CREDIT CONTROL JOURNAL and ASSET & RISK REVIEW is published by House of Words Media Limited.

The current issue and full text archive of this journal is available at **https://www.creditcontrol.co.uk/**

Analysis

Connecting the Global Financial Markets

Ganesh Iyer

Ganesh Iyer
Vice President
Global Marketing
IPC

Biography

Ganesh Iyer is Vice President of Global Marketing at IPC (www.ipc.com), a technology and service leader that powers the global financial markets. At IPC, Ganesh heads the team that is responsible for spearheading global marketing initiatives, building brand awareness and growing the business. He has been widely quoted in the press regarding various aspects of the financial markets and has been featured in a number of publications including the Wall Street Journal, Financial Times and CIO Review magazine. He has also been a speaker, panelist and delegate at over 50 industry events in the Americas, EMEA and Asia-Pacific.

Prior to IPC, Ganesh was responsible for marketing and product management at Syncsort, a leading provider of high-performance data integration software and iLEVEL, a spin-off of the Blackstone Group that offers a cloud-based SaaS solution to the alternative investment market. Ganesh has expertise in the financial markets as well as over 20 years of global experience in the technology industry spanning marketing, product management, market research and strategic planning.

Ganesh holds an MBA from Indiana University's Kelley School of Business in the United States and a BS in Engineering from the Delhi Institute of Technology in India. He is a Chartered Alternative Investment Analyst, Financial Information Associate, Pragmatic Marketing Certified and has served as a member of the Executive Committee of the Financial Information Services Association of the SIIA.

Keywords Financial markets, Traders, Connectivity, Foreign exchange, Financial ecosystems, Buy-side, Sell-side, Coronavirus
Paper type Research, Opinion

Abstract

“When we try to pick out anything by itself, we find it hitched to everything else in the Universe,” said John Muir, Scottish-American Naturalist and Author (1838-1914), and this is particularly true for the global financial markets. In this article, Ganesh Iyer, Vice President of Global Marketing at IPC, a leading provider of secure, compliant communications and networking solutions for the global financial markets, explains what it means when everyone is connected and part of an ecosystem.

Introduction

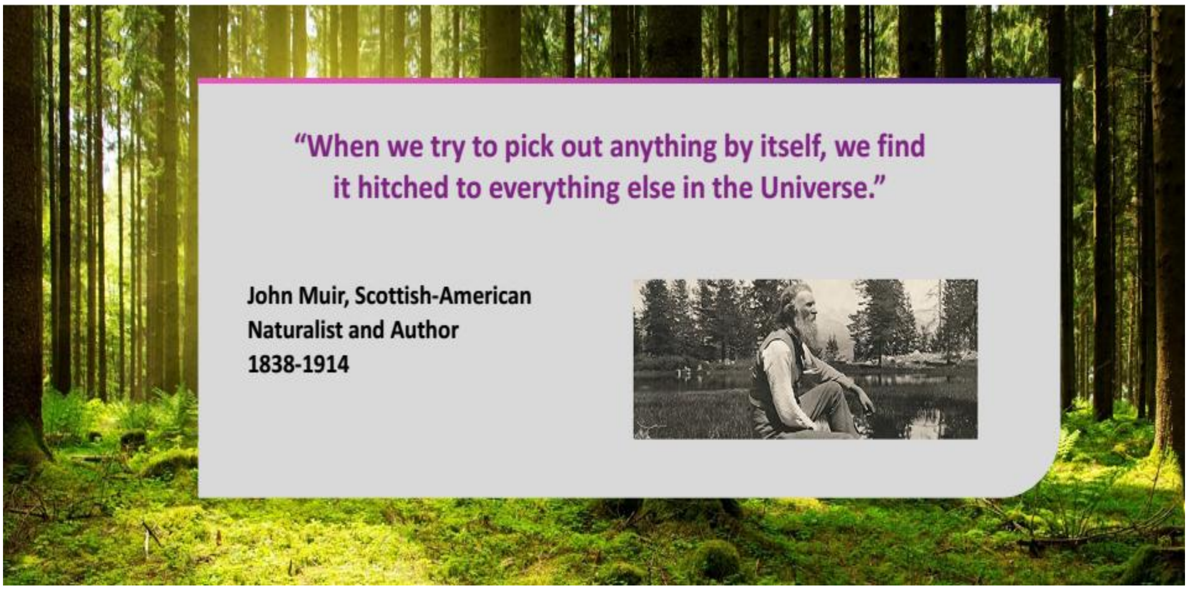
The financial markets are heavily dependent upon connectivity throughout the trade lifecycle and having access to a readymade diverse ecosystem of participants. These are recurring themes we hear when we speak with our customers and the broader markets.

The above quote from John Muir, Scottish-American Naturalist and Author (1838-1914) (see *Figure 1*) encapsulates this well – “When we try to pick out anything by

CREDIT CONTROL JOURNAL and ASSET & RISK REVIEW is published by House of Words Media Limited.
The current issue and full text archive of this journal is available at **https://www.creditcontrol.co.uk/**

itself, we find it hitched to everything else in the Universe." What it really means is that everyone is connected and we are all part of a broader ecosystem. This is particularly true and relevant to the financial markets.

Figure 1: Connectivity and ecosystems



Source: IPC

Robert Metcalfe, an engineer and entrepreneur from the United States who helped pioneer the Internet and co-invented Ethernet, famously stated that the effect of a telecommunications network is proportional to the square of the number of connected users of the system. Known as Metcalfe's Law, it underscores the 'power of the connected community'. For example, if you have, say, two hundred thousand users on your network, that gives the possibility of 20 billion interactions between these users. The power of the community and diverse ecosystems is truly remarkable!

When everyone is connected to one another there are more opportunities for interaction, and for people to communicate with each other. This is what the financial markets are all about, the power of the connected community, and having access to a diverse financial ecosystem.

Communications throughout the trade lifecycle

The financial markets constitute various types of participants including buy-side firms, sell-side firms, inter-dealer brokers, exchanges and other liquidity venues, clearing and settlement firms, market data providers and independent software vendors.

CREDIT CONTROL JOURNAL and ASSET & RISK REVIEW is published by House of Words Media Limited.

The current issue and full text archive of this journal is available at **https://www.creditcontrol.co.uk/**

Every aspect of the trade lifecycle from order creation to order placement to trade execution, as well as clearing, settlement, reporting, and market data delivery – are all heavily dependent on connectivity and communications. (See *Figure 2*)

Figure 2: Communications throughout the trade lifecycle

Source: IPC

Diverse ecosystems

When we talk about diverse ecosystems we are not just talking about the number of users that participate in an ecosystem, but the diversity of that ecosystem in terms of their liquidity needs, trading intent, and risk appetite – different firms have differing needs.

A diverse financial ecosystem includes brokers, dealers, asset managers, hedge funds, private equity firms and various institutional investors such as pension funds, plan sponsors, sovereign wealth funds, foundations, endowments, family offices, insurance companies, corporate treasuries, and wealth management firms. Such an ecosystem would also incorporate market data providers, trade lifecycle services from risk management, portfolio management, and OMS/EMS providers to a variety of liquidity venues such as traditional exchanges, electronic communications networks, multi-lateral trading facilities, alternative trading systems and dark pools.

A readymade, diverse financial ecosystem enables dynamic access to numerous sources of liquidity. But why is that so? The answer – building a new ecosystem is very difficult, both in terms of the underlying technology and the time it takes to build the essential connectivity to exchanges and other market participants. It is not something that you can replicate that easily.

Ecosystems are notable in other industries too. For example, Uber does not own any taxis, but provides 'taxi liquidity'. Likewise, Airbnb does not own any

CREDIT CONTROL JOURNAL and ASSET & RISK REVIEW is published by House of Words Media Limited.

The current issue and full text archive of this journal is available at **https://www.creditcontrol.co.uk/**

accommodation, but they provide 'accommodation' or 'hotel liquidity'. Similarly, IPC enables market participants to find each other through a diverse ecosystem and source liquidity.

Technology and regulatory changes

The landscape of the global financial markets continues to change dramatically, particularly the economics of intermediation. Additionally, fragmentation, new trading protocols, and the entry of new participants are having a significant impact on the structure of the market.

We are, in particular, seeing major changes in the market structure for illiquid products, the process of price discovery, as well as the nature of liquidity provisioning during stressed market conditions.

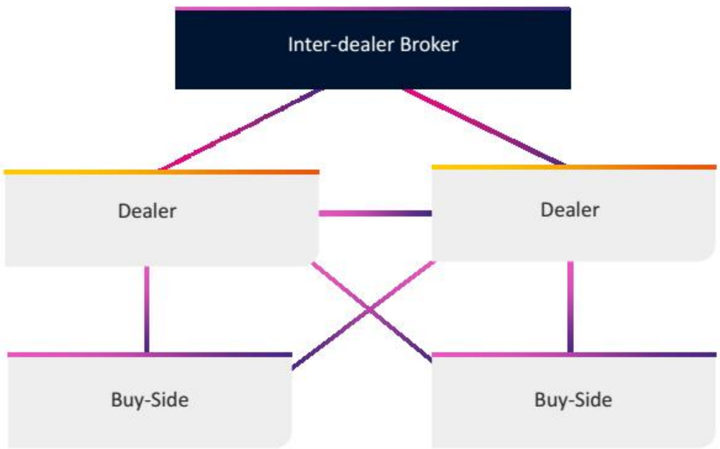
In a diverse ecosystem, the various market participants have different goals that they seek to attain. For example, insurance companies behave in a different way from hedge funds. Insurance companies are looking to get the maximum return from premiums so that they can manage liquidity risk effectively during, say, a natural disaster. Hedge funds and other alternative investment managers tend to be opportunistic providers of liquidity – their primary goal being generating returns for their investors. Similarly, pension funds are focused on generating returns for their participants.

Ecosystems are particularly critical during 'black swan' events. Although none of us can predict what the next black swan event will be, we can all be prepared for it and mitigate the impact and risk from it by being part of a diverse financial ecosystem.

Traditional market structure – illiquid instruments

The traditional market structure for illiquid instruments was fairly straightforward – the buy-side would contact their dealers and the dealers would speak to their inter-dealer broker (see *Figure 3*).

Figure 3: Traditional market structure – illiquid instruments



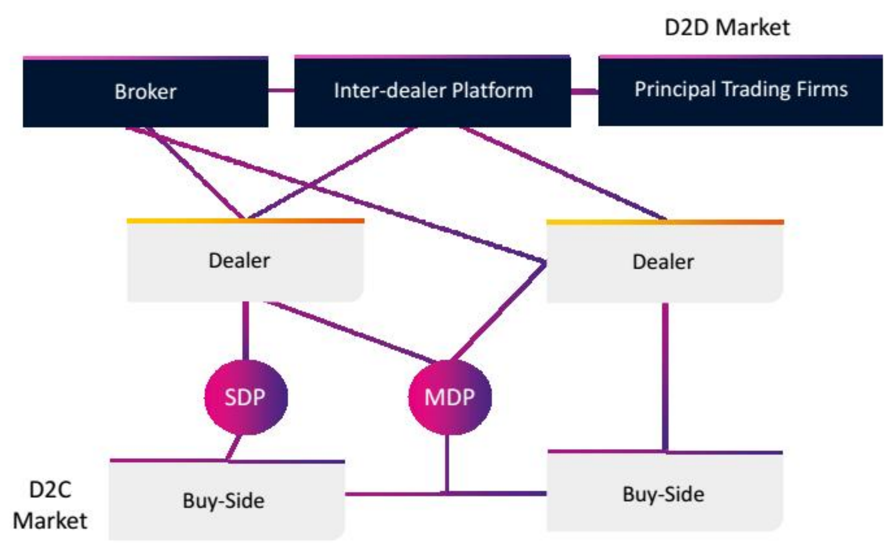
Source: IPC

CREDIT CONTROL JOURNAL and ASSET & RISK REVIEW is published by House of Words Media Limited.

The current issue and full text archive of this journal is available at **https://www.creditcontrol.co.uk/**

That market structure has changed significantly in recent years (see *Figure 4*). There are now more players – we have single-dealer platforms (SDPs), a multi-dealer platforms (MDPs), and principal trading firms in the mix. These is much more opportunity for connectivity and communication between the various market participants.

Figure 4: Evolving market structure – illiquid instruments



Source: IPC

So what does all this mean? We see three major trends:

1. The over-the-counter voice trading market continues to be significant and will remain so for the foreseeable future.

2. Electronic trading protocols such as RFQs and order books – electronic versions of telephone interactions are growing.

3. Buy-side to buy-side platforms which aggregate liquidity and bring together natural buyers and sellers are also experiencing demand.

Goals of global investment managers

All this should be taken in the context of the goals of global investment managers. They are looking to generate alpha, source liquidity, mitigate risk, diversify, and protect assets.

In their search for alpha, investment managers take on more leverage and more risk. This is fine until you have stress in the markets. During stressed market conditions, liquidity becomes fragile as investors are simultaneously reducing their tolerance to risk and are deleveraging. Bid-ask spreads widen and there is a premium for liquidity.

CREDIT CONTROL JOURNAL and ASSET & RISK REVIEW is published by House of Words Media Limited.
The current issue and full text archive of this journal is available at **https://www.creditcontrol.co.uk/**

This is when it becomes really important to have a diverse ecosystem of market participants with different liquidity horizons and trading intent, enabling natural buyers and sellers to find each other more easily.

Today we see a lot of unpredictability, uncertainty and volatility in the financial markets and the wider global economy. The COVID-19 pandemic has had an unprecedented impact on the global markets. Natural disasters around the world also routinely affect the markets. There is a lot of unpredictability in the current environment and as stated before, whilst we don't know where the next black swan is, we can always prepare for that next black swan.

The critical role of connectivity and communications

When we look at the typical connectivity needs of the buy-side firms such as hedge funds, asset managers, private equity firms and CTAs, five areas where network technology plays a key role emerge (see *Figure 5*):

1. Connectivity to prime brokers, brokers/dealers, investment banks and liquidity venues helping generate alpha, optimize liquidity capture, achieve best execution, manage collateral and reduce market impact.

2. Access to market data and trade lifecycle services such as order management, execution management, risk management and portfolio management systems.

3. Collaboration among employees that are geographically dispersed to not only formulate and execute investment theses but to also manage the risks associated with these strategies.

4. Communication with institutional investors – pension funds, endowments, foundations, sovereign wealth funds, corporate treasuries, insurance companies, family offices and wealth managers.

5. Business continuity management and disaster recovery planning to ensure the ability to trade and invest in the markets around the clock.

Communications beyond trader communications

Trader communications are vital for the financial markets to function effectively. However, there are many other critical regulated communications workflows in the financial markets beyond trader communications. Connectivity is vital for these workflow. Here are some examples:

- The investor relations team at a hedge fund or private equity firm needs to communicate with institutional investors such as pension funds, endowments, foundations or sovereign wealth funds to discuss the performance and allocation of investments.

- Risk managers need to communicate with third party pricing providers to price hard to value illiquid securities independent of traders and portfolio managers.

CREDIT CONTROL JOURNAL and ASSET & RISK REVIEW is published by House of Words Media Limited.

The current issue and full text archive of this journal is available at **https://www.creditcontrol.co.uk/**

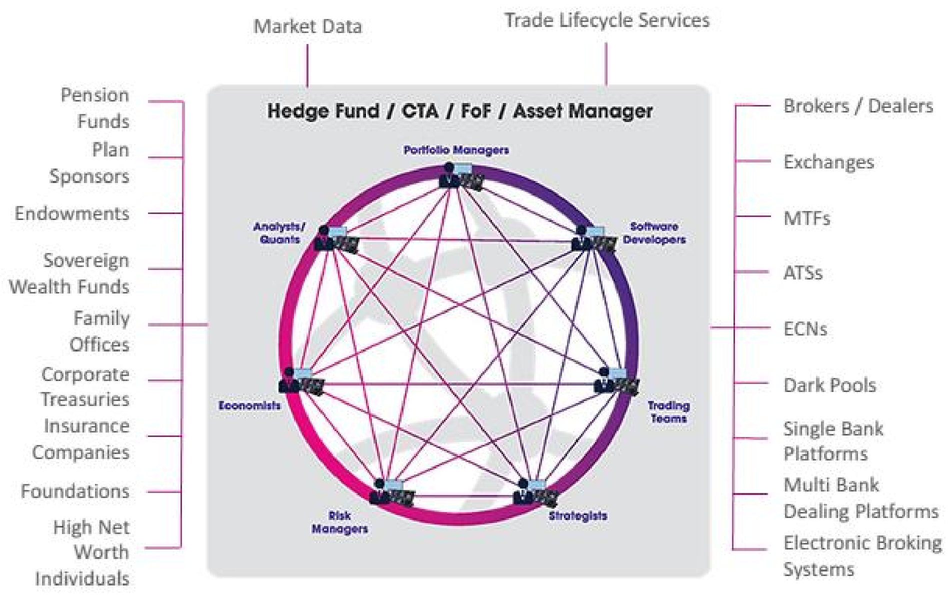
Risk managers also depend on accessing and communicating with a range of independent market data sources to more accurately calculate net asset values and assess risk. Connecting to a range of trade lifecycle services also helps risk managers enforce position and risk limits.

- Collaborating among various groups within a firm including middle office and back office roles to record, confirm and reconcile trades.

- Another increasingly important non-trader related communication is around analyst communications and mobility (see *Figure 5*). While portfolio managers and traders routinely work from a central location, analysts are often on the road visiting the offices of the companies whose stocks and bonds they are following. Secure, reliable, mobile communications are critical for these analysts as they need to communicate their findings with portfolio managers and traders in real-time.

- Analyst communications have also become very important due to research unbundling under MiFID II. Written reports are now much more commoditized. There is real, tangible value in the conversations between the analysts in the sell-side and clients on the buy-side.

Figure 5: Typical connectivity needs of a buy-side firm



Source: IPC

Connectivity matters to exchanges and other liquidity venues too

Given that the global investment community is constantly looking for new ways to harvest alpha, source liquidity, diversify portfolios, manage trading costs and mitigate risk, it has become imperative for exchanges to address five pressing challenges:

1. **Growing liquidity** – Deep liquidity ensures strong financial markets and continues to be an important goal for exchanges. Exchanges that are connected to more market participants and make available more financial products are likely to attract more business. A highly liquid market can provide significant benefits especially during volatile markets or correction and consolidation periods.

2. **Attracting a diverse investor base** – This continues to be one of the biggest challenges for liquidity venues. A liquidity venue is likely to be viewed as more attractive if it can be accessed by a large and diverse range of institutional investors. A diverse base of investors can potentially have a positive effect on liquidity by enabling the provision of more capital and improving corporate governance standards.

3. **Increasing the pool of securities and associated financial products to include fixed income, FX, derivatives, cryptocurrencies and ETFs** – Low investor participation in many markets can be directly attributed to the lack of investment opportunities. Liquidity venues overcome this challenge by not only expanding the number of listings but also by expanding into other asset classes such as fixed income, FX, futures, options, cryptocurrencies and exchange traded funds.

4. **Creating a regional exchange ecosystem** – Another strategy to grow liquidity, attract a diverse investor base and drive economies of scale is to develop regional market linkages and create a regional market.

5. **Attracting order flow and distributing market data in new geographies** – Liquidity venues are increasingly looking to attract institutional investors, asset managers, hedge fund and market makers outside their primary market to fuel profitable and sustainable growth. Also, investors often desire access to new sources of liquidity if they find that their home market is saturated.

To tackle these issues, liquidity venues are implementing technologies that provide adaptive, on-demand connectivity throughout the trade lifecycle across asset classes.

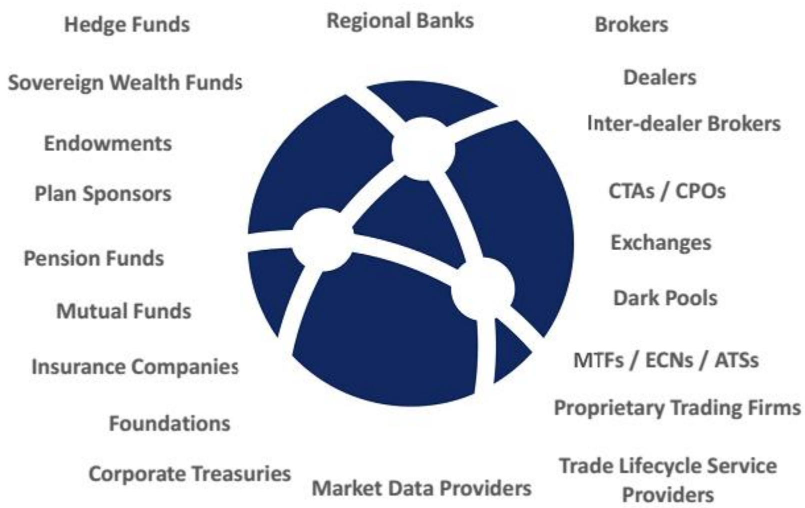
Diverse ecosystems and connectivity create an efficient environment for electronic trading, algorithmic execution, direct market access and enhancing market data (see *Figure 6*).

The ability to sell short as well as borrowing and lending securities is also heavily dependent on a connected market. Implementing state-of-the-art communication infrastructures is vital for solving the biggest challenges being faced by liquidity venues.

CREDIT CONTROL JOURNAL and ASSET & RISK REVIEW is published by House of Words Media Limited.

The current issue and full text archive of this journal is available at **https://www.creditcontrol.co.uk/**

Figure 6: Connectivity and ecosystems: large and diverse community



Source: IPC

Conclusion

Dynamic access to a diverse cloud ecosystem brings a significant number of benefits:

- Efficient linking of potential buyers and sellers
- Dealers can offset inventory
- Reduced holding period for dealer positions
- Investors can directly transact with each other
- Improved price discovery

As generating alpha becomes more challenging, cost-effective communications infrastructure and technology solutions are making it easier to have the connectivity and ecosystem needed to succeed.

So as one looks at across multiple asset classes for one's fortune, investing a little time to investigate today's technology options will help firms be better positioned in managing their investments.

Reference

For more information on IPC and its solutions, please visit www.ipc.com.