DIGITAL INVESTMENT BANKING

Beyond Single-Dealer Platforms
1. Challenging Times for Professional Investors
   1.1. Changing Imperatives 3
   1.2. Navigating the Regulatory Minefield 4
   1.3. e-Commerce Solutions are Built for the Banks, Not Their Clients 4
   1.4. Banks Make It Hard for Investors to Deal with Them 5

2. An Imperfect World
   2.1. Growing Electronification 5
   2.2. Changing Market Structure 5
   2.3. Limited Multi-asset Capabilities and Partial Coverage of the Lifecycle 6
   2.4. Disjointed Technology 6

3. Digital Investment Banking 7
   3.1. Putting the User in the Driving Seat 7
   3.2. Compliant Today and Ready for Tomorrow 7
   3.3. Universal Coverage 7
   3.4. No More Complexity 8

4. UBS Neo: Evolution or Revolution? 8
   4.1. Direct Access to UBS’s Intelligence 8
   4.2. Built for the New Market Paradigm 9
   4.3. Multi-asset and Cross Lifecycle 9
   4.4. Simplicity is the Ultimate Form of Sophistication 9

5. Conclusion 10

Executive Summary

- e-Commerce and electronic trading are profoundly transforming and continue to shape the relationship between professional investors and their service providers.

- Over the recent years, major new regulations have been changing the market structures of several asset classes, mainly in fixed income. Legislators and regulators are forcing a transition from a marketplace dominated by principal trading completed over voice to one where agency execution over electronic platforms is the standard.

- Single-bank platforms are now at a critical junction: SDPs can either keep on packing even more features into a limited form-factor, or they can focus on the user’s experience and productivity. Additionally, choice is shifting away from the banks and in favour of the Buyside. Investors have, more than ever, the power to decide where, with whom and how to trade while broker-dealers compete for “screen real estate”.

- UBS Neo brings together a series of business and technological innovations, each of them an evolution of existing best practices. However, until UBS, no other bank had combined these various breakthroughs into a holistic and coherent ensemble. This is what makes UBS Neo the first integrated Digital Investment Banking platform, going beyond the single-dealer platforms.
1. Challenging Times for Professional Investors

There are four distinct forces driving the ways Buyside firms select and transact with their Sellside counterparties. In essence, e-Commerce is the nexus point where those forces meet (see Figure 1).

In order of impact, these forces are:

1. **Investors’ requirements** – The Buyside must manage their investment processes holistically and against an ever-more complex commercial and compliance backdrop.

2. **Regulations** – From best execution to reforms to the OTC derivatives landscape, complying with regulatory mandates is becoming significantly more difficult without the proper tools.

3. **Sellsise capabilities** – Increased competition and the necessity to differentiate between themselves spur banks to multiply and develop their capabilities.

4. **Technology** – Consumer sector innovations in electronic interactions are making their way through to the corporate sphere, triggering a complete rethink of how users interact with their banks through electronic platforms.

1.1. Changing Imperatives

Buyside firms are under an unprecedented amount of pressure to manage investment portfolios more effectively. They must seek efficiencies everywhere they can by:

- rationalising their operations and investment teams;
- consolidating the number of counterparties they deal with;
- focusing on alpha by delegating the management of beta; and
- optimising their use of technology.

Fiduciary duties to achieve the best possible returns for their own clients mean Buyside firms are obliged to seek best execution from multiple sources. In GreySpark’s 2011 e-Commerce survey, 84% of the Buyside respondents declared that their choice of an execution destination was mostly predicated on price. This means that Buyside traders must actively monitor several banks’ platforms at one time. Consequently, the importance and value attached to each of the various stages of the investment cycle are shifting. Moreover, these priorities are different from one investor to another.

Figure 2 summarises the changing priorities across the trading lifecycle for three broad segments of investors. Based on over 200 individual responses to our annual e-Commerce surveys, the graphs plot the relative importance of the capabilities offered to investors via banking platforms. The capabilities of these platforms were assessed across four stages of trade lifecycle in 2012 and, as a forecast, for how they will perform over a three-year horizon. For funds managers, whether traditional or alternative, there is a clear shift away from execution and STP toward pre- and post-trade. Meanwhile, the findings show that wealth managers are becoming more mature and balanced across the board in their usage of single-bank platforms.
1.2. Navigating the Regulatory Minefield

Regulations, such as Basel III, the Dodd-Frank Act and EMIR are in the process of changing the structure of capital markets, and their impact will be felt in ways similar to the impact of RegNMS and MiFID. Legislators and regulators want to reduce the size of capital-heavy trading activities on the balance sheets of banks as well as increase the transparency of markets, sometimes at the detriment of liquidity. These changes mean that there will be less principal trading by banks, and they mean that more processes will be moved to electronic platforms – from price discovery to clearing and settlement. Professional investors are on the receiving end of these changes. According to GreySpark’s 2013 Trends in e-Commerce Survey, 77% of Buyside respondents have a negative outlook for the impact of regulations on the prices and liquidity that will be available to them in the future. In short, these Buyside investors are looking for help to guide them through the transformation.

1.3. e-Commerce Solutions are Built for the Banks, Not Their Clients

With very few exceptions, single-dealer and investment-banking e-trading platforms are built by adding user interfaces on top of the existing business models and operating processes of the Sellside. They are typically aligned with a given product or silo and clients are forced to learn how to ‘work’ the systems. Meanwhile, the Buyside is increasingly organised along business functions (investment management, trading, operations) looking at a multi-asset universe.

1.4. Banks Make It Hard for Investors to Deal with Them

Banks have found it difficult to coordinate their product development across product-silos. This led to the creation of a multitude of client interfaces. The significant number of active counterparties that any Buyside firm maintains makes the challenge even more acute (see Figure 3). As many as 75% of the Buyside firms claim that they suffer from ‘data overload’ – they know that all the market information they could need is available, but finding the relevant piece of data for any given task is too taxing to make it worth the effort.

![Figure 2: e-Commerce Priorities of the Buyside](image)

![Figure 3: The Jigsaw of Single-Bank Platforms](image)
2. An Imperfect World

e-Commerce now covers all asset classes, albeit in varying proportions. For example, a mere 10% of credit default swaps (CDS) are e-traded while, at the same time, more than 85% of listed futures and options are now bought and sold electronically. e-Commerce has also moved beyond trade execution to cover the whole investment lifecycle, from pre-trade to post-trade and STP with post-trade services replacing execution as the main entry point for the Buyside. Unsurprisingly, technology is the enabler of this trend.

2.1. Growing Electronification

As the rate of electronification increases across all asset classes, trade margins are dropping which, in turn, drives Buyside participation and further investment in e-Commerce capabilities. The four stages of this evolutionary process are summarised in Figure 4.

Stage I – Marginally electronic (less than 25% of tickets done electronically): Volumes, or the number of tickets, are low, but the ticket sizes are large. At this stage of e-Commerce development, banks are building demand by focusing on research, pre-trade functionality and analytics delivered through online platforms.

Stage II – Partially electronic (under half of the tickets are done electronically): Volumes are increasing in terms of the number of tickets, but the notional amount of each ticket is still rather large. The inter-dealer markets account for a large proportion of the trading done electronically. Single-dealer platforms are provided by banks to clients to allow them to tap into the liquidity maintained by the inter-broker-dealers.

Stage III – Mainly electronic (between 50% and 85% of the tickets done electronically): While volumes traded are rapidly increasing, ticket sizes are dropping proportionally. Only the largest tickets are dealt by voice. The delineation between the inter-dealer and dealer-to-client markets becomes less clear, and multi-dealer platforms take an increased share of the price discovery and execution flows.

Stage IV – Fully electronic (more than 85% of the tickets done electronically): The market moves to a ‘utility model’ wherein the focus shifts to the industrialisation of trading processes, cost optimisation and efficiency. In that stage, the primary focus is on client relationships, with banks competing fiercely for customer ‘mind share’ by trying to offer differentiated and value-added propositions.

With the increase in electronification, liquidity fragments and is available through different channels – from voice through to electronic platforms to all-to-all venues.

2.2. Changing Market Structure

New regulations are reshaping several segments of the market. But, contrary to the initial consensus, regulations like...
the US Dodd-Frank Act and the EU’s MiFIR and EMIR are, in fact, promoting the growth in e-Commerce through a renewed focus on transparency. Legislators are seeking to transfer approximately 90% of the market’s voice business and its associated manual interactions to electronic platforms with a mandate ranging from initial price discovery to clearing and settlement.

2.3. Limited Multi-asset Capabilities and Partial Coverage of the Lifecycle

The various product lines are at different stages of maturity; they also evolve at varying paces. As a consequence, single-bank platforms tend to focus on narrow product silos and to only cover a limited part of the lifecycle (see Figure 5).

Initially restricted to trade execution or research distribution, bank e-Commerce platforms are progressively widening their coverage of the trade lifecycle, encompassing:

- **Pre-trade** – Sales data, research and news, analytics, pricing, pre-trade risk, client sales and service and trade idea dissemination.
- **Execution** – Pricing, quote and order management, trade execution and TCA.
- **Straight-through processing** – Reporting, allocations, confirmations, clearing and settlement.
- **Post-trade** – Prime brokerage, custody services, asset servicing, funds administration, securities lending, collateral management and financing.

Banks are only slowly coming to terms with the realities of providing these capabilities to their clients, as highlighted in Figure 6.

2.4. Disjointed Technology

There are three established channels for e-Commerce:

- **Single-Bank Platforms** (such as FX trading screens or prime service portals).
- **Multi-Banks Platforms** (such as Tradeweb and Bloomberg for execution, or OMGEO CTM for allocations and confirmations).
- **Direct APIs** (such as the FIX protocol or SWIFT/ISO 20022).

A fourth channel of mobile services is emerging, but remains broadly untapped.

Buyside firms use all four of these channels on a daily basis. However, counterparty transactions via one channel are rarely accessible, let alone visible, through any of the other channels.
3. Digital Investment Banking

To address the needs of the investor community, the next generation of e-Commerce solutions – the integrated Digital Investment Banking platform – must be holistic, adaptable to varied needs and changing market structures while also designed to maximise user productivity.

3.1. Putting the User in the Driving Seat

Banks cannot predict all the possible use cases and journeys across their platforms. Instead, users should decide how they navigate and leverage the systems. In effect, what is expected is a network of interlinked functionality where the user can move from one task to the other without being constrained by pre-defined workflows. This functionality can be summarised into four key attributes:

- Intuitive and consistent user experience across all features and applications.
- Connected data across all product areas and functions.
- The ability to customise and rank the content that is presented by the platform.
- Multi-channel access and portability from one place or device to another.

Finally, the Digital IB platform should learn from the leading Internet franchises and combine their most innovative concepts into an adaptive and cohesive package. The platform must offer an intelligent search functionality, give smart advice and bring relevant content to the user based on the user’s behaviour (see Figure 7).

3.2. Compliant Today and Ready for Tomorrow

The Digital IB platform should help clients complying with, and navigating through, key regulations (DFA, EMIR, MiFIR). In one place, the platform should offer access to information on counterparty eligibility, stock lending and borrowing, trading history, central clearing methods and best execution as well as provide extensive reporting capabilities.

The Digital IB platform must also provide access to all types of liquidity on exchanges and lit-venues, on multi-dealer platforms, on dark pools and on MTFs. All trading mechanisms must be supported – from high-touch orders, low-touch algorithms and smart order routing, firm prices with click and trade to RFQs for tailored trades. Finally, banks should be capable through the Digital IB platform to act both as an agency intermediary and as a principal market maker.

3.3. Universal Coverage

The platform must be designed in a way that makes it intuitive to move from one process to another. Pre-trade, STP and post-trade must encompass all products, with execution retaining the assets’ specificities and trading paradigms (see Figure 8).
3.4. No More Complexity

To enhance the user experience and increase investor productivity, the design of the Digital IB platform must be consistent across all features and functions. The tool should be simple to use and follow the ‘three clicks rule’, which means the user should find their required content in no more than three mouse clicks. There should also be only one platform that exposes all required features. For the investor, it does not matter how the bank is organised or what underlying systems are accessed – the complexity of the architecture should be transparent. In summary, the target is to bring all the various pieces of the jigsaw into a coherent ensemble that hides the complexity of the underlying services (see Figure 9).

4. UBS Neo: Evolution or Revolution?

In 2013, UBS launched UBS Neo with the objective of bringing the next generation of single-bank platform to their clients. UBS Neo replaces dozens of legacy interfaces and tries to go beyond addressing the needs of the bank’s customers, but also anticipating them.

In UBS Neo there are four fundamental, albeit incremental, innovations that are combined together to create a proposition that competitors will find hard to replicate:

1. The platform places UBS experts and their insights at its heart and uses them as the guide to the journey across the platform.
2. UBS Neo was designed to take into account changes to the structure of capital markets brought on by new EU and US regulations.
3. UBS Neo integrates all asset classes into one platform, covering the full lifecycle of trading.
4. The platform brings to the professional investment world the design breakthroughs that revolutionised the consumer Internet.

4.1. Direct Access to UBS’s Intelligence

UBS’s full range of market insights is at the heart of UBS Neo. Not only is the platform a place for accessing research, evaluating analytics and following leading specialists, but it is also the same tool that is used by UBS’s analysts, leaders and influencers to generate written content, podcasts, discussions and market analysis. All the content is created, distributed and consumed within UBS Neo’s digital environment. All further functions that relate to execution and prime services
are accessible from multiple places in UBS Neo as well as from related research content pages. An order can be placed directly from the point of the trade idea. If content from one source – an analyst or a team – is of relevance for a user, the content originator can be followed in the same way as influencers are followed on social media.

4.2. Built for the New Market Paradigm

UBS Neo is built on the principle of being ready for incoming changes to the structure of market structure. UBS Neo is one of the very first platforms to support the agency dealing model in the traditionally principal-focused business of fixed income dealing. With central clearing or full collateralisation of assets in place, UBS Neo allows Buyside traders to access a whole array of trading destinations such as inter-dealer swap execution facilities that are otherwise restricted to banks. Additionally, UBS Neo has become the primary user interface for two of the bank’s award-winning Price Improvement Networks (UBS PIN Fixed Income and UBS PIN CDS), enabling trading on a vast inventory of credit products, from corporate bonds to single-name CDS as well as Index CDS. This means that UBS Neo offers transparent access to liquidity without the artifices of tiering or spreading of prices. In this respect, UBS Neo’s approach is a bold move because it anticipates the way OTC markets will operate in the near future².

4.3. Multi-asset and Cross Lifecycle

UBS Neo is the embodiment of UBS’s stance on the structure and needs of the investment industry, which means that it is a platform where correlated products are integrated, where price formation is transparent, where trading is holistic, where confidentiality and anonymity are preserved and where the right information finds the right investor, allowing that investor to gain a competitive edge (see Figure 10). The capabilities of UBS Neo are one of the broadest currently available on the market, encompassing global equities, currencies and fixed income. It offers, in one place, access to information on counterparty eligibility, stock lending and borrowing, trading history, central clearing methods and best execution, as well as providing extensive reporting capabilities.

UBS Neo allows investors to benefit from all available types of liquidity: on exchanges and lit venues, provided by UBS’s market makers, on multi-dealer platforms but also on dark pools and MTFs. All trading mechanisms are also supported: care and worked orders, direct client execution, algorithms and smart order routing, firm prices with click & trade, as well as indicative prices with request for quotes. The coverage of the platform is still expanding. All the capabilities that clients have been able to access via legacy interfaces are being migrated one by one into UBS Neo.

4.4. Simplicity is the Ultimate Form of Sophistication

UBS Neo integrates the latest information technology trends and represents a step change from traditional e-Commerce

solutions in four ways: user experience and design, multi-channel access, a high level of customisation and a focused interface. The breadth of UBS Neo is accessible through desktop PCs, tablets and mobile devices, with a design that has been optimised to each specific form-factor. Users can move seamlessly from one device to another without losing any preference, data or updates on their latest actions. Users can personalise UBS Neo to suit their own needs. The platform provides a fully customisable slate capable of drawing from a library of apps across assets and the trade lifecycle. Users can define how they view their portfolios on the platform, select favourites and drill down on their most frequently-used features to reflect individual interests and ways of working.

Finally, by having a single access point for the bank’s services, clients and employees of UBS no longer need to remember a host of passwords or to jump from one application to another to perform the majority of their daily tasks.

5. Conclusion

e-Commerce has become prevalent in most asset classes. But, despite the increasing sophistication of the tools deployed by the Sellside, the actual e-Commerce approaches have changed very little since the pioneering days. In an overwhelming majority of cases, single-bank platforms still focus on research and execution for a specific asset class. As a result, a typical global investment bank inundates its client with a multitude of user interfaces, platforms or Internet applications; this is both inefficient and confusing.

GreySpark’s last two annual e-Commerce surveys unequivocally point to the need for Digital Investment Banking platforms to focus on user experience by seeking simplicity and broad capability.

UBS Neo has been designed to meet this demand for multi-asset, content-led solutions that are capable of covering the whole trading lifecycle. To do so, UBS Neo took inspiration from the leading Internet innovators in order to conceive an intuitive and user-centric interface that is tailored for professional investors. UBS Neo has also the clear ambition to be one of the very first truly holistic solutions, covering all asset classes across their entire lifecycles. It has been designed to help its users to comply with the current rules, as well as being ready for the new market structure and incoming regulations. Finally, UBS Neo offers a direct line to the bank’s intelligence: its research, its insights, and more importantly, its people.

Ultimately, each dimension of UBS Neo is by itself a natural evolution of ‘best-of-breed’ solutions already available in the marketplace. Only when all these interconnected pieces of functionality and content are brought together under a state-of-the-art and flexible user platform does the true revolution that UBS Neo brings become apparent.

Table of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Forces Shaping e-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>Figure 2</td>
<td>e-Commerce Priorities of the Buyside</td>
<td>4</td>
</tr>
<tr>
<td>Figure 3</td>
<td>The Jigsaw of Single-Bank Platforms</td>
<td>4</td>
</tr>
<tr>
<td>Figure 4</td>
<td>The Evolutionary Path of e-Commerce</td>
<td>5</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Maturity of the e-Commerce Capabilities of the 18 Leading Investment Banks</td>
<td>6</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Maturity of Capabilities across Asset Classes and the Trade Lifecycle</td>
<td>6</td>
</tr>
<tr>
<td>Figure 7</td>
<td>A New Approach to Interacting with Your Investment Bank</td>
<td>7</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Digital IB Covers the Whole Trading Lifecycle for All Products</td>
<td>8</td>
</tr>
<tr>
<td>Figure 9</td>
<td>Bringing All the Pieces Together</td>
<td>8</td>
</tr>
<tr>
<td>Figure 10</td>
<td>UBS Neo’s Coverage</td>
<td>9</td>
</tr>
</tbody>
</table>
Digital Investment Banking: Beyond Single-Dealer Platforms
GreySpark Partners

GreySpark is a Capital Markets consultancy headquartered in London with operations in Hong Kong. We deliver Business, Management and Technology Consulting with particular expertise in Trading, Risk and Data Management across all asset classes.

GreySpark consultants, at the heart of the Capital Markets Industry, assist investment banks, hedge funds, asset management firms, exchanges and technology vendors to excel and innovate. Addressing business-critical interests, regardless of their business- or project-cycle stage, we are willing and capable of following through on our advice.

In a high velocity, winner-takes-all marketplace, continual innovation is more than the key to success - it is the price of entry. Our collective experience, creative spark, management approach and tenacity combine to deliver the best results for our clients.

Business Consulting
Covers all areas that require a particular industry-aligned expertise, including front office, operations, risk and regulatory.

Management Consulting
Focuses on areas that require a particular management expertise, including project and programme management, interim management and organisational effectiveness.

Technology Consulting
Specialises in challenges that require a particular technology expertise including architecture, software development, infrastructure, support and IT strategy.

Capital Markets Intelligence
Delivers research on industry topics based on close relationships with capital markets decision makers, practical experience of delivering projects and rigorous analysis.

Authors

Frederic Ponzo, Managing Partner
Frederic is the managing partner of GreySpark, where he focuses on providing leadership, direction and vision to the company while ensuring that the firm’s clients receive best-in-class services. Over the past 17 years, he has personally advised over 50 financial institutions, including all the top investment banks, building unparalleled insight into the industry.

A leading expert on electronic trading and e-Commerce for wholesale financial services, Frederic’s insights are frequently quoted in the general media (including the BBC, CNBC, The Financial Times, The Wall Street Journal, Bloomberg and Reuters) as well as the specialist press (Waters Technology.com, The Trade magazine, Financial-i and HFTReview.com). He is a regular speaker at trade events (TradeTech, FOW and A-Team), and he is a contributor to several publications including The Financial Times’ The Banker magazine guide How to Run a Bank. For two years running, Frederic has been listed on Dow Jones’ Financial News’ Top 100 Executives under-40 list.

Anna Pajor, Senior Consultant, Capital Markets Intelligence
Anna leads GreySpark’s Capital Markets Intelligence practice, overseeing the research process that combines the expertise of GreySpark consultants with quantitative and qualitative analysis of external industry players. Prior to joining GreySpark Partners, Anna worked for the Boston Consulting Group in Warsaw where she delivered strategy projects for financial services clients. Anna is a certified Project Management Professional with several years of experience in strategy, finance and IT.