NRI

lakvara vol.249

# Investment banks embrace collective reference-data utility model

Ken Katayama 11.October.2016

Nomura Research Institute, Ltd.



Ken Katayama Senior Researcher Financial IT Wholesale Business Planning Department

# **Executive Summary**

Faced with a challenging business environment, major investment banks have been pursuing improved efficiency and risk reduction by teaming up with each other to establish reference data utilities. Data management expertise is now more crucial than ever.

# Major investment banks face imperative of dramatically improving efficiency

Investment banks are beset by an adverse business environment that is pushing them to dramatically improve their operating efficiency. With the global economy still far from fully recovering nearly a decade after the global financial crisis first erupted in the US, investment banks' profits from their capital markets businesses remain in protracted decline. The profit decline has dragged their ROE down into the single digits from around 15% before the crisis.

Faced with strong pressure from investors to boost ROE back into the double digits but constrained by meager prospects of increasing front-office earnings power, investment banks have been forced to increase the efficiency of cost centers such as middle-office and back-office functions. They have been upgrading cost centers' productivity by automating repetitive business processes and offshoring labor-intensive ones.

Efficiency gains from offshoring, however, have been impeded by existing organizational silos, communication barriers and soaring labor costs. Automation also faces limits. Even if investment banks wish to automate further, they no longer have much scope to do so individually.

#### Co-ownership of reference data utilities

Within the past year or two, the biggest investment banks have been teaming up with each other to form utility joint-ventures with IT vendors in the aim of reducing operating costs by collectively outsourcing certain cost center functions to their co-owned utilities. One of the first functions outsourced to such utilities is reference data (e.g., securities information, customer information) management, a relatively noncompetitive realm among investment banks.

Securities information supplied by market data vendors or securities exchanges is prone to errors and omissions. The task of checking such data and rectifying any errors and omissions is a big job that investment banks find burdensome. Sensing an opportunity, a number of IT companies have launched data-cleansing services but the services failed to gain favor among major investment banks and consequently never achieved much success.

As a new approach, Goldman Sachs, J.P. Morgan and Morgan Stanley, the three biggest investment banks, partnered with SmartStream, an IT vendor, to jointly establish SmartStream Reference Data Utility (RDU) in October 2015. Motivated by a strong commitment to improving their operating efficiency under their own control, the banks contributed their know-how as information consumers to the venture. All three banks had previously worked hard to maximize their securities information databases' efficiency. Goldman Sachs had built a securities information database that was consistent across both its front and back offices and also featured centralized data correction<sup>1)</sup> to ensure the information's completeness and accuracy. Its database was the envy of the industry. J.P. Morgan likewise had built an in-house securities information management system at an early date<sup>2)</sup>. Morgan Stanley, by contrast, had been utilizing SmartStream's securities information cleansing service. The service had reportedly reduced its data error rate by half over the preceding three years<sup>3)</sup>. The three banks channeled their combined capabilities and experience into SmartStream RDU.

In terms of asset classes, SmartStream RDU's service is initially limited to exchange-traded derivatives<sup>4)</sup> data. Equity data is scheduled to be added from the latter half of 2016 through 2017; bond data, in the latter half of 2017<sup>5)</sup>.

Meanwhile, investment banks have been stepping up know-your-customer (KYC) due diligence, including verification of information when opening new accounts and periodic follow-up checks, in response to a series of heavy fines imposed on financial institutions for money laundering violations. Investment banks' compliance staffing and, in turn, expenses have consequently increased sharply, leading to the advent of third-party KYC solutions. Thomson Reuters launched Org ID, a KYC information gathering service, at the behest of certain financial institutions. Additionally, SWIFT<sup>6)</sup> has launched a centralized KYC information registry. However, these services are targeted at financial institutions other than investment banks and therefore do not fully meet investment banks' needs with respect to customer information.

#### NOTE

- It is not uncommon for data items to be lost during transmission or for incoming data to contain errors. Investment banks have consequently devoted considerable human resources to checking and correcting incoming data.
- J.P. Morgan's securities information management system was reportedly due for an upgrade at the time SmartStream RDU was established.
- According to A-Team Group webinar, "The Reference Data Utility: How and Why Goldman Sachs, JP Morgan Chase and Morgan Stanley Are on Board" (June 2016).
- 4) Futures, options, etc.
- 5) One possible reason that exchange-traded derivatives were the first asset class is that they have expiration dates and therefore must be managed by identification codes that change over time even if the underlying asset remains unchanged. Another possible reason is that multiple exchanges list similar products in competition with each other.
- 6) SWIFT is a banking industry consortium that operates an international messaging network for funds transfers and securities settlement.

#### Reference data utilities

Type of data	Co-owners (IBs et al.)	Vendor partner	Name of service
Securities information	GS, JPM, MS	SmartStream	RDU
Customer information	Barc, BNYM, CS, GS, JPM, SS	DTCC	Clarient Entity Hub
	BNPP, Citi, DB, HSBC, MS, UBS, WFS, PIMCO	Markit + Genpact	kyc.com
	_	SWIFT	KYC Registry
	_	Thomson Reuters	Org ID

Source: NRI

- Depository Trust & Clearing Corporation, a US securities clearing house and pioneering utility service provider.
- 8) Now named IHS Markit following its merger with IHS.
- In response, State Street and five investment banks, including Goldman Sachs and JP Morgan, partnered with DTCC<sup>7)</sup> to establish Clarient, a centralized KYC information registry, in 2014. PIMCO and seven other investment banks, including Morgan Stanley, followed suit by establishing a similar service in partnership with Markit<sup>8)</sup>, a financial information service provider, and Genpact, a BPO (business process outsourcing) provider.

## Challenges of shared utility model

Given the huge volume of reference data utilized by investment banks across many different organizational units, adequate preparation for adoption of a shared utility model is crucial.

The reference data utility's function is data cleansing only. Investment banks that use a reference data utility must make the incoming, cleansed data accessible to their relevant organizational units. The biggest investment banks can utilize their existing centralized data management systems like those mentioned above<sup>9)</sup>. Other investment banks seeking to improve efficiency by using a utility service must assess the feasibility of building such a centralized system for managing incoming data.

 But they still need to ensure that their networks have sufficient bandwidth to receive voluminous data from their reference data utility.

Another common issue related to utilization of reference data is data model standardization. Details such as identification code formats for exchange-traded derivatives and customer information fields tend to differ among banks. To minimize system modification costs, every user company naturally wants to use its own data model. The investment banks with utility JVs initially engaged in heated discussions on this data model issue. However, the investment banking industry is apparently making progress toward establishing an industry standard through discussions that transcend the scope of any single bank's operations.

The investment banking industry has entered an era in which even the biggest players are teaming up with each other to collectively manage data. Improving data's completeness, accuracy, timeliness and consistency across multiple organizational units reduces both risk and the incidence of exceptions in transaction processing. Both outcomes would be welcomed by customers and regulators. Data management expertise is not only a driver of cost competitiveness, it has a big impact on risk and compliance also. The time has come for investment banks to take further steps toward centralizing data management and agreeing on a standardized data model.

### about NRI

Nomura Research Institute, Ltd. ("NRI", TYO: 4307) is a leading global provider of system solutions and consulting services, including management consulting, system integration, and IT management and solutions for financial, manufacturing and service industries. Clients partner with NRI to expand businesses, design corporate structures and create new business strategies. NRI has 10,000 employees in 35 offices globally and reports annual sales above \$3.7 billion.

For more information, visit https://www.nri.com/global/

The entire content of this report is subject to copyright with all rights reserved.

The report is provided solely for informational purposes for our UK and USA readers and is not to be construed as providing advice, recommendations, endorsements, representations or warranties of any kind whatsoever.

Whilst every effort has been taken to ensure the accuracy of the information, NRI shall have no liability for any loss or damage arising directly or indirectly from the use of the information contained in this report.

Reproduction in whole or in part use for any public purpose is permitted only with the prior written approval of Nomura Research Institute, Ltd.

Inquiries to : Financial IT Marketing Department

Nomura Research Institute, Ltd. Marunouchi Kitaguchi Bldg.

1-6-5 Marunouchi, Chiyoda-ku, Tokyo 100-0005, Japan

E-mail: kyara@nri.co.jp

http://www.nri.com/global/opinion/lakyara/index