The evolution to cloud-based financial applications is transforming desktop computing in profound ways for financial service organizations, large and small.

From boutique financial service providers, to commercial banks and Wall Street investment firms, the benefits of cloud computing and virtual desktop infrastructure (VDI) are driving increased adoption of cloud-based financial applications. Liberated from managing and maintaining their own end-to-end IT infrastructure, these organizations are achieving significant gains in workflow agility, availability and data security, at lower cost structures.

Amid this newfound computing flexibility, there’s been intensifying scrutiny on the role of conventional desktop personal computers (PCs), and the value they provide for financial service organizations in working environments spanning from the corporate office to the bank teller window to the trading floor. A careful review of the desktop PC’s value proposition for financial applications reveals that the burdens and risks imposed relative to security, reliability and workflow efficiency often run directly counter to the core value propositions of cloud computing.

For financial service organizations deliberating on whether to renew their desktop PC leases and/or upgrade to newer PC models, cloud-optimized thin clients offer a compelling alternative, and should merit strong consideration. Here we’ll assess the many advantages that thin clients can provide as a desktop computing solution for financial service organizations – a solution that’s uniquely distinguished as an ideal complement for modern cloud-based financial applications.

**SECURITY CONCERNS AT THE FOREFRONT**

Data security and protection are paramount concerns for financial service organizations, given the sensitivity and importance of the financial data and client information they’re administering. Data leaks and breaches can produce a host of negative consequences, and leave the organization vulnerable to costly litigation and sanctions, and untold reputation damage.

Cloud datacenters help neutralize security risks in the backend infrastructure leveraging stringent, centrally-managed security and access protocols, with comprehensive, redundant data backup that prevents against data loss. But these data security and protection measures can be compromised at the desktop device level in environments where conventional desktop PCs are employed. With critical data and applications residing locally on the PC, there is a heightened risk that data can be stolen, tampered with, or lost, and this risk is magnified with every individual PC that’s connected to the network.

With thin clients, however, all data is stored and protected centrally in the cloud, and can’t be downloaded or saved to the device itself – this eliminates the aforementioned security risks at the endpoints. Authorized users access the cloud repository via tightly-controlled user authentication and permissions verification, and if needed, smart cards. USB port protections and firewalls can be employed to further bolster endpoint security.

**WORKFLOW AGILITY & SYSTEM RELIABILITY**

Another key benefit of cloud computing is ‘always on’ data availability. The applications and information that employees count on for smooth day-to-day workflow are accessible at any time via any authorized computing device equipped with an internet browser.

Custom-configured desktop PCs populated with onboard apps and file storage can present numerous workflow chokepoints, however, restricting employees to using dedicated devices that can limit their computing agility. And if a user’s PC fails, that user is essentially stranded until an IT administrator or technician can service the machine. This can be particularly problematic for finance professionals whose clients depend on them for real-time consultations.

Cloud accessible thin clients neutralize these challenges by offering every user the ability to digitally transfer their device functionality and user interface seamlessly from system to system, with no downtime. The user experience remains consistent for bank tellers as they rotate to different windows, and for other finance professionals who find themselves visiting multiple branch offices, or shifting desks and cubicles on the fly.

With thin clients, the risk of device failure is also considerably reduced compared to desktop PCs. Power efficient thin clients keep thermal dissipation to a minimum, and therefore don’t require onboard fans – a moving part that’s a common point of failure for desktop PCs. As an additional benefit, the reduced heat output makes it easier to cool workspaces in densely staffed environments like stock exchange trading floors.

From enterprise-sized financial service institutions to the boutique consultancy, thin clients’ power efficiency advantages also help to lower electricity expenses and reduce strain on the local power grid and/or onsite generators. This also helps to shrink the organization’s carbon footprint – an important benefit for any financial service organization seeking to reduce its environmental impact and promote corporate sustainability.
THE VALUE OF VERSATILITY

Apart from the many benefits that distinguish thin clients as the ideal complement for cloud-based workflow, thin clients are also easily adaptable to physical workspaces. This is especially valuable for finance professionals who utilize multiple displays in ‘command center’ configurations to visually track multiple feeds of financial data in real time.

With office and cubicle space at a premium – particularly for fast-growing financial service organizations who occupy some of the most expensive metropolitan real estate in the world – it often isn’t practical to surround a desktop PC with four to six screens at a time. Thin clients with multi-display configurability and rich multimedia support can enable users to shrunk their desktop footprints to include fewer displays, each of which can be digitally partitioned into multiple sub-displays, with crisp 4K graphics resolution that doesn’t strain the eye.

Thin clients also make it easy to swap in/swap out peripherals as needed, with little to no IT department intervention required. For use cases where card readers, signature pads, scanners and/or receipt printers may be needed, users can quickly customize their thin clients to adapt accordingly, and the IT department is spared the time and expense of re-configuring individual devices. Ideally, a single thin client platform – one model number – could be deployed across the entire organization, enabling a uniform desktop computing environment that can be quickly and easily adapted to each individual user, with no downtime or workflow interruptions.

THE AMD THIN CLIENT ADVANTAGE

The evolution to cloud computing and VDI is transforming the way data is stored, managed and accessed, accelerating the transition from conventional desktop PCs to thin clients for a diverse range of applications across the financial services market. With more and more financial applications migrating to the cloud, thin clients enable secure ‘anytime, anywhere’ access flexibility, with workflow and cost efficiencies that surpass individually administered desktop PCs.

Powering thin client solutions from leading system OEMs including Dell, HP, IGEL and others, AMD Embedded G-Series and R-Series processors provide ideal performance for financial applications.

Financial service organizations of all sizes and disciplines can take advantage of AMD-powered thin client solutions to improve workforce agility and efficiency, while lowering their operational costs.

AMD Embedded processors are available in a wide range of performance, power and security profiles, and are renowned for their graphics processing capabilities. Supporting multi-display configurability and 4K HD video, AMD-based thin client solutions equip financial service organizations with the high-performance computing and rich multimedia capabilities they need to help their clients succeed in fast moving financial markets.

To learn more about AMD’s thin client solutions, visit http://subscriptions.amd.com/greatpower/industrymedical.html

To calculate the potential cost and energy savings that can be achieved with AMD-powered thin clients, visit http://www.amd.com/en-us/solutions/embedded/thin-client/tco-calculator

ABOUT AMD

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AMD solutions enable people everywhere to realize the full potential of their favorite devices and applications to push the boundaries of what is possible.

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