

Whitepaper

IT INFRASTRUCTURE ON TRADING FLOORS

Future Trends





Trends in the Trader Workplace.

Business and IT managers considering decisions about trading floor design and infrastructure face three major trends which are impacting needs assessment and resource allocation: stricter regulation, the evolution of the role of the human trader, and cost pressures.

Regulatory Environment and the Transparent Trader

Compliance with stricter regulatory mandates such as Market Abuse Regulation (MAR) and MIFID II impacts technology in the front office and at the trader workplace. Record-keeping now applies to multimedia records of financial transactions and trades. So-called workplace recording encompasses pre-, during and post-transaction analysis and recording, including not only the trade itself but also voice recording on the telephone, every keystroke on the screen, emails, messages and chats. After the recording is complete, records need to be archived so that the complete multimedia environment at the time of a trade can be reconstructed, analyzed and audited.

The Trading Desk Cockpit

The role of the human on the trading floor is changing. Today's traders are multi-taskers and overseers in an increasingly complex trading environment. Technically savvy trader desk managers assume more roles and monitor complex products, markets and even algorithms in a highly dynamic financial world. This translates into more data, screens, systems and transaction processes.

The rise of electronic or algorithmic trading is self-evident. Nonetheless, the New York Stock Exchange's management insists, "the human touch, however limited, still plays a crucial role. Traders on the floor can listen for rumors about big deals, and sound out the market in ways a computer cannot."¹ Further, human intervention remains essential in situations when there is stress and volatility. So, even as low-risk trades are increasingly being executed automatically by computers, humans continue to do what they do best – listen carefully, think creatively, respond quickly and appropriately to avoid or shorten the impact of problems and safeguard against excesses.

This 21st century trader needs an ergonomic "cockpit" working environment with tools that are fine-tuned to optimize the efficiency of human workflows and processes. A single multifunctional console which can be used to reach out to and control every system, source and screen can simplify the complexity and reduce the margin of human error. Smart technology helps smart people take on and accomplish more tasks.

Trading Floors which reinforce human interaction

With headcount restrictions in place, fewer traders are taking on more roles, alternately covering different areas of trading. As such, they must be able to change their trading and screen environments with a simple keystroke (i.e. immediate switching between equities and derivatives) on their management console. Likewise, traders must be able to collaborate, regroup and move around a trading floor, creating and re-creating ad hoc teams. Whereas once traders were chained to specific desks and moves were tedious, tomorrow's traders will "once again be able move around the floor and interact directly and spontaneously with each other, while simultaneously keeping track of market behavior."² This is called "free seating" and the technology which enables it is now available. According to Jeffrey Mitcheltree, "Once technology ceases to dictate where people work (i.e.

¹ Preserving a Market Symbol, Graham Bowley, The New York Times, April 25, 2011. <http://www.nytimes.com/2011/04/26/business/26floor.html>

² Jeffrey Mitcheltree, "The Future Trading Floor: Technology Will Support Human Connections", <http://www.gensler.com/fifty-on/2015/11/5/the-future-trading-floor-technology-will-support-human-conne.html>



tethered to desks), traders could go back to earlier, pre-technology ways of working where direct human interaction took precedence.”³

Taking it one step further, free-seating can also be realized across multiple sites. Stock exchanges and trading floors are considered critical infrastructure that are to be protected in a world wrought with anxiety about terrorist attacks and environmental catastrophes. Business Continuity strategies increasingly require the establishment of disaster recovery plans which focus on redundant business locations and/or back up sites that eliminate outages. In the future, traders will be able to flexibly choose among multiple operational work locations, from where they continue to have real-time access to all their systems and tools. The show always goes on somewhere, despite the occurrence of all kinds of crises, from annoying traffic jams to serious bomb threats and building evacuations.

Technology-driven, saving on technology

Trading floors were once staffed by throngs of people supported by bespoke IT infrastructure. But banks are becoming increasingly technology-driven and spending averse. According to Bob Santella, “Efficiency gains from automation have become an industry must.”⁴ Cost pressures are bearing down on banks, and particularly since the crash of 2008, they are saving on IT costs on the trading floor.

At the same time, IT security requirements and compliance regulations are becoming stricter. Whereas the availability of powerful computers and the emergence of hybrid trading platforms are pressuring some IT managers to consolidate the number of computers per trader, strong arguments exist to resist this trend. To name but a few: the risk of outages at the desk goes up; security and compliance guidelines dictate multiple systems split among multiple isolated networks; technical constraints and requirements among system vendors hinder the deployment of competitive platforms on shared hardware. The future-proof solution is a workplace design that allows traders to access and control any number of systems on any number of separate networks with a single management console, without compromising corporate security.



Secure, climate-controlled system room houses trader workstations

³ Ibid.

⁴ Bob Santella, “Trading places: How automatic technology is changing the trading floor”, bobsguide, March 2017, <http://www.bobsguide.com/guide/news/2017/Mar/6/trading-places-how-automation-technology-is-changing-the-trading-floor/>



Significant opportunities do exist, however, to save on IT infrastructure expenses. The first step is to deploy cost-effective but standardized workplace architecture that can flexibly accommodate changing IT landscapes without major investments. Hardware-based solutions distribute any source to any desk without regard to the sources' hardware platform, operating system or software version. This means that the workplace architecture (including cabling, screens, keyboard) withstands multiple evolutionary steps in workstations without upgrades. That saves money.

Further, housing trader workstations in a secure, climate controlled system room not only gives rise to free seating on the trading floors. It also protects IT assets, significantly reduces costs for maintenance and IMACs (installations, moves, adds and changes), conserves precious real-estate (provide 90% desking for 100% of the trader community) and saves lots of energy for air conditioning in the office and the system room. PCs are also less secure and have shorter lifespans when located under tables where they are prone to damage and tampering. And there is no immediate access to hot-swappable replacements in case of failure, which can mean user downtime.

Conclusion

IT Managers will be spending more time and money on new workplace recording solutions to comply with transparency regulations. Solutions will focus on multimedia recording, archiving, retrieval and the recreation of multimedia environments before, during and after trades.

Meanwhile, we are witnessing the rise of multi-tasking traders who are responsible for overseeing a variety of different trading processes. Trading desk managers need an ergonomic cockpit environment to reduce complexity and stress, and enhance the usability of high-performance workplaces. And they will move around their trading floor freely, enjoying immediate access to all their information and trading sources from any location, and collaborating within flexible teams that respond to dynamic market situations.

And finally, although there is something counter-intuitive about saving on IT infrastructure and relying on advances in IT technology at the same time, both trends co-exist today. The answers lie in smarter IT solutions that save on non-productive expenses (e.g. fault management, inefficient IMACs, replacement of standard hardware) without jeopardizing business critical success factors such as human workflow efficiency, collaborative team-building, IT security and business continuity.