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The Voice of Trading



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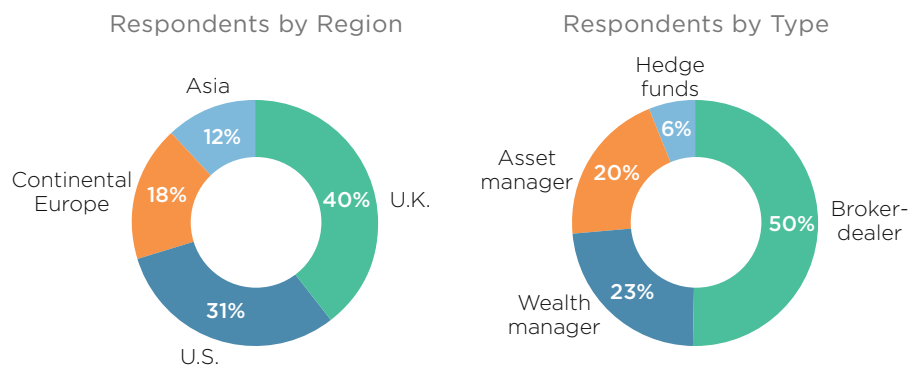
Introduction

One-on-one conversation has and will always be at the center of the financial markets. From its origins at the foot of the buttonwood tree in New York and in Jonathan's Coffee House in London, buyers and sellers would meet and verbally communicate their interest to buy and sell and negotiate on price and quantity. Of course, trading has evolved significantly since those early days—to exchange floors and, in the past two decades, to trading desks all over the world.

Even as trading has become more electronic and geographically diverse, the role of voice communication remains as important a part of the trading process today as it was all those centuries ago. While the transmission of order details such as symbol, side, quantity, and price are communicated electronically, additional instructions, market color and unique insights on current market conditions are often best delivered via a phone call.

METHODOLOGY

In the summer of 2016, Greenwich Associates interviewed 108 trading professionals to learn about their use of voice communication tools. Interviews were conducted electronically with respondents in Asia, Continental Europe, the United Kingdom, and the United States. Respondents were asked a series of qualitative and quantitative questions about the use of voice in the trading process, how trading turrets are used and their expectations for the future.

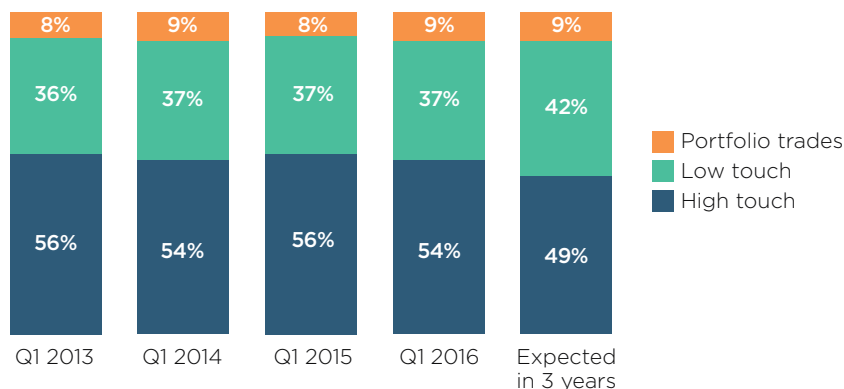


Note: May not total 100% due to rounding.

Voice of the Customer

One of the biggest changes in trading over the last 10-15 years has been the shift to electronic trading. Trading algorithms, dark pools and electronic market makers have transformed the way people trade today, so the misconception that all trading is now done electronically is understandable. However, the buy side actually executes the majority of their order flow via high-touch channels. In fact, even in the U.S. equity markets, often viewed as one of the most electronic markets in the world, high-touch trading (single stock trades routed to a sales trader) still represents the largest execution channel.

HIGH-TOUCH VS ELECTRONIC MIX OF U.S. EQUITY TRADING COMMISSIONS



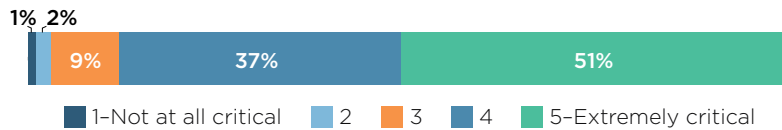
Note: May not total 100% due to rounding. Based on 303 responses in 2014, 292 in 2015, and 299 in 2016.
Source: Greenwich Associates 2016 U.S. Equity Investors Study

With electronic trading strategies, instructions for how to trade the order are set via parameters in the order entry screen. For example, “Strategy: VWAP, Start: 10:00 Finish: 14:00.” But the nature of high-touch trading implies that there is additional communication around how the order should be traded after it is routed. A buy-side trader would typically route a block trade to his broker via FIX and communicate instructions separately—via a phone call or electronic chat. For example, “Get half done here and work the rest over the day,” or “Put it in dark pools only and call me if you find a natural cross.”

When traders are sending orders worth millions of dollars, it is important that they have a trust relationship with their executing broker—a phone conversation is a very effective way to ensure that. Greenwich Associates research consistently indicates that service quality is one of the most important factors in selecting a counterparty. In fact, 88% of participants in this study indicated that reliable voice communications are either very critical or extremely critical to their trading workflow. Consequently, a personal phone call as opposed to electronic chat can be an important way for brokers to provide white-glove service to their clients.

IMPORTANCE OF RELIABLE VOICE COMMUNICATION

How critical is reliable voice communication to your normal trading workflow?



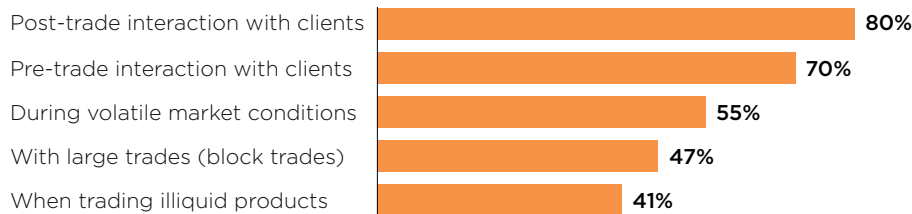
Note: Based on 108 responses.

Source: Greenwich Associates 2016 Voice Communication Study

In addition, even when routing via electronic channels, voice communication is still used to complement this activity. In our study, 91% of respondents indicated using voice communication in this way, primarily for post-trade interaction (e.g., discussing trade performance and receiving allocation instructions) and pre-trade interaction (confirming order receipt, discussing market conditions or expectations for the trade).

Much of this pre- and post-trade interaction could be conducted via chat or email. But the fact that so many traders still rely on voice communication when trading electronically again speaks to the more personal nature of a phone conversation and the nature of the buy-side/sell-side relationship.

HOW VOICE COMMUNICATION COMPLEMENTS ELECTRONIC TRADING ACTIVITY



Note: Based on 98 responses.

Source: Greenwich Associates 2016 Voice Communication Study

On a trading floor—and between buy-side investors and their brokers—effective communication is vitally important. When trades can routinely have a nominal value in the millions of dollars, it is essential that the details of the trade, the strategy to be employed and relevant market dynamics are effectively communicated. On the flip side, miscommunication can be extremely costly if it results in a trading error. For this reason, voice communication remains an important tool for traders.

In today's technologically enabled, super-connected world, we have a myriad of ways of communicating with each other—the same is true in the trading world.

VOICE CONTROL



Standard Phone

A standard phone where a user directly dials others by entering the number on a keypad. Phones like this have been a fixture in trading since they were invented and are still used on a desk, although primarily as a back-up these days.



Physical Trading Turret

A classic piece of trading desk hardware. Relatively large, it typically sits under a trader's screens and has an array of buttons, lights and a keypad. Buttons can be programmed and assigned to specific clients or other brokers and desks. Modern turrets now often include a video screen and speakers for A/V hookup.



Intercom/"Hoot and Holler"

Similar to other intercom systems, with a trading desk intercom the trader pushes a button to speak directly to one or multiple recipients (usually internal) via the intercom's loudspeaker. These are useful for relaying information quickly. Today, they are often fully integrated into the physical trading turrets.



Virtual Trading Turret

A relatively new technology, a virtual turret seeks to replicate much of the functionality of a physical trading turret in a software-based application.

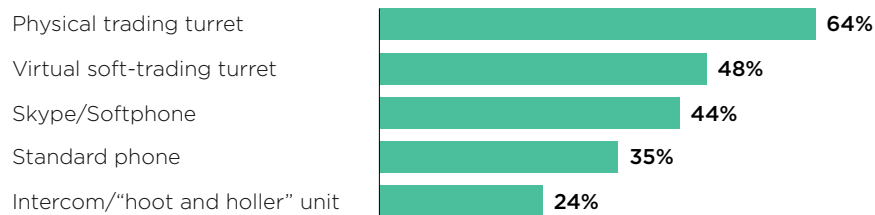


Softphone/Skype

A softphone or "software phone" seeks to replicate all the functionality of a standard phone in a software-based application. Skype, owned by Microsoft, is the most widely known example of a softphone.

A trading desk likely has several different voice communication tools available for traders to use, including a standard phone, a physical phone turret and also an intercom, or hoot'n'holler unit. In recent years, new tools have been gaining popularity, including virtual turrets and softphones such as Skype.

VOICE COMMUNICATION TOOLS USED IN TRADING WORKFLOW



Note: Based on 108 responses.
Source: Greenwich Associates 2016 Voice Communication Study

Physical and Virtual Turrets

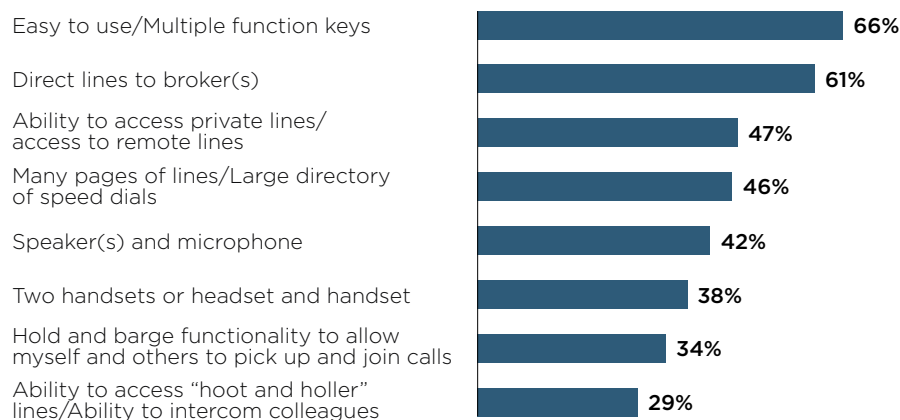
Despite many advances in technology, the physical turret remains the most widely used voice communication tool. This is a proven technology that most traders are comfortable with, having been standard equipment for years.

Virtual turrets seek to replicate in software many of the features of a standard turret, and cloud services incorporating them bypass traditional private voice circuits with internet communications. In the last few years, new offerings in the space can provide improved bandwidth and call reliability, enhanced analytics and audit capabilities, and the ability to integrate with other internet protocols (such as presence detection, integration with address book and other applications). Per-user subscription pricing, no up-front capital outlay, reduced infrastructure costs, and reduced dependency on private wire connectivity can mean lower cost of ownership than a hardware solution.

Both physical and virtual turrets are more popular than a standard phone, which has limited features. Intercom remains an important internal tool for communicating with other desks on the trading floor or other internal desks in different geographic locations. However, they are predominantly a sell-side tool and, as such, less prevalent overall.

Having voice communication tools on a separate piece of hardware is viewed by some traders as an advantage of physical turrets. Virtual turrets can be problematic to use if on a crowded trading screen, while a physical turret reduces the risk that can come about from having a single point of failure for communication tools. For example, if voice, email and chat are all running on the same computer and it crashes, then the trader's ability to do their job is significantly handicapped.

MOST IMPORTANT TURRET FUNCTIONS



Note: Based on 108 responses.
Source: Greenwich Associates 2016 Voice Communication Study

Benefits of Virtual Turrets

Respondents ranked ease of use/multiple function keys and direct lines to brokers as the most important features of trading turrets. Access to other lines and an extensive directory were other top features.

Many of these important functions can be replicated in a virtual turret installation. Features more related to their hardware—such as speakers, microphone and intercom—are generally deemed less important. This suggests that as virtual turrets become more robust and widely accepted, they will have a good opportunity to displace physical turrets and the associated infrastructure and dedicated private voice circuits, because of the reduced cost of ownership.

Even if users still require a separate trading voice communication system to avoid the single point of failure problem, a less expensive virtual turret can be installed on a dedicated tablet-like computer. Indeed, this is a likely path of future innovation in the virtual turret space.

Virtual turrets also offer other operational advantages. As they can run on standard computer hardware and internet protocols, they do not need dedicated IT expertise to manage the desktop technology, the back-of-house technology, or the connectivity network of analog phone lines. In addition, a software-based solution makes it very easy to scale up and add traders quickly as desks expand given most are cloud-based.

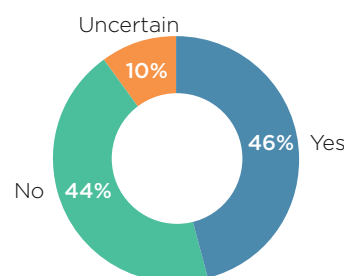
It will take time for compliance departments to become fully comfortable with these new technologies, however. As they run on desktop software and internet protocols, there are additional cyber-security concerns. Also, internal or outsourced specialists will need to be retained to ensure the same level of service quality as with physical turrets. Widespread adoption will therefore take time, with firms looking to mix and match more traditional on-site solutions with newer cloud-based solutions. However, the increased audibility of calls made via a virtual turret and the analytics often packaged into the system will ultimately win over compliance departments.

Alternatives to Voice Communication

Despite the continued high usage of voice communication, trading desks these days do have alternative methods for communicating. When asked whether trading functions could be performed if voice communication were removed entirely, about half of respondents indicated that it could.

Without voice, traders would have to fall back on either email or IM/chat. Due to the latency sometimes involved with email, IM/chat would

CAN TRADING FUNCTION WITHOUT VOICE COMMUNICATION?

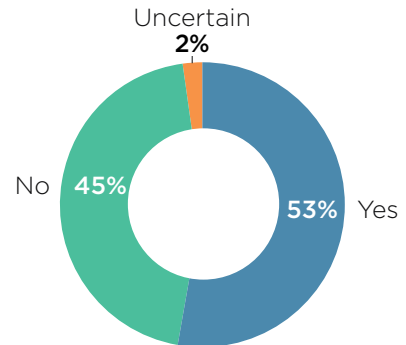


Note: Based on 108 responses.
Source: Greenwich Associates 2016 Voice Communication Study

be the preferred option for traders. Chat communication has increased markedly over the last several years. While slowed somewhat by the Libor and FX fixing scandals, our research indicates that growth will continue, although at a measured pace.

While 45% of finance professionals do not anticipate using chat more and voice less, a slight majority, 53%, do, suggesting the trend will continue. Investments made in the space further support this trend: Bloomberg has continued to invest to maintain its market dominance and Symphony, a technology start-up, has raised approximately \$100 million from 21 investment banks and venture capital firms to develop secure, compliant communication tools, partnering with FactSet to increase distribution. Thomson Reuters, another major desktop terminal provider, has also made significant investments in its Eikon Messenger product.

UTILIZING IM/CHAT MORE AND CALLING LESS



Note: Based on 108 responses.
Source: Greenwich Associates 2016 Voice Communication Study

Conclusion

Voice communication remains an important tool on today's trading desks. Many new technology products have come into the market and transformed the way order information is communicated—from IM/chat messages to electronic, computer-to-computer FIX communication. The nature of trading-desk communication will continue to change, with a moderate, ongoing shift to utilizing electronic chat. Many traders may choose to switch to virtual turrets.

Innovation in the virtual turret space will continue, with the software becoming increasingly integrated with other tools on the trading desk. Technologies are being developed that will not only record conversations, but also convert them into text. For compliance departments and regulators, this has real advantages—as the ability to search and monitor text data is significantly easier than searching and monitoring recorded phone conversations. In addition, virtual turrets could also be ported onto mobile devices, allowing traders to make and receive fully compliant phone calls at home or while traveling.

Voice communication tools will surely get more electronic, but they will never go away. There may be faster and more efficient methods, but communicating by voice is always more personal. Voice communication helps traders convey nuance, build trust and develop stronger relationships with their clients and brokers. And trading is—and always has been—a relationship business.

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