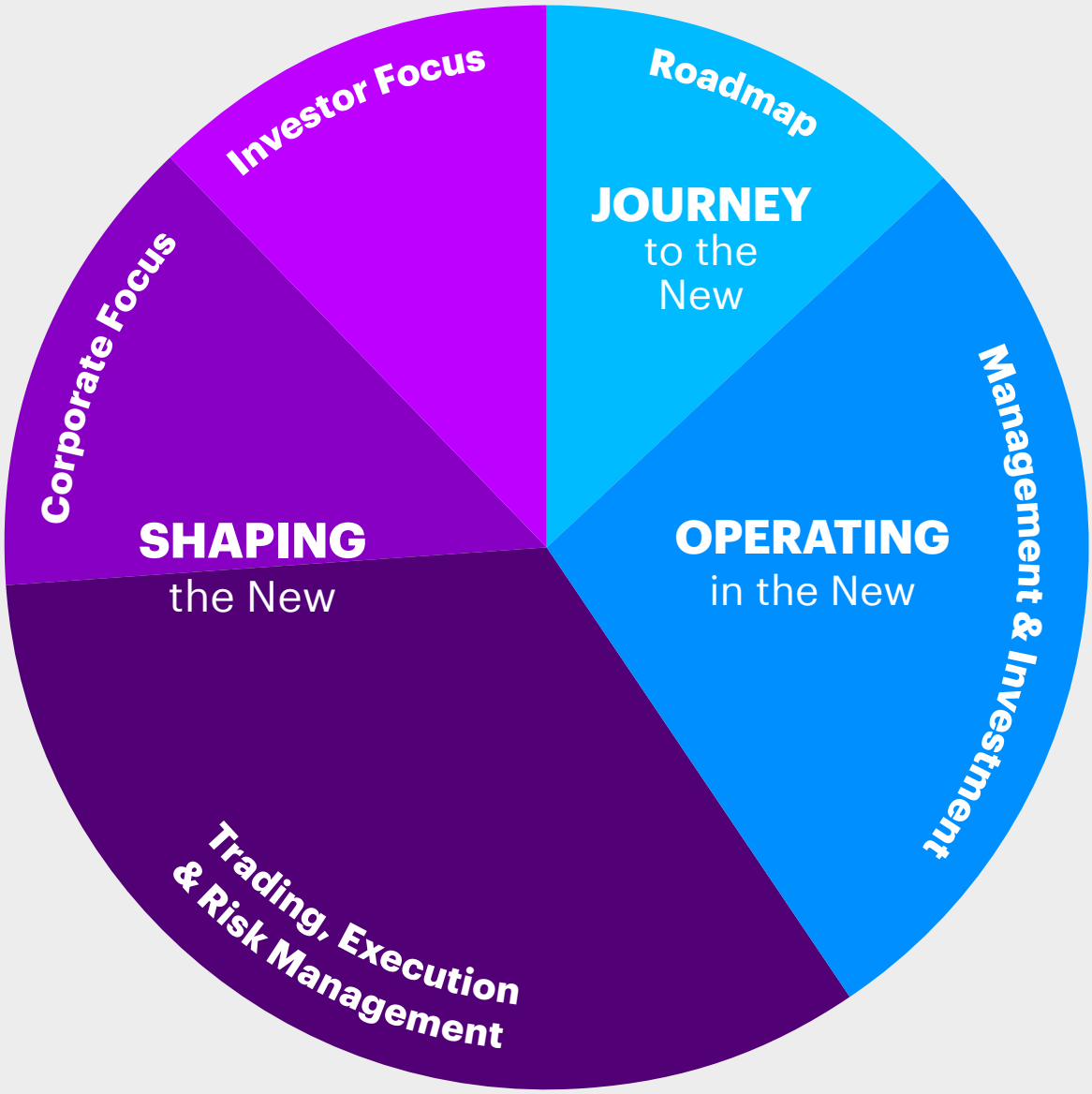
Operating in the new: how does a company need to change to successfully operate in the new digital economy?

JOURNEY to the new

Journey to the new: how can an organization get from A to B given resource constraints and pressures on profitability?

This part of the paper now explores each of these 17 opportunities and challenges in turn (see figure 11).

Figure 11: Top challenges in capital markets



Source: Accenture Research

1. **Transforming investment products, distribution and servicing**
   Recreating a $200+ billion value chain in a digital world

2. **AI-enabled transformation of investment management**
   Radically reducing the cost of portfolio construction and focus on true alpha

3. **Taking capital markets financing into the new**
   Industrializing the issuance process and broadening investor reach

4. **Taking corporate treasury services into the digital age**
   Serving corporates at digital value and cost

5. **From electronic trading to digital sales and service**
   Holistic transformation of the client front end

6. **Rebalancing trading focus and operating model**
   Liquidity provision, internalization and trading platforms in the new reality

7. **Capturing the risk management platform opportunity**
   Enabling the next tiers with market infrastructure

8. **Boosting post-trade efficiency through DLT and utilities**
   Transforming legacy settlement and servicing processes into new-style market infrastructure

9. **Transforming the $100 billion risk and compliance function**
   Taking the three lines of defense into the digital age

10. **Hiring and managing the new workforce**
    Aligning the HR and management models to new skill profiles and team structures

11. **Data-driven management**
    Turning dark data into business impact

12. **Systematic approaches to "stractical" technology investment**
    Leveraging fintech investment into business impact

13. **Physical footprint in the new**
    Location strategy in a digitizing and regionalizing world

14. **Building flexible and resilient infrastructure**
    Combining cloud and cyber technology to build a modern infrastructure

15. **Legacy as part of your journey to the new**
    Pivoting to the new while dealing with the old

16. **Translating scale/M&A into competitive advantage**
    Fit-for-purpose operating models for industry consolidators

17. **Scaling down profitably**
    The journey from the core

SHAPING the new

1 Transforming investment products, distribution and servicing: Recreating a $200+ billion value chain in a digital world

The capital markets industry dedicates a massive $200+ billion cost base to developing, distributing, managing and servicing investment solutions to institutional and individual investors. This massive cost results from both the industry's failure to translate size into economies of scale within its subsectors, and from an industry value chain that duplicates activities between and within sell-side, buy-side and market infrastructure players.

Shrinking margins, along with a potential squeeze scenario on the buy-side in particular, will lead to a fight for relevance and value. At the same time, barriers between subsectors will start to break down.

Consolidation within traditional business and operating models won't be enough. The industry needs to re-invent and industrialize its underlying value chain. This includes taking a data-driven approach to assessing profitable franchise coverage, re-evaluating supplier and distributor estates for profitability and efficiency, as well as creating future-ready digital sales and service platforms.

2 AI-enabled transformation of investment management: Radically reducing the cost of portfolio construction and focus on true alpha

The industry collectively spends approximately $110 billion in chasing alpha and providing access to beta. Cost versus value has gotten out of sync. Although many players claim that they truly try to produce alpha, few consistently succeed in doing so. The perceived lack of value for investors in once-core product sets is driving a flight to passive management, a movement to the cheapest quintile of products and massive price competition among the largest providers.

AI technologies can help buy-side firms enhance their value proposition by radically reducing the cost-to-serve of commodity products, adding unique "smart" functionality to core products or tapping into previously inaccessible signals in the pursuit of pure alpha. Sell-side and market infrastructure firms should reconsider their service lines in an investment environment that blends heavy quantitative and niche qualitative data to inform investment insight.

3 Taking capital markets financing into the new: Industrializing the issuance process and broadening investor reach

Capital markets financing has thrived over the last decade. Equity and debt capital markets volumes have recovered to pre-crisis levels and contribute substantially to the top line of IBs and CIBs.

There is even more potential to grow, as Europe slowly shifts from bank lending to bond issuance. But issuers need to be clear on their value proposition, particularly as many high-growth private businesses continue their move to public markets. Moving into a post-quantitative-easing and digital world, things will start to change again. While assets were king during quantitative easing, its reversal will make investors more selective, balance lenders more interested in distribution, and capital markets players work harder on structuring and placing deals.

In equity markets, the Spotify IPO has proven the possibility of large-scale direct issuance. Meanwhile, initial coin offerings and crowdfunding platforms demonstrate nascent alternative equity financing channels.

On the debt side, platform lenders are expanding their marketplaces to include small and medium-sized enterprises and institutional investors. CIBs need to reinvent their equity, debt and loan capital markets financing businesses both by digitizing deal processes for lower cost and by creating new connections with alternative financing platforms and distributed ledgers. The latter will allow the revival of originate-to-sell and securitization models. It will also open new trading opportunities on tokenized asset classes (for example, trade assets on DLT) across asset management, IB/CIB and market infrastructure platforms.

4 Taking corporate treasury services into the digital age: Serving corporates at digital value and cost

Corporate treasury sales are a major profit driver for both top- and next-tier CIBs. And, while many top CIBs have already integrated market capabilities across the whole spectrum of transaction services (that is, payments and cash management, trade and receivables financing, issuer services), most of their platforms still have significant room for growth in terms of client experience (especially on an operational level) and end-to-end servicing.

We've found that hundreds of CIBs and corporate banks—accounting for about 40 percent of overall global markets revenues—along with the majority of corporate businesses have yet to catch up on digital capabilities and integration. Overall, the industry has only started scratching the surface of data-driven client targeting and advice, for instance.

Digital proliferation will further blur the boundaries between market segments, allowing, for example, top-tier players to serve a broader range of corporates at competitive cost. But it will also require firms to experiment with new business and operating models, such as platform plays and prime brokerage-like arrangements separating product and credit. This, in turn, will require CIBs of different sizes to redefine their positioning on where to compete and where to collaborate. It will also open platform opportunities for top investment banks and market infrastructure players.

5 From electronic trading to digital sales and service: Holistic transformation of the client front end

Top-tier firms have driven electronic trading for more than a decade, pouring investments into both connectivity for competing multi-dealer platforms (MDPs) and proprietary single-dealer platforms (SDPs). They have also streamlined their trading and sales teams. But they have effectively been running just to stand still, as front- and middle-office productivity has stagnated. Furthermore, a lack of digitization of client management and operational processes means that firms are leaving money on the table through lost sales and operational inefficiency.

Players need to develop truly digital sales and service models. This should cover everything from advanced data-intensive digital marketing techniques to informed sales and client management and an automation-heavy internal middle office estate. It should also include optimized intra-and inter-firm workflows through common industry platforms and standards.

6 Rebalancing trading focus and operating model: Liquidity provision, internalization and trading platforms in the new reality

Despite significant automation, the industry still dedicates almost $170 billion to trading execution, clearing and risk management. On the one hand, routine trading processes have been automated, emptying formerly busy trading rooms and replacing groups of traders with a single trading technologist. On the other hand, complexity has increased, with liquidity fragmenting across multiple exchanges, electronic communications networks/alternative trading systems, and D2D, as well as certain D2C platforms and central counterparties.

At the same time, markets flooded by quantitative easing operated with much lower levels of dealer liquidity, with superior technology being substituted for large balance sheets in some cases. Changes to client flows post quantitative easing, further shifts in market structure, and the tokenization of existing and new asset classes will require firms to recalibrate their trading footprints.

Sell-side players will need to refocus their trading strategy and make a call on where to deploy liquidity and capital versus order aggregation and crossing, as well as where to build businesses around captive group flows. This technology-driven recalibration, and subsequent realignment of operating models and platforms, presents opportunities for infrastructure players able to extend and integrate all-to-all exchange offerings with D2D platforms and risk management services.

7 Capturing the risk management platform opportunity: Enabling the next tiers with market infrastructure

Risk management platforms are crucial to the success of any global markets or asset-management operations. Yet most players are operating a fragmented set of sub-platforms for each asset class. They also face escalating running costs stemming from outdated custom-built solutions and duplication across functional silos.

We've found only a few large IB/CIB players, mostly based in the US, that seem to have solved this conundrum and invested in a truly integrated cross-asset-class risk management platform. These players are already enjoying a significant economic advantage through cost efficiency and the monetization of technical assets.

Some top-tier players have also been able to turn their trading infrastructure into platform businesses for consumption by the next tiers of non-competing players. To take advantage of such an opportunity, firms will need to truly understand their prospective customers, move beyond white labelling, identify how to decouple the technical asset from the core estate, and build a robust commercial and support model befitting a true "technology company".

8 Boosting post-trade efficiency through DLT and utilities: Transforming legacy settlement and servicing processes into new-style market infrastructure

The industry spends $133 billion on post-trade settlement and servicing, driven by stubbornly high levels of inter- and intra-firm reconciliation, a lack of operational scale and an archaic and overly complex asset-servicing stack. Many players feel they are getting close to "maxing out" the efficiency gains they can realize on their own, while regulation continues to raise the compliance bar (and potentially the cost base).

Common industry solutions could include an additional lever for boosting efficiency. While distributed ledgers will eventually redefine and simplify industry workflows, their scaled adoption is probably still some way off.

In the interim, industry utilities offer an opportunity for cost efficiencies while preparing the firm and industry for DLT workflows through the standardization of technologies and intra-party processes.

To truly capture this opportunity, market infrastructure and utility players need to tackle a broad enough cost base with a meaningful impact on a customer's bottom line. They must also solve the "chicken and egg" problem of driving industry participation and develop a clear view of their end-state role, considering both the technical possibilities of today and those of the future.

9 Transforming the $100 billion risk and compliance function: Taking the three lines of defense into the digital age

The capital markets industry spends almost $100 billion on legal risk and compliance each year. This reflects the large emphasis firms have placed on risk and compliance over the past decade, with plenty of resources being thrown at the problem—but often as a "band-aid" without a holistic view of the underlying operating model.

As a result, many of these processes are grossly inefficient today. In other words, disproportionate costs are being incurred considering the impact being achieved. Anti-money laundering (AML) and financial crime detection illustrate this point clearly. Roughly $10 billion is spent by the industry on AML compliance, and yet 99.9 percent of transactions flagged for (mostly manual) review turn out to be false positives.[10] What's more, industry observers estimate that only one percent of fraudulent transactions are actually stopped—causing massive damage and billions of dollars in fines each year.

It is time to move all three lines of defense into the digital age. This will require that capital markets players adopt new technology to offset both machine risk (cyberattacks, algorithmic breakdown in trading or risk models) and human risk (conduct and compliance monitoring, anti-phishing security). It will also require a move from reactive rule-making to forward-thinking change and safeguards, particularly around the emerging technology agenda.

The greater adoption of AI solutions requires an equally significant step-up in solution transparency. Firms need to avoid creating "black boxes" of layered business logic and early algorithmic trading and ensure they don't lose control over, or allow unhealthy biases into, their automated systems.

Other major challenges will also require collaboration, both across the sector (DLT adoption) and even across industry boundaries (cloud adoption). The industry should take inspiration from open banking regulation across the EU, particularly that within the UK's Open Banking Implementation Committee.

OPERATING in the new

10 Hiring and managing the new workforce: Aligning the HR and management models to new skill profiles and team structures

Capital markets workforces have changed dramatically over the last five years. The reduction of traditional "producers" in the front office has been supplemented with the introduction of business-focused technology talent.

In addition, "juniorization" has boosted the prevalence of the millennial workforce across the industry. This generation brings a markedly different outlook on the finance sector, big business, and the overall shape of a capital markets career. Today, firms in the capital markets industry are competing on different levels, and with different competitors, for top technical and business talent.

Many are already adopting radically different approaches to candidate targeting and selection, as well as ongoing employee management and progression. Preparing an organization for this shift requires firms to re-imagine both work and the workforce, understanding the enablers that create an organization that delivers mutual value for a new type of workforce and a new type of employee.

11 Data-driven management: Turning dark data into business impact

Running a capital markets business is all about data, analytics and fact-based insight. This is the modern bedrock of winning trades and portfolios. But it is not how most capital markets businesses are being developed strategically. Beliefs—and sometimes myths—have endured as cost bases, and their contributions to client and business value generally remain a mystery. Shedding light on this large pool of "dark data" has been tedious work and often limited in scope.

But, when a fact base is established, conclusions often come easily. Questions like "Are we really spending $100 million on this? Let's cut this down." can be asked—and answered. To do so, capital markets players need to leverage the rich data sets they operate on more systemically, both within their boundaries and in their ecosystems. This starts with the adoption of a data-driven mindset at a senior level. But it also involves the adoption of AI techniques like machine learning in the pursuit of data veracity, interoperability and clarity.

12 Systematic approaches to "stractical" technology investment: Leveraging fintech investment into business impact

Capital markets players already allocate a significant share of budget to innovation initiatives—an estimated $5 billion a year among the top 12 investment banks alone according to our research. Historically, this money has been focused on proprietary builds, even down to proprietary programming languages, developed and deployed behind high walls.

The pace and democratization of new technological advances have necessitated a more open stance, with firms actively embracing the fintech community of start-ups, accelerators, incubators and consortia. However, most firms' track records are anecdotal at best, with many displaying a lack of investment rigor, limited systematic utilization, and poor returns on new technology investment.

To address this issue, firms need to marry a tactical and strategic approach to technology investment, operating at two speeds across a broad portfolio of innovation initiatives. Crucially, this involves ruthlessly aligning innovation targets with concrete KPIs that reflect business strategy, while designing the correct operating model and environment that will foster innovation and push initiatives past "proof of concept" into scaled production.

13 Physical footprint in the new: Location strategy in a digitizing and regionalizing world

The ability to migrate capital, talent, technology and data to seamlessly service clients across boundaries has traditionally given global players a competitive advantage. While digital reach has transcended borders, recent national and regional policy—including Brexit—has pushed in the opposite direction, threatening to unsettle this advantage.

Firms should carefully consider what geographical infrastructure makes sense strategically for their business, understand the impact of this choice on data accessibility and cross-geography infrastructure redundancy, and use technology to both build local niche advantage and offset the reduction in free talent migration.

14 Building flexible and resilient infrastructure: Combining cloud and cyber technology to build a modern infrastructure

The demands on core infrastructure in capital markets firms have rarely been greater, with the business demanding flexibility and agility with no compromise on security in the face of new threats—all within the context of an evolving regulatory agenda.

According to new Accenture research, banks and capital markets firms are generally bullish about their current cyber-resilience capabilities.[11] Yet one in seven breach attempts against these organizations succeed—and almost half go undetected for a week or more. Moreover, opportunities for cybercrime will only rise as the industry digitalizes further. And, while firms are investing in new technologies to boost security, these generally lag behind investments in robotics, AI, the Internet of Things and DLT.

An improvement to the status quo is sorely needed. Firms should be leveraging new digital approaches to help reconcile their organizational needs for agile flexibility and resilience.

JOURNEY to the new

15 Legacy as part of your journey to the new: Pivoting to the new while dealing with the old

The industry has long been plagued by expensive-to-run, fragmented systems that are largely a hangover from years of M&A without a real business need for update or consolidation. While these layers provide a stable platform for processing high volumes of business-critical transactions, unpicking them without disrupting this flow is highly risky, preventing firms from taking advantage of more modern technologies and architectures.

However, the speed of change in the competitive environment has intensified the demand for faster and more responsive product and systems development. Yet this is often undeliverable with the legacy systems, architectures and change processes available to technology teams today.

Firms thus need to be able to operate at two different speeds, using the huge reserves of data insights and process knowledge in legacy systems to continue to optimize the old, while accelerating the development of the new IT. Doing so requires structural changes to governance, teams and technologies to allow functionally rich services and data in legacy systems to power new IT build, while technical debt is addressed (see Capital Markets Technology 2022).[12]

16 Translating scale/M&A into competitive advantage: Fit-for-purpose operating models for industry consolidators

Traditional wisdom has suggested that capital markets firms pursue economies of scale with full-service models, spanning geographies, asset classes and service lines. This has driven significant M&A activity across asset and wealth managers and asset-servicing exchange players. However, few providers are translating this scale effectively into profitability. Scaling assets and revenue has brought equal increases in complexity and cost. While some investment banking players with more than $20 billion in revenues are realizing benefits, many firms are not.

Operating models need to be redesigned for industry consolidators to truly realize the benefits of M&A. Strategies should be sector-specific, covering a variety of channel, niche and capability acquisitions where partnership models deliver insufficient synergy. However, it should be borne in mind that investment in digital technologies and organizational structures can help service more clients while keeping headcount and infrastructure under control.

17 Scaling down profitably: The journey from the core

Only a handful of the top full-service investment banks are operating profitably at scale. The remainder, predominantly those in Europe, are being squeezed. The challenge for most of these banks is not to break upwards, but to shift models into a lucrative niche. Doing so in a profitable way will not necessarily be straightforward, particularly since most recent cost downsizing has been matched and even exceeded by revenue downsizing. And more likely than not, a number of asset managers will soon face similar challenges.

Firms will thus need to assess both the profitability of their clients and the coherence of their business mix holistically. That analysis should then be used to inform what to off-board and what to unwind, as well as how the firm's economics must change to chase profitability at scale among a client base of smaller organizations.

We believe that the $1 trillion capital markets industry is entering an era of profound disruption. But it is also an era that provides significant opportunities for those who act fast as value pools are being redistributed. Nimble firms will be able to capture new profit opportunities in a "race for relevance"—and the industry's customers will benefit greatly. Tomorrow's leaders are already on their way, shaping, implementing, operating and mastering their journey to the new.

As a potentially more efficient market structure competes with incumbents' interests in preserving the status quo, very different outcomes are possible. But, sooner or later, the paradigm will shift from lucrative inefficiency to digital innovation and disruption.

This paper details our analysis of the capital markets industry through 2022. Over the coming months, we will continue to evolve and expand our thinking on the ideas it presents, especially the 17 challenges we've identified. Stay tuned for more coming soon.

CONTACTS

Michael Spellacy
Senior Managing Director and
Global Capital Markets Lead
michael.spellacy@accenture.com

Markus Boehme
Managing Director
markus.a.boehme@accenture.com

Julian Skan
Senior Managing Director
julian.skan@accenture.com

REFERENCES

1 Calculated as profit after standardized taxes and cost of equity

2 https://www.forbes.com/sites/rogeraitken/2018/04/03/will-spotifys-30b-nyse-non-ipo-direct-listing-hit-the-spot/

3 https://www.euromoney.com/article/b18f5s6kqtcr6m/euromoney-fx-survey-2018-results-released

4 https://www.finextra.com/blogposting/15373/the-blockchain-spheres-coming-up-together--part-1; https://www.reuters.com/article/us-blockchain-dtcc-cds-idUSKBN14T1EA

5 https://www.finextra.com/newsarticle/32121/tel-aviv-stock-exchange-plans-blockchain-securities-lending-platform

6 https://techcrunch.com/2018/08/28/security-tokens-will-be-coming-soon-to-an-exchange-near-you/

7 https://www.blackrock.com/aladdin/offerings/aladdin-overview

8 https://newsroom.statestreet.com/press-release/corporate/state-street-completes-acquisition-charles-river-development

9 https://www.risk.net/risk-management/2480360/jp-morgan-to-join-goldman-in-opening-up-risk-system

10 https://www.reuters.com/article/bc-finreg-laundering-detecting/anti-money-laundering-controls-failing-to-detect-terrorists-cartels-and-sanctioned-states-idUSKCN1GP2NV

11 https://www.accenture.com/us-en/insights/financial-services/2018-state-of-cyber-resilience#banking-and-capital-markets-2018-state-of-cyber-resilience

12 https://www.accenture.com/us-en/insight-technology-digital-capital-markets-2022

FOLLOW US

@AccentureCapMkt

www.linkedin.com/showcase/accenture_capital_markets/

Explore more Accenture Capital Markets Latest Thinking
www.accenture.com/CapitalMarkets

ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world's largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 459,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

DISCLAIMER

This document is produced by consultants at Accenture as general guidance. It is not intended to provide specific advice on your circumstances. If you require advice or further details on any matters referred to, please contact your Accenture representative. This document makes descriptive reference to trademarks that may be owned by others. The use of such trademarks herein is not an assertion of ownership of such trademarks by Accenture and is not intended to represent or imply the existence of an association between Accenture and the lawful owners of such trademarks.

181741