Investment banks' technology initiatives: highlights

- Banks' investment in technology is accelerating as banks fight to maintain/develop edge in electronic markets; improve risk management; and achieve savings by rationalising complex system architectures.
- Such investment is time consuming – and costly. Programmes announced in recent years typically boosted the proportion of tech & ops in their total operating costs by 10% during the peak phase of execution.
- The IT investment pays off, however. Banks that completed their investment programmes are devoting the same proportion of total operating costs to running efficient new systems as banks that barely started their upgrades. In the new 'e-world', we expect this IT gap will grow; and doubt the long-term viability of spreadsheet-based and similar solutions.

The technology budget of the leading capital markets banks is the most significant item after the cost of the front office traders and sales people. The investment comprises staff providing system support, the licensing of systems from external providers, the development of in-house systems and the cost of the purchase and cost of infrastructure that make up a bank's wider platform.

Before the 2008/09 financial crises, most banks had a convoluted technology system architecture. Individual product areas had their own patchwork of platforms for trade capture, risk management, trade settlement, client reporting and so on. Consolidating data across product areas often involved manual work-arounds, or spreadsheet-based solutions.

The crisis shifted priorities to better risk management. This was followed by the rise of electronic trading in equities, FX and the credit markets; and, finally, 'investing-to-save' longer-term initiatives.

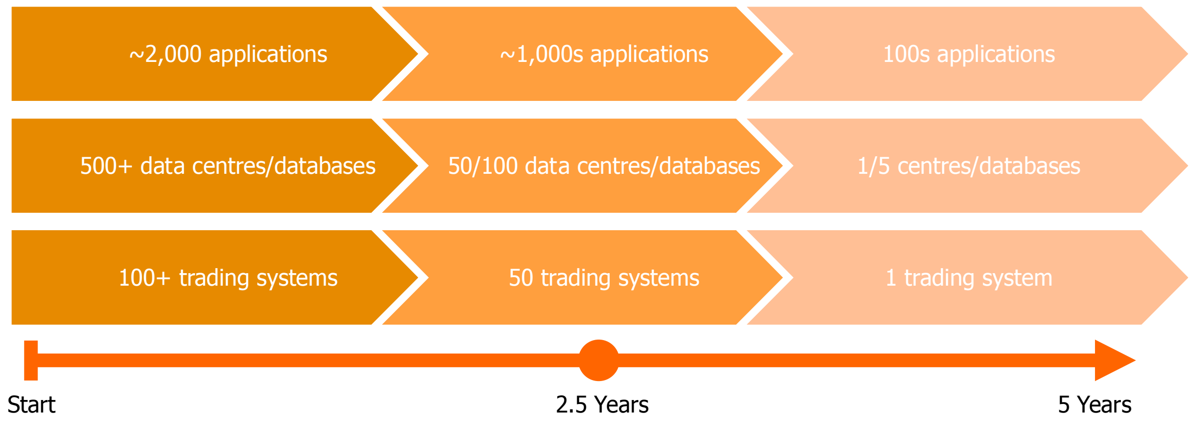
Focus areas for technology investment

Invest in risk management	▪ Cross asset class netting ▪ Credit risk cross region correlation ▪ Consolidating cross business unit risk ▪ Consolidating liquidity management
Invest in electronic markets	▪ Algorithmic trading ▪ Bank owned market trading fora ▪ Automated retail/HNWI product solutions
Invest to save	▪ Rationalising the number of trading systems ▪ Removing manual processes

Source: Tricumen

'Investing to save' and investing in stronger cross-business risk management often both lead to simplification of systems architecture. In the mid-/late-2000s, investment banks typically run thousands of applications, on hundreds of separate trading systems. Simplifying this to a few hundred applications and a *single* system for risk management and trade capture is the new goal of many. In addition to a more effective risk oversight, a simplified architecture typically allows for cost reductions (mainly via cuts to operations and system support staff), but this is a lengthy process. Our research suggests that at least 5 years of significant investment are required; changes often have to be made in gradual steps, to minimise the risk of operational failures. A typical reduction program is shown overleaf.

Typical complexity reduction program

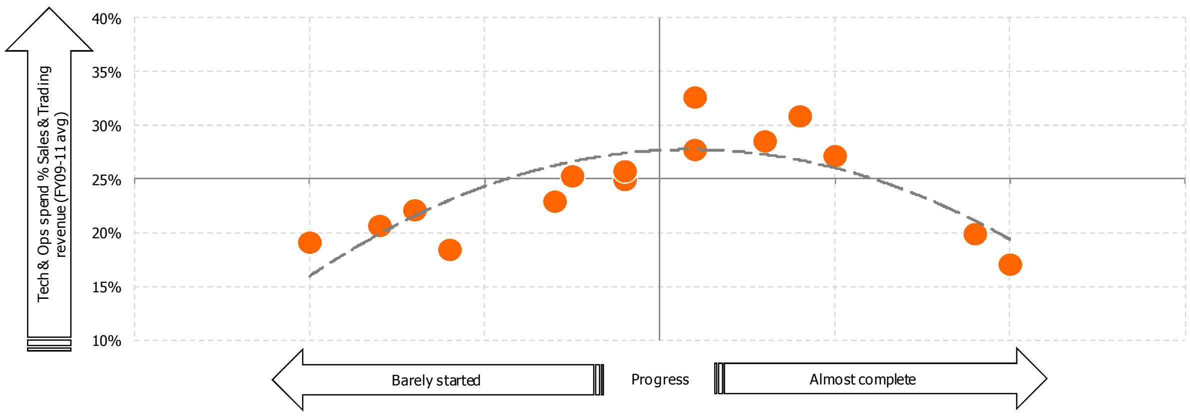


Source: Banks, Tricumen analysis.

Banks such as J.P.Morgan and Goldman Sachs have been at the forefront of such programs with both putting in place substantive work prior to the crisis. J.P.Morgan, for example, launched a $3bn programme to streamline its network and datacentres in 2005 and in the two years before the crisis typically targeted 65% of its growth initiative budget on technology projects. At the time, this negatively impacted the bank's cost/income ratio; today, however, most of its peers' investment programmes are lagging far behind.

However, not all banks have decided to embark on such costly and margin reducing programs. Some of the French banks, for example, favour 'lighter-touch' architectures, relying on relatively basic systems enriched with business unit-owned spreadsheet solutions. This approach typically accounts for the same proportion of total operating expenses as is the case at IT leaders; but in the fast-moving 'e-world', the viability of such systems is, in our view, questionable.

Tech & Ops investment stages as a percentage total sales & trading markets expenses



Source: Tricumen. Peer group comprises capital markets/CIB units of: Bank of America Merrill Lynch, Barclays, BNP Paribas, Citigroup, Credit Agricole, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, JP Morgan, Morgan Stanley, Royal Bank of Scotland, Societe Generale, UBS, Wells Fargo.

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