## Branching out

Neil Ainger looks at the emerging frontier of technology services.

The trend towards third party technology provision at emerging market exchanges is clear, with established bourses in developed markets offering 'exchange-in-a-box' or partnership deals. Frontier markets in Africa and elsewhere are also outsourcing their tech, offering their Western counterparts much needed revenue and emergent ones status, market access, compliance and experience.

"Why reinvent the wheel," asks the CEO of the London Stock Exchange's MillenniumIT technology services unit, Mack Gill, when discussing the rationale behind many emerging and frontier market exchanges' decision to offer their technology to outside providers. "It's far more

efficient to leverage partnerships to acquire 'bestin-class' technology that is already developed ... using scalable architectures, shared standards and existing tech is a win-win."

It is viewpoint that Lars Ottersgard, head of NASDAQ OMX Market Technology agrees with. He notes that establishing new capital markets requires access to global best practice, technology and expertise around the legal, regulatory and trading framework to serve local market participants as well as attract international investors. Emerging markets don't want to start from scratch. "We have partnerships with Borsa Istanbul in Turkey, the East Africa Exchange in Rwanda and the Kuwait Stock Exchange, among

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others, and have helped build these markets," he says. "In the latter case the objective was to support the Kuwait exchange's compliance with international standards and its contribution to economic development. NASDAQ OMX provided trading technology and strategic advisory services. This included the implementation of a new trading platform for equities, bonds and derivatives a few years ago. In addition, we oversaw the introduction of compliance and post-trade services."

Other recent examples include the LSE's Millennium IT unit using its tech expertise in South Africa, installing post-trade technology at the Singapore Exchange and modernising the Mongolian exchange. It also introduced a smart order routing solution in Peru and a central securities depository (CSD) project in Argentina. Third-party surveillance system installations are also common – sometimes in alignment with established exchanges, for example SMARTS which is now owned by NASDAQ OMX – as are index calculators and market data distribution systems in end-to-end installations.

Deutsche Börse is also a major player in this space with its advanced Xetra platform. It has

recently bought a stake in the GMEX Group which targets emerging market trading clients. According to Veronica Augustsson, CEO of Cinnober, independent provider of mission-critical solutions and services to major trading and clearing venues, Deutsche Börse has also recently entered into a memorandum of understanding with the Thai stock exchange to replace its old NASDAQ OMX powered platform with a Xetra-based platform.

Cinnober is a partner in the Thai project (see p.59), which Augustsson believes demonstrates the importance for emerging market exchanges' to be flexible and not be tied to restrictive 'exclusive' partnerships that can hinder flexibility, create silos and have long-term negative impacts. Co-operation without lock-in is possible via the effective use of standards and service-orientated architecture (SOA)-like infrastructures that share common protocols, coding approaches and so forth. "I'm a believer in collaboration but it shouldn't be exclusive," she says, adding that while her firm sees established exchanges tech services' units as rivals, there is no reason why they cannot also work together to benefit end users (as in the case of the Thai exchange).

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Historically, dedicated technology companies have brought innovation and new tech to the marketplace that established exchanges wouldn't necessarily have done so, says Augustsson, citing the raft of new multilateral trading facilities that resulted from the EU's first Markets in Financial Instruments Directive (MiFID) back in 2007 – and earlier from the RegNMS changes in the US – and the fact many of these new launches were subsequently acquired by traditional exchanges. "The LSE, for instance, acquired Turquoise and latterly Sri Lanka's MillenniumIT precisely in order to overhaul its old tech offering. This illustrates how standalone tech companies can refresh the market."

## Off-the-shelf v partnerships

While retaining some flexibility in emerging or frontier market exchanges allows technology swap outs and upgrades to happen more easily in later years, it is not the only approach. "In Brazil, for instance, BM&F Bovespa has partnered with CME Group and they don't sell an exchange-in-a-box type solution," says Aite Group analyst, Danielle Tierney.

CME favours a traditional comprehensive

build-out methodology which may require tweaks to make existing platforms better suited to local markets, and often requires large internal IT staff numbers, but it does at least have the advantage of control, consistency and clear lines of responsibility. "CME has a strategic partnership with Mexico's exchange operator too and they personify this partnership approach, versus the exchange-in-a-box type of project, which say the Nigerian exchange is pursuing with NASDAQ OMX," she adds. "Both approaches are valid and emergent exchanges must decide for themselves what is best."

Whatever approach is adopted it is important for the end user emergent exchange to install comprehensive end-to-end technology that can cover trading, reporting and surveillance operations, with compliance, clearing links and so forth also available. Only then can international markets be accessed, audit trials established and new financial hubs created.

## Benefits and trend drivers

The main benefits for emerging or frontier market clients is the access to high-tech financial hubs



and liquid markets that can attract global investors quickly, drive economic growth and be created in a fraction of the time it would otherwise take. They also gain cachet, access to international markets, connectivity and tech know-how in an instant. For established exchanges they can plumb new revenue streams at a time of declining equity volumes and profit margins due to regulation, dark trading and electronic broking.

Mark Hemsley, CEO at BATS Chi-X Europe, believes that competition fostered by newer venues such as his own, is only escalating the third-party tech provision trend. "The cost of trading and clearing in Europe has plunged since 2008: it's now 10 times cheaper post-MiFID to trade and up to 150 times cheaper to clear. This has dented the revenues incumbent exchanges derive from trading," he says. "Selling technology to emerging market players that may not enjoy comparable budgets or the same technical experience is a means to plug the shortfall. In some cases, it's also a strategic alliance that allows the cross-propagation of business and clients between exchanges."

Hemsley maintains that his own firm is not interested in joining the third-party exchange technology providers. "We've had multiple requests to start a technology business. Our conclusion so far has been the same: we'd rather focus resources on completing the integration of BATS Chi-X Europe, and are now doing the same in the US with Direct Edge. This is a mammoth task, from which we don't want distractions."

## Conclusions

Jim Northey, co-founder of the LaSalle Tech Group and co-chair of FIX Trading Community's Americas Regional Committee, is understandably keen to stress the need for standardisation in this space to ensure cross-border connectivity, via the likes of FIX messaging, and to aid technology integration and market efficiency.

"The use of FIX is essential to the growth of frontier and emerging markets," he says, citing the recent positive impact of the introduction of FIX in Nigeria. "It also aids on-boarding, and certification provides certainty and resilience for market participants."