The complex weave of Capital Markets

From coffee shops, carrier pigeons through buttonwoods, telegraph poles and the frensied brick and mortar stock exchanges of yesteryears, to the complex computer based virtual electronic trading screens of today; it has been a long and fascinating journey.

The winds of liberalisation and globalisation aided by the rapid growth of high speed communication networks over the past four decades, has further accelerated this transformation of capital markets to dizzying heights, not withstanding the intervening bubbles and bursts.

Corporate have access to international financial centres thereby increasing cross-border flows of funds and securities dramatically. Many new products have evolved and the shape and structure of capital markets is undergoing a paradigm shift. On the NYSE alone, the average daily trading value was 153 billion USD in 2008 and the market capitalisation stood at almost 12 Trillion USD in 2010.

Adding to the scale and complexity, the landscape is witnessing an increased reliance on exchange traded products including certain OTC products like Interest Rate Swaps [IRS], Fx, etc. Risk management is being centralised at clearing corporations with OTC products being cleared through Central Clearing Parties (CCP). Electronic trading, high frequency trading, tick-by-tick data and low latency are made possible by cutting edge technologies. There is added pressure on achieving higher levels of Straight through Processing (STP) to reduce cycle times.

Today technology provides the competitive edge enabling an array of differentiated service offerings, with exchanges claiming response and transaction speeds in micro seconds. On one hand, when the world is shrinking into a unified global market, this makes the role of regulatory bodies, such as ASIC in Australia, AMF in France, BaFin in Germany, RBI/SEBI in India, FCA in UK, SEC in USA and many others, along with the attendant laws in the respective countries, ever more challenging in terms of Clearing and Settlement. On the other hand, it is becoming abundantly clear that the increasing reliance on technology and business assurance of such technologies alone could mitigate the emerging pain points and boost efficiencies.

This underscores the imminent need for specialist testing services with relevant domain knowledge.

Competencies on offer

With a wide range of competencies in testing various applications across the entire trade life cycle, in various functional areas, SQS - Software Quality Systems AG is well placed to provide a whole gamut of services suited to Capital Markets.

Asset classes addressed

- Equity {Exchange Traded Fund (ETF), and Securities Lending & Borrowing}
- Derivatives (Futures & Options)
- Commodities (Inclusive of Implied order)
- Fixed Income
- Money Market
- Interest Rate Derivatives
- Forex
- Structured Products

Familiar message formats

- FIX (Financial Information Exchange)
- SWIFT (Society for Worldwide Interbank Financial Telecommunication)
- Proprietary Messages

Projects

SQS has tested the above asset classes across various types of projects:

- Business Requirements Specifications Preparation
- System Integration Testing
- User Acceptance Testing
- Regression Testing
- Automation & Non Functional Testing

Track record

SQS' Capital Market clientele includes

- Stock /Derivatives/Commodity Exchange – Domestic and International
- Capital Market Product Companies
- Leading Global Brokerages
- Clearing and Settlement Firms
- Registrar and Transfer Agency
- Depositories
- Asset Management Companies
- Wealth Management Firms

The SQS advantage

Domain Focus

- Requirement Assurance
- Financial Calculators {E.g. Limits Calculator, Indicative Opening Price (IOP) Calculators, Brokerage and Commission Calculator, etc}
- RBT: Risk Based Testing

Accelerators

- Ready to use Test Repositories of Scenarios, Functions, Sub Functions, Conditions and Cases for many Capital Market Segments
- Testing Centre of Excellence (TCoE) Framework and Implementation Model
- Risk Prioritisation Matrix

Automation

- ARTEMIS: The SQS test automation framework
- PAVE: Parameter Verification Tool
- SPEAR: Methodology for Performance Testing

Applications Tested

- Neat, Neat +, Neat Pro
- Leading capital market solution provider – FO&Clg. & Settlement Systems
- Syn~
- Stars
- NSDL-DPM
- Miles- Moneyware Fundware
- AG | Capital
- Eurex
- ACE Trader (Commodities)
- OFIS
- EMC Captiva
- EMC Documentum
- APX.MOXY & TRADEX
- Fidessa Latent Zero Capstone Sentinel
- Hi Portfolio (DST Global)

Client Speak

"During test preparation and execution, the SQS team raised a huge number of issues that helped significantly to improve the software in their area of responsibility. They always discussed the findings with superiors and team colleagues in an appropriate way ensuring a high quality of issues raised and making them one of the most successful contributing teams."

Project Manager
A leading European Stock Exchange

Contact

For further information, or if you have any other questions, please do not hesitate to send us an email: info@sqs.com

SQS – the world's leading specialist in software quality