Case Study

In the emerging transformation of the global exchanges business, future relevance, competitiveness, and profitable growth will depend on high liquidity combined with trading capabilities that provide timely price dissemination and deal execution. The London Stock Exchange is acutely aware of this and has developed a strategic framework that will enable it to further advance its leadership position—optimizing alignment between its technology investment and business model to the ultimate benefit of the members and customers it serves.

Business Challenges

The London Stock Exchange (LSE) is one of the world’s premier financial exchanges. With 350 members—comprising the leading investment banks, specialist traders, and certain investment funds from over 40 countries—the LSE is the premier source of equity market liquidity, benchmark prices, and market data for U.K. equities in the European time zone.

In a dynamic industry environment where improved productivity of assets and capital is paramount in order to maintain profitability, the LSE has helped to progressively reduce the cost of capital in the equity savings market value chain by introducing new market structures, streamlining market processes, and enabling automation. It launched the Alternative Investment Market in 1995 to improve access to capital for smaller companies and reduce their costs. A public limit order book was introduced in 1997—SETS—to permit order matching and reduce the capital required to participate in the equity trading market. Enhancements to this service were introduced to provide a hybrid trading service SETSmm (order book and market making support) and an International Order Book for trading certain foreign stocks. LSE also played a key role in developing the marketwide central counterparty to reduce financing costs for the industry and has since facilitated choice in clearing services.

Executive Summary

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<td>BUSINESS CHALLENGES</td>
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The London Stock Exchange Transforms Itself for Global Competitiveness as It Innovates on Efficiency, Latency, and Speed to Market
The LSE’s latest innovation is to introduce a new information dissemination and trading platform as part of its technology program, the Technology Road Map. The components of the platform are its price dissemination capability (Infolect) and its improved trading capability (supported by the forthcoming launch of TradElect). This IT environment demonstrates enterprise best practice with the adoption of an outsourced managed services model that allows the LSE to run other exchanges, such as the Johannesburg Stock Exchange, using its own platform. This new platform will help LSE to more cost-effectively manage changes in market demand and do so at higher speeds.

The soon-to-be-implemented Markets in Financial Instruments Directive (MiFiD) modifies the market environment in Europe by creating a level playing field for business negotiated away from the order book and opening up the possibility of additional competition by enabling customers to choose where to execute or report their business from a wider range of venues.

Against this backdrop, the LSE wanted to find a way to frame and demonstrate the benefits of the services it provides to its members and customers. Other strategic goals included the need to determine where the next major IT investment should be made in order to improve its position and meet evolving customer needs.

Solutions

The Cisco Internet Business Solutions Group (IBSG) works with global leaders in Financial Services to develop breakthrough innovations in business-model processes and demonstrates how technology contributes to positive financial growth and market position.

This is accomplished by drawing upon technological innovation and industry best ideas, one such example of which is the Cisco Exchanges Survey. The survey—carried out with absolute sensitivity and care taken to protect anonymity—is based on interviews with senior executives at 30 of the world’s top financial institutions and identifies and benchmarks the key capabilities required by a leading equity exchange.

Robin Paine, chief technology officer for the LSE, tells the story: “We found ourselves at an important crossroads, and we were introduced to IBSG through our Cisco account manager. From these initial discussions it quickly became apparent that we had a shared understanding of the market and a vision of where it is going. Being smart about the way we invest in technology is crucial to ensuring future success and driving growth through improved customer experiences and increased transactions.”

Working with Cisco IBSG, the Exchange was able to take an objective look at the market and model cause and effect to simplify complex issues. Systems Dynamics techniques were employed to do this.
The model examined the correlation between investments made in reducing latency in its Infolect platform and the perceived value this would deliver to the Exchange through the ability to convert more orders into trades. More importantly, by showing that completed deals, as opposed to volume of orders, were the primary driver of revenue, the model confirmed that the exchange should at this time focus on improving capacity and reducing execution trade response times.

David Lester, chief information officer for the LSE, explains how this insight has added value: “Taking this snapshot of evolving customer needs helps us to think about the next stage of our IT development once our Technology Road Map program is completed later this year. The different customer needs identified enable us to decide how best to support our customers in managing their order flow and at the same time weigh up the potential timing of and payback from our future investment.”

The final stage of the engagement involved a comprehensive review of the LSE’s technology sales strategy. Cisco IBSG helped to support this process by presenting a set of recommendations to identify those areas where the exchange was most likely to achieve best results for its efforts. It is intended that this sharpening of focus will help to maximize future opportunities, such as sales of the Exchange’s iBus middleware solution, as well as facilitate the removal of internal cost and non-productive management time.

Business Results

The LSE’s investment in the Technology Road Map gives its customers a fast, reliable, scaleable, and modern financial trading platform.

Cisco IBSG has helped the Exchange to develop a new model which provided a context in which to align technology and innovation in its business model. By ensuring closer integration between IT and business strategy, the LSE can now focus on delivering the next stage of growth to benefit customers.

LSE’s investments to date to improve the performance and reduce the latency of its Infolect data distribution system have contributed to a dramatic increase in order flow and throughput. With the latency of its Infolect information distribution system reduced to an average of 2 milliseconds, the peak number of daily messages entered into the trading system per second has increased by around 50 percent.

The study confirmed that the LSE Board would obtain best ROI—and facilitate customers’ trading needs—by shifting the focus of its next investment to improve trading system performance and increase peak second capacity. As well as helping to evaluate and prioritize future IT projects, the model has also helped the Exchange to confirm its understanding of the prerequisite capabilities required to be competitive.

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chief information officer
London Stock Exchange
The collaboration has assisted the Exchange to re-evaluate and focus its technology sales strategy in a way that will better target future opportunities and eliminate nonvalue creating activities.

Next Steps
Looking ahead, implementation of TradElect is expected to provide the capacity to increase current trading volumes from around 600 trading units per second to 2,500 trading units per second, leading to measurable increases in trading volumes and the ability to offer even higher service levels to its members and customers.

Paine comments: “Due diligence and preliminary work carried out with Cisco IBSG means that we can now move to planning and execution of the project with a higher degree of confidence. Challenging our baseline assumptions and introducing new approaches, tools, and techniques helped us to develop our own thinking. As a result, we now have a model that we can apply to other future IT programs.”

More Information
The Cisco Internet Business Solutions Group (IBSG), the global strategic consulting arm of Cisco, helps Global Fortune 500 companies and public organizations transform the way they do business—first by designing innovative business processes, and then by integrating advanced technologies into visionary roadmaps that improve customer experience and revenue growth.

For further information about IBSG, visit http://www.cisco.com/go/ibsg