

Asia sets the pace

Technology suppliers throughout Asia are increasingly customising their technology services to meet the demands of clients in the region and exporting these techniques to Europe and the US. Against this backdrop, Thomson Reuters has overhauled Murex as the leading supplier in Asia, as voted by our readers. By Clive Davidson

Thomson Reuters has benefited from a substantial investment in its derivatives trading and risk management suite of products and regional support infrastructure, taking top spot in *Asia Risk's* third annual technology rankings. With first places in 13 categories, New York-based Thomson Reuters has built a commanding lead over its rivals. It brushed aside the winner of the survey for the previous two years, Paris-based Murex, although its other arch-rival in the region – London-based Misys – has made significant gains.

While Thomson Reuters made impressive strides with its revamped risk management technology – following the co-development and implementation of its market risk management system Kondor Global Risk at Development Bank of Singapore (DBS) in 2006 – the risk management sector was far more competitive than the other categories. This is where Misys came into its own, winning four categories, including dedicated credit and operational risk

the most keenly fought areas of all: structured products. Given the level of activity in this area in the region, and the complexity of the instruments that Asian dealers are bringing to market, a number of vendors have made a point of enhancing their structured product technology over the past year. But Murex won both the structured product pricing and analytics and trading systems categories.

John Palmiero, Hong Kong-based head of trading and risk management for Asia at Thomson Reuters, says his company had under-invested in its risk product suite and was falling behind its competitors. That was three years ago. Then the company gave the risk division a war chest – Palmiero would reveal only that it was “a large amount” – to upgrade its existing systems or buy new technology.

Among the most significant investments were the purchase of California-based derivatives trading and risk specialists Application Networks in 2006, whose Java-based technology has given Thom-

son Reuters a flexible framework for delivering its applications; and an overhaul of Kondor Global Risk to give it credibility in the enterprise risk arena. The company also upgraded the back-office module of its Kondor+ cross-asset trading system, enabling it to compete as a stand-alone product. The system, Kondor+ Trade Processing, won 25 clients in 2007. And Thomson Reuters launched Kondor+ Structured Products, a design, pricing and risk



management tool bought by 14 financial firms in the past year.

“[Thomson Reuters] made a very big investment in our risk business, not just so that we would catch up, but to enable us to move ahead of our competitors,” says Palmiero, who joined in 2006 at the time of the new investment to develop the company’s software business in Asia. In 2007, financial information specialist Thomson acquired Reuters, but all the derivatives trading and risk technology is essentially from the Reuters side of the business.

Risk management technology in Asia is evolving towards local market requirements

Graeme Beardsell, Misys

management. Pennsylvania-based SunGard made the top five across all risk categories. And Paris-based Fermat has made strong progress over the past year, winning the regulatory capital calculation and Basel II category, and coming ahead of rival specialist risk technology vendor, Toronto-based Algorithmics, in the overall top 10.

Elsewhere, some familiar names jockeyed for position with the frontrunners. California-based Calypso Technology, particularly strong in credit, and Paris-based Sophis, an equity derivatives specialist, mounted strong challenges across the trading systems categories. NumeriX and Bloomberg, both based in New York, solidified their positions as the leading pricing and analytics vendors for the region.

Meanwhile, Murex held on to its lead in what is currently one of

Asia has not been incidental to Thomson Reuters' technology upgrades. The Kondor+ Trade Processing development was in large part driven by demand from the region, and six of the initial users of system were in Asia, mostly in Singapore and Taiwan. "A lot of the system's teething problems occurred here in Asia, so our developers had to pay attention to them," says Palmiero. Meanwhile, DBS – the first client for Kondor Global Risk – played a significant role in the design and development of the product, he says.

It is not just Thomson Reuters whose global product development is now significantly affected by the demands of Asian financial institutions. "Derivatives and risk management technology in Asia is evolving towards local market requirements and away from the traditional practices of US and Europe," says Graeme Beardsell, Misys's Hong Kong-based regional manager for Asia.

He points to the structured products innovation happening in the region as an example of how Asia is starting to take a lead in financial markets. "Look at equity accumulators, which were selling like hotcakes in Hong Kong, Singapore and Korea in 2007, while the US and Europe were just followers," he says. Financial innovation like this requires technological support. "As a result, the technology roadmap of financial institutions and software solutions providers is being directed increasingly by Asia," says Beardsell.

Balance shift

To address this shift in the centre of gravity of financial innovation, Misys has set up an Asian product centre in Beijing, with 20 staff dedicated to its Summit FT and Opics Plus derivatives trading and risk systems. The new centre is part of Misys's expansion of resources in the region, where it has increased staff by 65% over the past two years to 850 across 13 offices, supporting 195 clients. Recent additions to its client list include China Everbright Bank, which ordered Summit FT and the Eagleye compliance application in February, and Hong Kong-based Wing Hang Bank, which in April signed up for Summit FT to support its expanding structured products and other capital market businesses.

Fermat has also seen the evolution of its products driven forward by Asian clients. When the vendor was pitching for the contract for a Basel II risk-weighted asset calculation and capital adequacy reporting tool at Standard Chartered (SCB) in 2006, it needed to demonstrate that it could meet the bank's requirement for business and client profitability reporting. "SCB was an early mover in designing 'beyond Basel II' requirements into its Basel II systems that many banks are just looking at today," says Gilbert Gagnaire, co-founder and Asia chief operating officer of Fermat in Singapore.

The company's prototype of what has become its Risk Adjusted Performance Management (RAPM) application included the ability to forecast risk-adjusted measures. Standard Chartered implemented the application last year, and Fermat has since sold it to a number of other banks in Europe as well as North and South America. "And as a direct consequence of the work with SCB, we enhanced the forecasting part of RAPM into a stand-alone product, which we launched in early 2008 with lead customer HSBC," says Gagnaire.

In the course of these developments, Fermat opened a research and development office in Singapore staffed with 15 people (of the company's 90 total staff), including several senior staff relocated from Europe. This office now leads the development for Fermat in



John Palmiero, Thomson Reuters: has benefited from big spending

key areas, such as the RAPM product, capital forecasting and planning, a web-based 'dashboard' and portal reporting tool and collaborative workflow services. The company has also added support for the national versions of Basel II for 10 countries in the region, including India, Malaysia and Thailand.

It is clear from the survey that there has been a payoff for vendors that have invested significantly in the region, such as Fermat, Misys and Thomson Reuters. Algorithmics – third in five categories, including economic and regulatory capital calculation – is another example of a vendor increasing its local presence. The company has doubled its systems implementation and business development staff in Asia over the past year. "We have invested significant time and resources in trying to understand the issues and needs of banks and regulators in region," says Corinne Neale, Asia-Pacific head of capital management at Algorithmics in Singapore.

The company also has partners in the region that have increased resources devoted to its risk products. In China, Algorithmics has formed an alliance with IBM to develop and deliver enterprise market and counterparty risk and collateral management applications. The two companies are also implementing a portfolio construction and risk management system for securities trading and fund management at China's Guotai Junan Securities in Beijing. In India, financial application development specialist Polaris Software Lab has set up a centre of excellence in Mumbai for implementing Algorithmics' market and credit risk applications.

Meanwhile, SunGard – which topped the rankings in economic capital calculation and management – has restructured its Asian operations and is pumping resources into its Indian research and development and engineering facilities. The company appointed presidents for its operations in China (Zhou Hua) and Japan (Ted Yasunaga) and a chief operating officer for Asia-Pacific (Andrew Bateman), all overseen by a new president for international distribution for financial services outside Europe and the US (Martin Boyd).

SunGard has around 1,300 developers in Pune and 400 in Bangalore, with a further undisclosed number in Shanghai. It plans to increase the headcount in India alone to more than 2,000 in 2009. Although these teams work on global projects, SunGard is reaping

the benefits of this regional presence. "Having this offshore capability gives us the advantage in the region that we can act more as an Asian company, with people in the same time zone as our clients," says Bateman. "It is also helpful from a cost perspective, because it would be impossible to sustain flying in consultants or developers from Europe or the US all the time."

Opinions vary as to how much the subprime crisis and subsequent credit crunch across North America and Europe have affected Asia and the market for derivatives trading and risk technology. "While the subprime losses in Asia are relatively small compared to those suffered by banks in the US and Europe, these losses have materially affected profitability," says Arnold Papp, general manager for Asia-Pacific at Calypso, which topped the rankings in credit trading systems and came second in cross-asset systems. "This has been ameliorated to some extent by the continued robustness of the Chinese economy and increased intra-Asia trade. However, the net effect has been a more cautious approach to technology investment."

Meanwhile, Misy's Beardsell takes a slightly different view. "Over the last year, Asian capital markets have remained largely buoyant, with surging demand for innovative and sometimes complex financial instruments," he says. "Domestic banks in China, Hong Kong, the Philippines and other markets generally have low exposure to the American subprime market, and the fact that they are well capitalised means they are still lending to each other. These factors have driven investment in powerful technology solutions."

While others, such as Thomson Reuters' Palmiero, say the full impact of the US and European financial crisis has yet to be felt in the region, the leading technology vendors have in general performed well over the past 12–18 months. Thomson Reuters says its Asian business grew 50% in 2007, with 11 clients signing up. Murex met its target of 30% growth in the region over the past year, with new clients in mainland China, India South Korea and Thailand.

Sophis, which topped the equity pricing and risk analytics category and came second in equity trading systems, grew its client base by 30% and increased its revenues significantly in the region in 2007. "Asia made a significant contribution to Sophis' overall revenue growth of 50% to €72.2 million [\$112.2 million] during 2007," says Stephen Knipe, senior project manager at Sophis in Hong Kong.

And NumeriX, second in the structured products pricing and analytics category and third in currency pricing and analytics, added 25 clients in the region in the past year, says Jim Jockle, senior vice-president of marketing at NumeriX+ in New York.

While there has been criticism of the role of valuation and risk management systems during the credit crisis in Europe and the US, the conclusion has been that where there were failures, they were largely down to inadequate systems naïvely used, rather than flaws in the technology. Asian financial institutions have noted the dire consequences that can result from inaccurate valuations and

the inability to properly calculate exposures such as counterparty credit risk, and that has been a factor driving risk technology business in the region.

"Because big banks in Europe and the US have lost a lot of money on counterparty credit risk in their trading portfolios, there is now lot of interest in this by Asian banks, whereas before no-one paid too much attention to it," says Algorithmics' Neale. And Steven O'Hanlon, New York-based chief operating officer at NumeriX, says there is now even greater interest in the analytics that can price complex instruments. "Overall, the [credit crisis] has been positive for us," he says. "Regulators and auditors are driving requirements for greater transparency in valuing exotic and structured products."

After-sales service

Meanwhile, two factors continue to play a critical role in the success of vendors in the region. One is the ability to implement and support systems, not just deliver them. The other is reputation. As Palmiero of Thomson Reuters says, one botched implementation can put a vendor out of the running for future contracts in that country for five years or more. And Misy's says its record of 100% successful implementations has been critical to its growth in the region.

One development that is helping overcome some of the issues surrounding implementation is application service provision (ASP) – the hosting of a system by a vendor that clients access online. This way, the supplier has entire responsibility for the implementation, maintenance and upgrade of the system. It can also significantly reduce capital outlay, as most vendors operate their ASPs on a rental or pay-per-use basis, rather than a large upfront licence fee.

SunGard and Algorithmics report increased demand for ASP delivery, while Calypso says there is strong interest in the imminent ASP version of its trading and risk system. Misy's is introducing a buy-side version of its derivatives and structured product application, Misy's Summit Invest, for which it already has one Asian client. "The system will also be available as an ASP, which is a huge advantage for buy-side firms, as it enables fast implementation at a predictable cost and can be linked to assets under management to show a fast return on investment," says Beardsell.

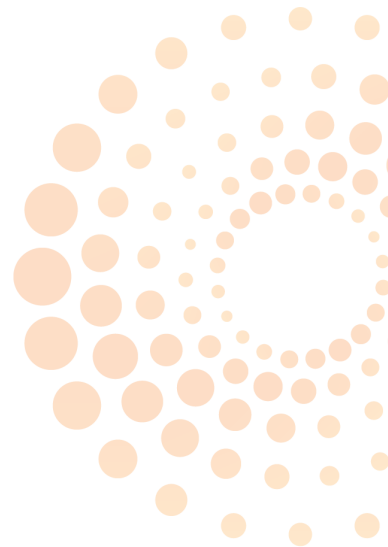
The top vendors in the survey say financial institutions in the region take the long-term view, and suppliers must match that in their business strategy to maintain market share. Zuo Feng, chief compliance officer at Guotai Junan Securities, said at the time of his firm's deal with IBM and Algorithmics: "In developing our risk management solution and its system, we have been preparing patiently and planning for a long march in decades to come."

A lack of significant newcomers in this year's rankings suggests the barrier to entry into the derivatives trading and risk technology market in Asia is now very high in terms of the product quality and commitment to the region vendors must demonstrate. But a buoyant Asia quickly growing more sophisticated in its use of financial products can offer enormous opportunities to enterprising vendors. ●



Corinne Neale, Algorithmics: Asian banks' interest in counterparty risk is increasing

THOMSON REUTERS NAMED TOP TECHNOLOGY VENDOR ASIA RISK TECHNOLOGY RANKINGS 2008



Thank you to all our clients who voted Thomson Reuters #1 as their preferred vendor of choice



- ✓ #1 Market Risk Management
- ✓ #1 Limit Checking
- ✓ #1 Back Office
- ✓ #1 Data Vendor
- ✓ #1 Collateral Management
- ✓ #1 Pricing and Risk Analytics: Cross-asset
- ✓ #1 Pricing and Risk Analytics: Commodities
- ✓ #1 Pricing and Risk Analytics: Credit
- ✓ #1 Pricing and Risk Analytics: Rates
- ✓ #1 Pricing and Risk Analytics: FX
- ✓ #1 Trading Systems: Equities (front-to-back office)
- ✓ #1 Trading Systems: FX (front-to-back office)
- ✓ #1 Trading Systems: Rates (front-to-back office)

Thomson Reuters is the largest provider of risk and trade management solutions globally servicing over 750 financial institutions. Our solutions offer sophisticated, tailored functionality at every step of the trade – from STP enabled front-to-back trading systems to enterprise wide risk management – allowing our customers to efficiently manage their market, credit and operational risks.

We have the global reach and local expertise that is required of a long term strategic partner with more than 950 risk professionals in 83 countries. And with more than 20 years of experience, you can rely upon Thomson Reuters' proven track record of delivering complex solutions to meet your exact requirements.



Top 10 overall vendors

2008	2007	Vendor	1st places	2nd places	3rd places	Points
1	2	Thomson Reuters	13	3	1	46
2	1	Murex	4	12	1	37
3	8	Misys	4	1	9	23
4	3	SunGard	1	6	0	15
5	4	Calypso	1	1	3	8
6	-	Fermat	1	1	2	7
7=	5=	Algorithmics	0	0	5	5
7=	-	Sophis	1	1	0	5
9=	-	Bloomberg	0	1	1	3
9=	7	NumeriX	0	1	1	3

Note: Points are awarded as follows: 3 for a first place, 2 for a second, 3 for a third.

Risk management – overall

2008	Vendor	1st places	2nd places	3rd places	Points
1	Misys	4	1	2	16
2	Thomson Reuters	5	0	0	15
3	SunGard	1	5	0	13
4	Murex	0	4	0	8
5	Fermat	1	1	1	6

This category did not appear in last year's survey as an overall table

Pricing and risk analytics – overall

2008	Vendor	1st places	2nd places	3rd places	Points
1	Thomson Reuters	5	0	1	16
2	Murex	1	6	0	15
3=	NumeriX	0	1	1	3
3=	Sophis	1	0	0	3
5=	Calypso	0	0	2	2
5=	SunGard	0	1	0	2

This category did not appear in last year's survey as an overall table

Trading systems – overall

2008	Vendor	1st places	2nd places	3rd places	Points
1	Thomson Reuters	3	3	0	15
2	Murex	3	2	1	14
3	Calypso	1	1	1	6
4	Misys	0	0	5	5
5	Sophis	0	1	0	2

This category did not appear in last year's survey as an overall table

Risk management

Market risk management

Vendors cited: 34

2008	Vendor	% of votes
1	Thomson Reuters	26.22
2	Murex	19.84
3	Misys	14.10
4	SunGard	9.64
5	Calypso	8.37

Dedicated credit risk management

Vendors cited: 30

2008	Vendor	% of votes
1	Misys	21.34
2	SunGard	20.36
3	Algorithmics	12.60
4	Fermat	6.63
5	SAS	4.82

This category did not appear in last year's survey

Limit checking

Vendors cited: 36

2008	2007	Vendor	% of votes
1	2	Thomson Reuters	35.53
2	1	Murex	18.99
3	3=	Misys	10.68
4	-	SunGard	10.42
5	3=	Calypso	6.65

Economic capital calculation and management/Basel II pillar 2

Vendors cited: 22

2008	Vendor	% of votes
1	SunGard	20.07
2	Fermat	15.41
3	Algorithmics	12.90
4	Calypso	9.68
5=	SAS	5.38
5=	Misys	5.38

This category did not appear in last year's survey

Regulatory capital calculation/Basel II

Vendors cited: 26

2008	Vendor	% of votes
1	Fermat	22.38
2	SunGard	16.61
3	Algorithmics	11.91
4	Misys	10.83
5	Reveleus	6.50

This category did not appear in last year's survey

Dedicated operational risk management

Vendors cited: 29

2008	Vendor	% of votes
1	Misys	21.07
2	SunGard	16.79
3	SAS	8.93
4	Algorithmics	8.21
5	Fermat	7.44

*This category did not appear in last year's survey***Enterprise risk management/cross-risk integration**

Vendors cited: 14

2008	Vendor	% of votes
1	Misys	23.15
2	SunGard	14.81
3	Algorithmics	13.43
4	Fermat	10.65
5	SAS	9.72

*This category did not appear in last year's survey***Collateral management**

Vendors cited: 30

2008	Vendor	% of votes
1	Thomson Reuters	17.87
2	Murex	14.13
3	Algorithmics	13.67
4	SunGard	12.60
5	Misys	12.53

*This category did not appear in last year's survey***Back office**

Vendors cited: 32

2008	Vendor	% of votes
1	Thomson Reuters	25.75
2=	Misys	16.58
2=	Murex	16.58
4	Calypso	11.49
5	SunGard	8.74

*This category did not appear in last year's survey***Asset and liability management**

Vendors cited: 21

2008	Vendor	% of votes
1	Misys	20.36
2	SunGard	15.00
3	Fermat	11.79
4	Algorithmics	5.36
5	IPS-Sendero	4.64

*This category did not appear in last year's survey***Data vendors**

Vendors cited: 23

2008	Vendor	% of votes
1	Thomson Reuters	45.59
2	Bloomberg	26.96
3	GFI	6.37
4	Markit	5.33
5=	Intex	4.24
5=	Telekurs Financial	4.24

*This category did not appear in last year's survey***Pricing and risk analytics (continued overleaf)****Commodities**

Vendors cited: 22

2008	2007	Vendor	% of votes
1	2	Thomson Reuters	26.78
2	1	Murex	20.66
3	-	Bloomberg	9.97
4=	-	SunGard	8.77
4=	-	Calypso	8.77

Cross-asset

Vendors cited: 25

2008	2007	Vendor	% of votes
1	5	Thomson Reuters	26.84
2	1	Murex	21.46
3	-	Misys	10.26
4	2	NumeriX	11.02
5	-	Bloomberg	9.40

Credit

Vendors cited: 32

2008	2007	Vendor	% of votes
1	-	Thomson Reuters	27.75
2	1	Murex	19.04
3	3	Calypso	11.13
4	5	Misys	10.61
5	4	NumeriX	7.46

Currency

Vendors cited: 27

2008	2007	Vendor	% of votes
1	2	Thomson Reuters	37.20
2	1	Murex	20.27
3	4=	NumeriX	9.04
4	-	Bloomberg	7.10
5	-	Misys	6.85

Pricing and risk analytics (continued)

Equities Vendors cited: 21

2008	2007	Vendor	% of votes
1	-	Sophis	19.57
2	2	Murex	19.39
3	-	Thomson Reuters	18.02
4	-	Bloomberg	9.38
5	-	Misys	7.32

Interest rates Vendors cited: 25

2008	2007	Vendor	% of votes
1	2	Thomson Reuters	31.29
2	1	Murex	21.81
3	5	Misys	12.74
4	4	Bloomberg	10.10
5	3	NumeriX	7.77

Structured products Vendors cited: 22

2008	2007	Vendor	% of votes
1	1	Murex	24.35
2	2	NumeriX	12.99
3	4=	Calypso	10.84
4	4=	Misys	9.55
5	-	Thomson Reuters	8.72

Trading systems (front-to-back-office)

Commodities Vendors cited: 22

2008	2007	Vendor	% of votes
1	1	Murex	27.80
2	3=	Thomson Reuters	23.86
3	2	Calypso	13.15
4	-	Misys	10.91
5=	5=	OpenLink	10.67
5=	-	SunGard	10.67

Credit Vendors cited: 24

2008	2007	Vendor	% of votes
1	1	Calypso	26.26
2	4=	Thomson Reuters	24.57
3	3	Murex	16.53
4	4=	Misys	13.51
5	2	SunGard	9.54

Cross-asset Vendors cited: 23

2008	2007	Vendor	% of votes
1	1	Murex	29.57
2	2	Calypso	23.37
3	3	Misys	16.77
4	5	Thomson Reuters	10.16
5	-	SunGard	9.80

Trading systems (front-to-back-office)

Currency Vendors cited: 27

2008	2007	Vendor	% of votes
1	1	Thomson Reuters	31.00
2	2	Murex	19.67
3	-	Misys	10.65
4	3	Calypso	7.26
5	-	SunGard	6.51

Equities Vendors cited: 24

2008	2007	Vendor	% of votes
1	-	Thomson Reuters	27.31
2	4	Sophis	22.73
3	-	Misys	13.38
4	2	Murex	10.58
5	-	Calypso	8.23

Interest rates Vendors cited: 26

2008	2007	Vendor	% of votes
1	1=	Thomson Reuters	21.78
2	1=	Murex	16.55
3	3=	Misys	13.26
4	3=	Calypso	8.16
5=	5	Bloomberg	7.41
5=	-	SunGard	7.41

Structured products Vendors cited: 24

2008	2007	Vendor	% of votes
1	1	Murex	27.48
2	-	Thomson Reuters	19.65
3	3	Misys	14.29
4	4	Calypso	11.14
5	2	SunGard	8.99

How the survey was conducted

Asia Risk surveyed technology users in Asia in July and received 1,186 responses, a near-fivefold increase on last year's 240. Respondents were asked to nominate the companies that provide the best products across categories such as market risk, credit risk, trading systems, analytics and front-to-back-office systems, based on functionality, usability, performance, return on investment and reliability. Asia Risk verified the validity of votes and discounted invalid votes.