



HAITONG

CASE STUDY

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An international financial institution with established presence in Hong Kong and a rapidly expanding network across the globe, has a track record of strong growth and is known for its risk-focused internal culture.

TSIMAGINE™



Profile

COMPANY

Haitong International Securities Group Limited “Haitong International” *

LOCATION

Hong Kong

ESTABLISHED

1996

DEPARTMENT

Trading desk supporting wide-ranging brokerage activities

**Securities House of the year, Risk.net, 8 September 2020*

Summary

Haitong International, an international financial institution with established presence in Hong Kong and a rapidly expanding network across the globe, has a track record of strong growth and is known for its risk-focused internal culture.

The firm has been using TS Imagine since 2016 for real-time risk analytics for its high volume equity/equity derivatives trading desk. Their usage of the platform has evolved with the business, which was primarily trading OTC options in 2016, and later expanded into structured products.

TS Imagine’s platform has become an integral part of their workflow and the team rely on it for cross-asset risk analytics as well as daily P&L and stress testing. As a cloud-based SaaS solution, Haitong International gains a future-proof system that is flexible, scalable, simple to upgrade and eliminates the need for dedicated internal support teams.



Critical risk management on the trading desk

Heavy trading volume and a wide range of instruments.

Given the equity/equity derivatives desk's high volume – in excess of HKD 4 billion (over USD 500 million) turnover daily – the Haitong International team needed a more robust risk management system. Kenny Chong, managing director of the equity derivatives trading, global markets team was already familiar with the platforms used at other large banks including both in-house and third-party systems. When TS Imagine was recommended, his team evaluated the platform's capabilities relative to other systems, and they were impressed.

"We have more than 1,000 positions spanning over 150 different actively-traded underlyings, and we need the ability to calculate real-time risk metrics for the portfolio to identify hedging opportunities. TS Imagine covers all the instruments we are actively trading, such as vanilla equity option, index futures and

options, FX forwards, covered warrants and callable bull/bear contracts (CBBCs) and the system has risk management capabilities similar to what we saw in other banks. Most importantly, it is built on a cloud-based SaaS platform, which was one of the key criteria for us," Kenny Chong commented.

The trading desk looks at both individual security and portfolio-level option risk using various greeks computed by TS Imagine, and they rely on the system to determine whether they are long or short beta, gamma, etc., for a given underlying. They are working with the TS Imagine team to further enhance existing drill-down features to identify the positions that contribute to an exposure. They also use the platform to calculate their P&L on a daily basis.

TS Imagine's abilities to stress-test key parameters are another one of the features that Haitong International relies on heavily. Using the platform's customizable dashboards, they have developed their own "risk matrix" so that they can compute prices for the instruments they trade under different strikes and maturities. The Haitong International team then uses the system to create a "spot ladder" that shows various greeks at different stressed levels of the underlyings. The risk matrix dashboard is used by the team for real-time analytics and this data feeds into a risk matrix report that is generated by the platform for the firm's EOD reporting requirements.



Automation facilitates information

Fast-moving markets and constant trading demand an automated solution

Haitong International uses APIs to automate their workflow and upload positions from their market-making system into TS Imagine throughout the trading day. Mr. Chong noted that, “We make as many as 30,000 trades per day so we automatically upload them into the platform throughout the day using TS Imagine’s APIs. We

aim for low-latency (every five minutes) so that we can look at risk numbers that are as current as possible.”

The firm plans to expand their use of the system to other desks within equity derivatives, such as OTC-based private wealth products, accumulators and equity linked notes (ELNs), which will increase the

number of positions they upload. The combination of the API and the scalable, cloud-based infrastructure means that TS Imagine will be able to handle increased volumes as their business grows.

TS Imagine manages the complex portfolio and risk analytics of their structured products business, while delivering the low-latency, scalability and automation of a cloud-based, hosted solution.



SaaS approach required

Faster implementation, simplified upgrades and reduced support requirements

Haitong International wanted a SaaS platform for many reasons, including ease of implementation, maintenance, upgrades and support. Importantly, the trading desk could not endure a lengthy implementation process and TS Imagine was outstanding in this regard. Mr Chong commented “With Imagine, we could start trading almost immediately, which was critical for us given that we had obtained regulatory approval to trade quite quickly. We knew the key capabilities we needed,

and Imagine stood out from other vendors we surveyed in terms of all of these items.”

He noted that many large banks still use on-premise systems because they think doing so provides greater flexibility, but he insisted on a cloud-based approach, knowing that it actually eliminates many support issues and makes upgrades much easier. Mr. Chong recognized Imagine’s outstanding support service,

saying that everyone on the team understands the product very well and has a lot of experience, more so than with other vendors who have high staff turnover. They rely on Imagine’s team to answer their questions, handle User Acceptance Testing (UAT) and address their needs quickly. This was important to them in choosing a SaaS provider.

“Many large banks still use on-premise systems because they think doing so provides greater flexibility, but a cloud-based approach actually eliminates many support issues and makes upgrades much easier.”

Kenny Chong, Managing Director,
Equity Derivatives Trading, Global Markets, Haitong International



Partnering to support business growth

A future-proof system that manages real-time, cross-asset risk and much more

When asked to highlight the top benefits Haitong International obtains from using the TS Imagine platform, Mr. Chong cited the following:

- Real-time risk management and monitoring,
- The ability to build very powerful customizable dashboards (for real-time monitoring) and reports (EOD), such as their Risk Matrix,
- Cost-effectiveness, relative to the many benefits it provides;
- Impressive data and calculations, producing fair values that Haitong relies on every day,
- The cloud-based, SaaS solution
- Meets internal compliance requirements

The partnership between Haitong International and TS Imagine delivers a future-proof solution that supports business growth. As an example, the team has built a warrants and callable bull and bear contracts (CBBCs) business over the past few years supported by the product coverage, flexibility and scalability of the

TS Imagine platform. Going forward, they plan to continue to expand the use of TS Imagine to different areas, such as real-time margin management, as they continue to grow and as regulatory requirements evolve.

“TS Imagine covers all the instruments we actively trade, 150 different underlyings, and has the real-time risk management capabilities we need to identify hedging opportunities. Most importantly, it is built on a cloud-based SaaS platform, which was one of the key criteria for us.”

Kenny Chong, Managing Director,
Equity Derivatives Trading,
Global Markets, Haitong International

We would like to thank Mr. Kenny Chong for speaking with us to produce this case study.

ABOUT TS IMAGINE

Created by combining two best-in-class platforms, TradingScreen and Imagine Software, TS Imagine delivers integrated trading, portfolio management and real-time risk solutions for buy-side and sell-side firms globally. The SaaS platform is uniquely positioned to streamline complex and time-consuming workflows across front, middle, and back office functions.

Our nearly 400 employees in 10 offices worldwide serve approximately 500 institutions across North and South America, EMEA, and Asia Pacific, including hedge funds, traditional asset managers, pension funds, fund managers, banks, broker-dealers and other financial institutions.

Headquartered in New York City, TS Imagine has offices in London, Paris, Montreal, Hong Kong, Singapore and Tokyo.

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