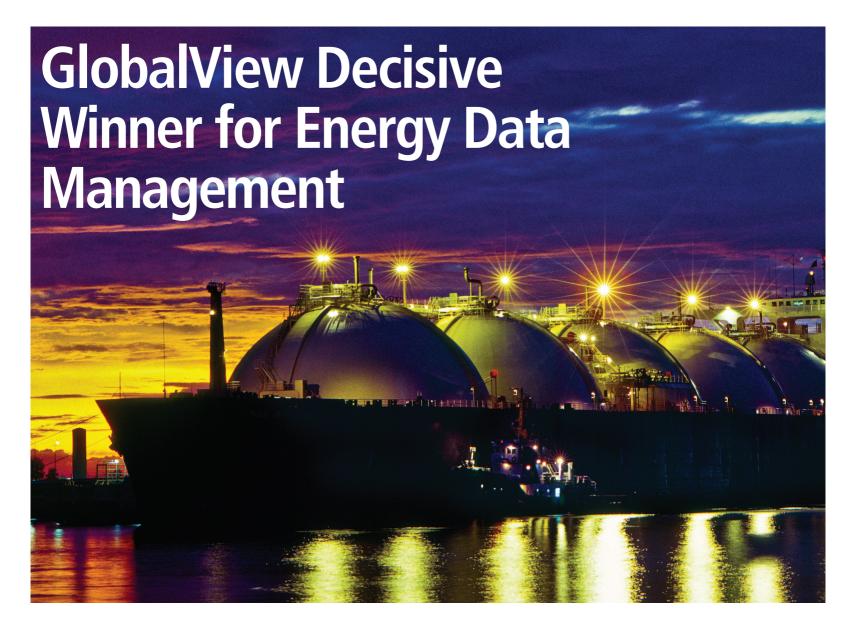


COMMODITY RISK MANAGEMENT & TRADING



EnergyRisk SOFTWARE RANKINGS 2016



#1 Choice Among Users in Five Categories

GlobalView





Budget constraints are now the biggest technology challenge energy firms face, with IT spending set to plummet in 2016, according to *Energy Risk*'s annual survey of energy trading and risk management (ETRM) software. Stella Farrington reports

he crash in crude oil prices, distress at traditional electricity utilities and other industry woes are having an impact on the technology spending practices of energy trading firms. Budget constraints are now viewed as the number one IT challenge facing energy companies, according to the 2016 *Energy Risk* energy trading and risk management (ETRM) software survey.

Some 79% of respondents said their company's IT budget for this year had stagnated or decreased from 2015, in the survey of 245 industry professionals from across the energy markets (see box: *How the poll was conducted*).

Almost 29% of respondents deemed budget constraints the biggest IT trial of the last 12 months, ahead of other major headaches such as data integration, the processing of nonstandard structured transactions and connectivity between different ETRM systems (see figure 1).

Some 38% of respondents said their IT budget this year had decreased relative to 2015, with only 21% saying it had increased (see

figure 2). That represents a turnaround from last year's survey, in which 22.5% said their budget had decreased from the year before while 36.5% reported an increase.

Market participants and consultants say that's not a surprising result. While utilities have been reining in IT spending for the past four years, oil and gas firms are only beginning to adjust budgets to adapt to the new low-price environment, says Ujjwal Deb, London-based vice-president of European commodities at advisory and technology services firm Sapient Global Markets.

"This is the first year we are seeing really significant cuts at oil and gas firms," says Deb. "Almost everyone we talk to has significantly less money to play with this year than last."

Consultants interviewed for this article estimate that IT budgets in the energy industry are on average 20–25% lower in 2016 than last year, in line with overall spending cuts, with some oil and gas companies cutting by as much as 35%. At the same time, regulatory require-

ments and a challenging economic environment are placing more demands on the IT function than ever before, say consultants and chief information officers (CIOs).

"It's a tough challenge to deliver on both points," says Marcus Schaper, CIO at RWE Supply & Trading, a unit of Essen-based utility RWE. "Firms need to look at how they can optimise productivity."

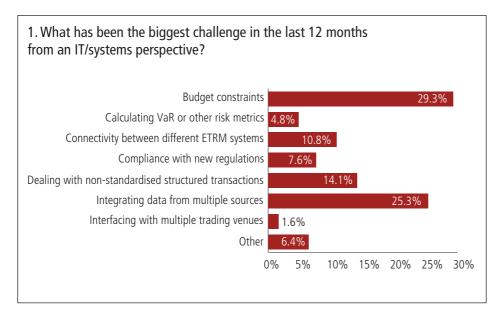
Standard issues

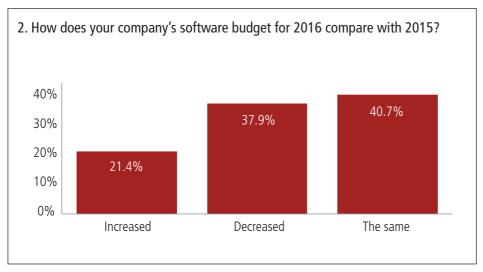
Coping with unruly data continues to be a major headache for IT chiefs at energy trading firms. Some 25% of survey respondents said integrating data from multiple sources was their biggest challenge, while 14% said it was dealing with non-standardised structured transactions.

These challenges are largely driven by US and European Union regulations that require firms to report all of their derivatives transactions to a trade repository, consultants say.

The US Dodd-Frank Act, passed in 2010, was the first major piece of legislation to introduce a







mandatory trade reporting scheme in response to the financial crisis, with the reporting of commodity derivatives trades going live in 2013. On the other side of the Atlantic, a similar regime arose out of the European Market Infrastructure Regulation (Emir); mandatory trade reporting under Emir began on February 12, 2014. Most recently, the EU Regulation on Wholesale Energy Market Integrity and Transparency (Remit) imposed a new trade reporting regime for power and gas trades, which began on October 7 last year.

While firms have overcome many of the initial data integration challenges posed by Dodd-Frank and Emir, Remit is posing new ones, consultants say. "Most of the bigger energy firms now have a handle on [data integration], but some of the new reporting requirements under Remit have necessitated some frantic

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Baris Ertan, Accenture

adjustments," says Sapient's Deb.

Remit has required firms to report all of their standard transactions and orders to trade since October. But a second deadline for reporting 'nonstandard' transactions and orders is looming on April 7, and the second phase of Remit reporting is shaping up to be much more challenging than the first, market participants

and consultants say. Nonstandard transactions under Remit include everything from exotic options and structured products to physical term contracts and very long-dated deals.

"Remit's second deadline asks for transaction data that has never been captured before, so people have had to scramble around to find where particular pieces of data reside," says Sapient's Deb.

One area that has proved particularly vexing is the handling of physical trades containing optionality. For example, many long-term contracts in oil, gas or power contain optionality in take-or-pay clauses or have provisions that set out options available to a producer in the event of an outage.

"Capturing and reporting this optionality is very difficult," Deb says. "Because it was never envisaged that these trades would be reported, in many cases this data was not entered into the trading system in a way that is reportable. One of our utility clients, for example, had to insert 13 or 14 new fields into the trade capture system and change business processes to support that."

Survey results suggest another major difficulty is connectivity between different ETRM systems, with just under 11% of respondents labelling this their biggest IT challenge. While connectivity between the major ETRM vendors and the main trading platforms is now straightforward, it can still be tough to join up older legacy systems or applications developed in-house, consultants say.

"The integration challenge today is mainly around internal customised integration – integrating data from multiple sources, be it from pricing systems or multiple CTRM systems," says Baris Ertan, Houston-based managing director, global trading and risk lead at Accenture. "Typical challenges would be to integrate the CTRM system, particularly legacy systems or in-house custom build, with downstream risk engines, optimisation tools, data warehouses, enterprise credit solutions and general ledgers."

Notably, only 1.6% of respondents identified interfacing with multiple trading venues as their main IT challenge. This was a source of much frustration several years ago, but by now, most of the prominent ETRM software vendors have developed effective interfaces with the major trading venues and other widely used platforms, consultants say.

"Application vendors are rising to the challenge with more out-of-the-box integration



functionality that provides open application programming interfaces (APIs), data mapping and connectivity configuration," says Ertan. "This is working well for interfacing with trading platforms such as [Atlanta-based] Ice and [Chicago-based] CME Group and established data providers and aggregators."

Build or buy?

Elsewhere in the survey, respondents were asked whether they used off-the-shelf packages, in-house systems or a mixture of the two to meet various requirements (see figure 3).

For trade reporting, confirmation, portfolio reconciliation and compression, between a quarter and a third of respondents said they used off-the-shelf packages, with similar numbers reporting they used in-house solutions instead. But the biggest number – more than 40% of respondents in all categories – reported using a mix of both.

Consultants confirm that this is the most common approach, with firms doing significant amounts of in-house development and customisation in order to meet regulatory requirements. While all of the larger ETRM vendors offer regulatory packages, most firms are supplementing them with in-house build in order to achieve full compliance.

Trade confirmation seems to be the area that most lends itself to the use of purely off-the-shelf solutions, according to the survey, with 33% of respondents saying they use off-the-shelf systems to meet this regulatory requirement. This is likely due to the adoption of electronic confirmation tools for over-the-counter trades offered by organisations such as CME Group,

following regulatory requirements:



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Ice and Efetnet, a London-based software provider owned by the European Federation of Energy Traders, consultants say.

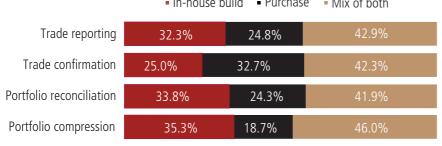
Regulatory readiness

While nearly 85% of respondents said their systems were either "ready" or "almost ready" to cope with the wide-ranging regulatory requirements of Dodd-Frank and Emir, only 65% said the same about Europe's new Markets in

Financial Instruments Directive (Mifid II). Some 35% said their systems were "not at all ready" for it (see figure 4).

Consultants say this is unsurprising given the current lack of clarity around Mifid II, with many energy firms still in the dark as to whether they will fall within the scope of the regulation or be exempt. Details of the so-called 'ancillary exemption', which governs whether nonfinancial firms are covered by Mifid II, have still not been finalised and were recently sent back to the Paris-based European Securities and Markets Authority for revision. The start date of Mifid II is now January 2018, following a vote by the European Parliament to delay implementation by one year.

■ In-house build ■ Purchase ■ Mix of both



3. Have you had to buy or build new software in order to comply with the

Reusable?

Many firms face reporting requirements under multiple regulatory regimes, in particular Emir, Remit and Mifid II in Europe. Sometimes parts of systems built for one regulation can be reused for another, CIOs say, particularly when it comes to trade reporting. But even small differences in the requirements from one reporting regime to the next can limit this practice.

Underscoring the difficulty of reusing system components, the survey found that most firms



have had to build materially different systems for each different piece of regulation, with only 20% of respondents saying they have been able to reuse systems "to a large extent" (see figure 5).

In both the US and Europe, regulators have stiffened the penalties for market manipulation, sparking a great deal of discussion about the need for companies to implement trade surveillance systems. But the overwhelming majority of respondents in the survey -84% – said their firm does not use any technology to monitor for instances of possible market manipulation.

The 15% of respondents who said they do have a surveillance system, though up from 11% in last year's survey, is still a small fraction given the current regulatory push towards monitoring. In Europe, both Remit and the Market Abuse Regulation, which becomes law on July 3 this year, require firms to have processes in place to monitor trades.

Consultants say trade surveillance is simply not a top priority for most energy firms. Moreover, there is a dearth of energy-specific surveillance software available, they add.

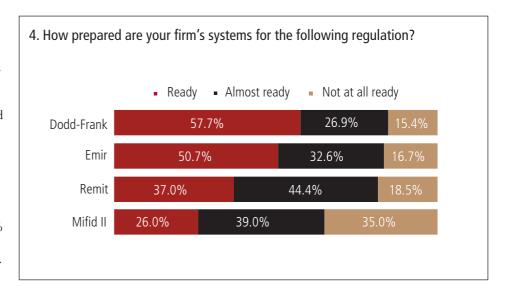
"Regulation around market abuse and surveillance is new for a lot of energy firms, unlike for brokers and banks, which have had it for years and where an ecosystem of tools and products have built up," says Sidhartha Dash, research director at risk technology research firm Chartis Research. "There's a lack of familiarity with what needs to be done. It requires a change of behaviour."

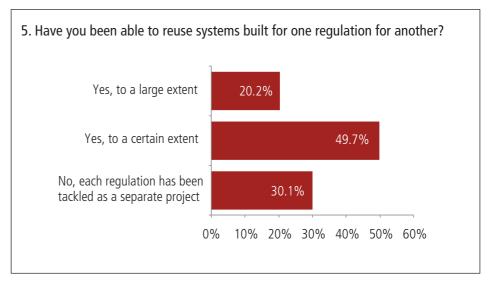
The picture is similar in the US. "It's not a high priority for many energy firms at the moment," says Accenture's Ertan. "Firms feel that they've built internal processes and procedures to

HOW THE POLL WAS CONDUCTED

The *Energy Risk* energy trading and risk management (ETRM) software survey was carried out between December 15, 2014, and February 12, 2016. It received 245 valid votes.

Of the votes, 63% came from respondents at oil, gas and electricity firms; 18% came from consultants and IT implementation specialists; and the rest came from banks, commodity traders, hedge funds and investors. The largest number of respondents (24%) were risk managers, followed by IT professionals (20%), consultants (14%), analysts (12%) and traders (11%).





capture market manipulation where it may be happening, and building additional tools is not as high up on their agenda."

Satisfaction

Most respondents to the survey reported fairly high levels of satisfaction with their ETRM systems, with front-, middle- and back-office systems receiving an average score of seven out of 10.

Perhaps more surprisingly, respondents also seemed relatively content with their Dodd-Frank swap data repositories (SDRs) and Emir trade repositories (TRs), despite noisy complaints about them in the early days of trade reporting. Asked to assess the repository they use, the majority of respondents said they were "satisfied" or "neutral" towards it, with only a small minority saying they were

"unsatisfied" or "very unsatisfied".

"The buzz around TRs has died down now from an IT perspective," says Sunilkumar Ramakrishnan, London-based associate partner in the energy risk management division at consultancy IBM. "Now that the repository has been selected and the initial interfacing has been achieved, the focus has moved on."

Accenture's Ertan agrees. "I think a lot of the early complaints around SDRs have stabilised," he says. "They are now viewed as a necessity to comply with regulation. As long as clients can upload their transactions and reconcile discrepancies, and monitor transactions uploaded by their counterparties, then these repositories are working as intended. The early rumblings were more to do with changemanagement inertia and working out how the processes were going to work."



| Ease o | of using | system | | Broadest product coverage | | | |
|--------|-----------|-------------------|------|---------------------------|------|-----------------|------|
| 2016 | 2015 | Vendor | % | 2016 | 2015 | Vendor | % |
| 1 | _ | GlobalView | 20.4 | 1 | 1 | Bloomberg | 26.0 |
| 2 | 2= | Bloomberg | 12.1 | 2 | 2 | Platts | 24.8 |
| 3 | 1 | Thomson Reuters | 9.8 | 3 | 3 | Thomson Reuters | 16.4 |
| 4 | 2= | Platts | 7.9 | 4 | 4 | Argus | 12.2 |
| 5 | _ | ZE Power | 6.8 | 5 | - | GlobalView | 5.3 |
| Qualit | ty and us | sefulness of data | | | | | |
| 2016 | 2015 | Vendor | % | | | | |
| 1 | 4 | Argus | 19.9 | | | | |
| 2 | _ | GlobalView | 17.5 | | | | |
| 3 | 2 | Bloomberg | 16.3 | | | | |
| 4 | 1 | Platts | 11.0 | | | | |
| 5 | 3 | Thomson Reuters | 8.1 | | | | |

| Preferred system | | | | Best at integrating with other systems* | | | |
|------------------|---------|----------------------------|------|---|----------|----------------------------|------|
| 2016 | 2015 | Vendor | % | 2016 | 2015 | Vendor | % |
| 1 | 2 | GlobalView | 52.8 | 1 | 2 | GlobalView | 53.8 |
| 2 | 1 | ZE Power | 20.9 | 2 | 1 | ZE Power | 19.8 |
| 3 | 3 | Morningstar Commodity Data | 10.7 | 3 | 4 | DataGenic | 12.0 |
| 4 | 4 | DataGenic | 10.5 | 4 | 3 | Morningstar Commodity Data | 9.5 |
| 5 | 5 | FIS (SunGard) | 1.6 | 5 | 5 | FIS (SunGard) | 1.9 |
| Best c | ustomer | service | | Best o | lata ana | ytics and charting | |
| 2016 | 2015 | Vendor | % | 2016 | 2015 | Vendor | % |
| 1 | 2 | GlobalView | 57.4 | 1 | 2 | GlobalView | 56.3 |
| 2 | 1 | ZE Power | 18.8 | 2 | 1 | ZE Power | 20.7 |
| 3 | 4 | DataGenic | 9.9 | 3 | 3 | Morningstar Commodity Data | 9.5 |
| 4 | 3 | Morningstar Commodity Data | 8.0 | 4 | 4 | DataGenic | 8.6 |
| 5 | _ | Pioneer Solutions | 2.1 | 5 | _ | Bloomberg | 1.9 |

To compile the Software Rankings, respondents were asked to vote for their preferred software vendor, implementation specialist, data management firm and data provider in a variety of categories. All votes were carefully checked and invalid votes stripped out. Examples of votes considered invalid are people voting for their own firm or using a free internet-based email address, multiple votes from the same person or IP address, and voters who chose the same firm indiscriminately throughout the survey.