From Proof of Concept to Center of Profit

David De Louya

David De Louya is senior vice president of product and strategy at AlphaPoint. David has over 25 years of management consulting experience in banking and financial markets as a global partner and consulting group leader of the financial services divisions of firms such as Ernst & Young, KPMG, IBM, Tata and HCL.

AlphaPoint is a capital markets technology company that powers digital asset networks and provides institutions a distributed ledger platform to digitize, trade and manage any asset. AlphaPoint powers digital asset networks on five continents and is led by a seasoned team of financial technology experts. AlphaPoint has offices in New York City, Philadelphia and San Francisco.

2016 was the year of the proof of concept (POC) for blockchain technology. At the time of writing, over 100 blockchain evaluations have been publicized, including trials by virtually every systemically important financial institution and market utility across the globe. It was a year when news of blockchain POCs, prototypes, pilots and technology trials emerged on a regular basis, culminating experiments and evaluations with blockchain technology or distributed ledger technology (DLT), which had been running internally for years.

2017 is taking shape as the year in which DLT goes into live production. For proof, look no further than The Royal Mint and CME Group's initiative to tokenize up to $1 billion in gold bullion on a distributed ledger, available for round-the-clock, 24/7 trading. Or consider comparable go-live announcements in syndicated lending or derivatives processing.

Why are blockchain projects propelled forward? What threads link them together?

No Longer Just About Cost Savings

In capital markets, early discussions surrounding blockchain have been driven by cost reduction and operational efficiencies. The reasons for this are sound. For one, even eight years after the end of the economic downturn, efficiency ratios remain challenged by increasing capital requirements, soaring compliance costs, margin compression and savvy competition from agile, unencumbered fintech upstarts.

Efficiencies promised by blockchain on this side of the balance sheet are immense. A recent study conducted by Accenture and McLagan, premised in data from eight of the 10 largest global banks, estimates institutions can save $8 billion to $12 billion per annum through at-scale use of blockchain technology. This includes savings of up to 70 percent in reporting, 50 percent in post-trade and 50 percent in compliance. As one would expect given these data points, most blockchain technology trials have focused on streamlining surveillance and post-trade operations, reducing intermediation by third parties and other efficiency-focused use cases.

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Yet, every single day, institutions are recognizing that cost cutting is only half of the story.

These firms realize that DLT can likewise be used to dramatically increase the fungibility and velocity of existing assets, to spin off to new markets and to unlock entirely new lines of profit. In so many words, both buy-side and sell-side firms are recognizing that the logic is "and," not "or." That the extreme cost efficiencies blockchain can inject into existing markets can be used to create entirely new markets.

Driving Revenue With Blockchain

"Asset digitization," a term we are hearing more and more, denotes the act of recording data relating to a financial asset on a shared, immutable blockchain instead of recording that data across a series of disconnected, centralized data silos. The latter is the norm with today's high cost legacy applications portfolio and infrastructure environment.

We have entered an age in which not only information, but

also value, can flow freely without the need for intermediaries, such as deeds offices, Central Securities Depositories (CSDs) and potentially even banking services. DLT promises to enable a digital peer-to-peer value-transfer revolution.

Digitizing assets on a distributed ledger enables financial firms to dramatically reduce their expenditure and counter competition from non-regulated fintechs, in the process strengthening return on assets (ROA) ratios as well as potentially strengthening return on equity (ROE) ratios. Asset digitization can create new business models and sources of revenue, to such a degree that firms can innovate entirely new markets and use cases. Consider the following examples:

- **Precious Metals:** Digitizing fractions of gold bullion into tokens on an immutable blockchain ledger can reduce settlement time from two to three days to almost instantaneously, unlocking entire new segments for the $5 trillion gold market.

- **National Currency:** The Bank of England recently estimated that transitioning 30 percent of GBP in circulation to DLT would, simply because of reduced friction, provide a 3 percent (£17 billion) gain to national GDP. Note that a majority of World Economic Forum technology respondents believe 10 percent of global GDP will be stored on blockchain technology by 2025.

- **Over-The-Counter (OTC) Derivatives**: During Q2 2016, gross market value of OTC derivatives rose to $20.7 trillion, up from $14.5 trillion during the same period in 2015. OTC markets provide a timely opportunity for blockchain to increase velocity and expand market participation through improved trade administration and greater market transparency, while at the same time withholding competitively sensitive data on trades.

In the final analysis, asset digitization derives from the larger shift farsighted institutions are making to more secure, lightweight and unencumbered infrastructure. It represents a focused effort to unlock revenue opportunities that have been feasible for years from a purely technical perspective, but which are only now—on account of the extremely low overhead DLT enables—coming into focus as centers of considerable profit.

Collaborative, Interoperable Markets

The developments taking shape around DLT can be fully appreciated only in the context of profound management philosophy changes occurring at Tier 1 financial institutions.

After years of business, operations and technology consolidations aimed at improving net profits, the financial services industry still finds itself facing the same core challenges: high costs, regulatory encumbrances, mounting risk of disintermediation by nimble fintech startups and rising macroeconomic constraints. Consider, for instance, the astronomical costs of compliance, which are on the verge of "breaking the banks" with governance, risk and compliance costs accounting for 15 to 20 percent of the total run-the-bank cost base of most major banks (as per a study by Bain Consulting on Banking Cost of Compliance —September 2016). Or consider the 2.5 percent drop in ROE from 2014 to 2015 among the world's top investment banks. On average, banks barely meet ROE levels that surpass their cost of equity, wherein many banks are effectively underwater, prompting a rush of bank exits over several years, across multiple markets worldwide.

Faced with a crossroads, institutions are moving beyond the relentless drive toward cost containment and focusing instead on reinventing themselves—uncovering new digital business models, transforming customer experience and exploring new sources of revenue. This shift in emphasis toward innovation and internal disruption can be discerned in organizational efforts to maximize adjacency, bolstered funding of innovation labs and increased partnerships with fintech ventures and colloquia.

The emphasis on value generation with DLT detailed above, and indeed the shift in focus with DLT from cost savings alone to savings paired with value creation, illustrates a much larger trend.

The principal architect of Microsoft's Project Bletchley recently described blockchain as "a catalyst to inspire change in the way disparate organizations work together in highly competitive markets," and we couldn't agree more. With blockchain, more so than with any other class of technology, the industry is witnessing sustained, organized efforts at collaboration and adjacency as well as a purposeful rethinking of how markets should be structured. Approximately 20 blockchain consortia are active across various facets of financial services. Dozens of open source projects are thriving, perhaps none more notable than the Hyperledger Project, and emphasis across buy-side and sell-side is mounting to build blockchains that are truly interoperable across institutions, markets and borders alike. The benefits of DLT compound as collaboration grows and for this reason we expect these efforts, unheralded over the last two decades in financial markets, to continue picking up speed.