



Software Rankings 2018



Lacima dominates in Energy Risk Software Rankings 2018







Energy companies begin to explore new technology as rising oil prices increase budgets. By Pauline McCallion

long-awaited uptick in oil prices last year has freed up space in the budgets of many energy trading firms, raising the prospect of renewed interest in commodity/energy trading and risk management (C/ETRM) system development.

Almost 40% of respondents to *Risk.net*'s latest C/ETRM software survey say budgets for software have increased in 2018, compared with 27% in 2017 and 21% in 2016. Meanwhile, budget limits are loosening: 28.1% of respondents said budget constraints were the biggest challenge faced by their organisation over the previous 12 months, down from 31% in 2017 (see figure 1).

"The oil complex has gone through a difficult time with low oil and other commodity prices in recent years," says Chandra Dev Singh, head of "This year the survey identifies risk metrics as one of the hottest growing concerns for energy and commodities players"

Chris Strickland, Lacima

derivatives and risk management at Bharat Petroleum in Mumbai. "Budget increases are a reflection of that period ending."

Sunilkumar Ramakrishnan, a London-based associate partner in IBM's energy risk management division, says he is not surprised to see energy-sector IT budgets increasing with the recent rise in oil prices. "[There is] the possibility

that clients will look to buy new C/ETRM systems in this environment," he adds.

And Ujjwal Deb, Netherlands-based vice-president at Sapient Global Markets, says he has already seen an increase in energy companies looking for new C/ETRM systems in 2018. "Last year we had much less interest, but this year we are starting to see much more activity," he says.

As well as looking for new systems and upgrades to current infrastructure, organisations are also increasingly interested in how new technology might be applied to energy trading, according to market experts. From the greater use of cloud applications to innovations such as blockchain, interest in new technology has re-emerged as energy prices have recovered, but can C/ETRM systems keep up?



Growing challenges

While budgetary constraints have been less of a challenge for energy companies over the past year, issues such as risk metrics and cybersecurity have become more of a concern. Only 10.7% of respondents to the latest survey see calculating value-at-risk and other risk metrics as a challenge (figure 1), but this figure has nearly doubled from 5.6% last year.

Market observers put forward several theories

"These firms want to create more bespoke transactions in order to hedge their portfolios more efficiently, but C/ETRM systems have not necessarily evolved to provide the risk calculations"

Sunilkumar Ramakrishnan, IBM

as to why this might be the case. For example, Deb believes fears of a correction in the bull markets may have pushed companies to think more about risk metrics over the past 12 months.

"The hope is that they can get an early warning if they have the right risk metric systems in place, which may or may not be true, but that's what people hope and fear," he says.

Independent consultant Jeremy Lock believes a middle-office push to measure risk in a more granulated fashion in recent years may be behind the increased awareness of the need to calculate VAR. "If businesses are experiencing sudden losses or seeing a change in revenue, it's going to put more pressure on the middle office to understand whether there is systemic risk or whether this is just the normal natural movement of the markets," he explains.

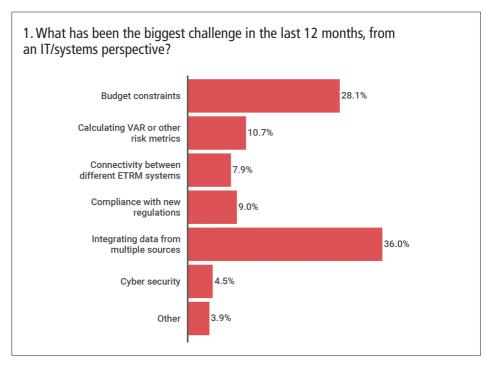
For others, increased complexity might explain the growing perception of VAR and other metrics as challenging. For instance, Ramakrishnan says larger energy companies have conducted more bilateral trades in recent years and some systems have struggled to keep up. These firms want to create more bespoke transactions in order to hedge their portfolios more efficiently, but C/ETRM systems have not necessarily evolved to provide the risk calculations, he explains. "Many of these

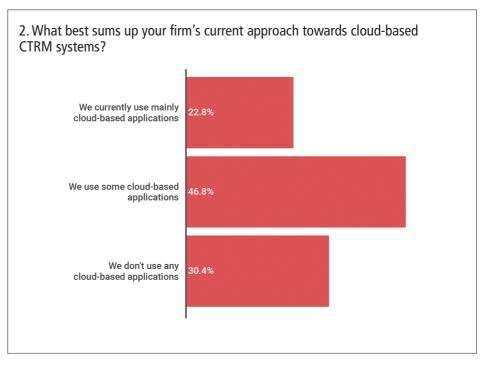
structures – even some very simple optionbased structures – are not very easily supported by C/ETRM systems at present," he adds.

Bjorn Hagelmann, chief operating officer at MRE Consulting in Houston, points out that energy companies are now required to parse a greater amount of data using more computationally-intensive processes, and that this must also be done more regularly due to increased reporting requirements. "There are more

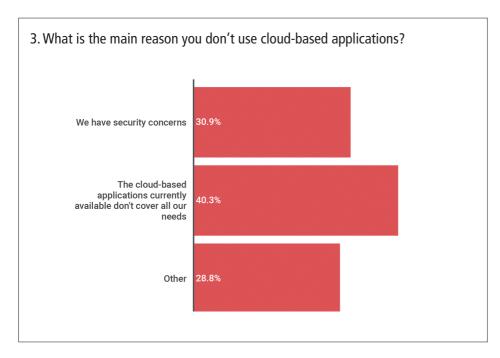
reports, but they are stuck behind the same set of simulations and dependents," which can create system bottlenecks in firms' risk metrics calculation processes, Hagelmann says.

It can be difficult to run these heavy calculations with traditional C/ETRM systems, but the growing use of more distributed systems could allow energy companies to split these calculations up into smaller parts, relieving the pressure to some extent.









"This enables firms to use computing power as needed – via the cloud or even virtual machines within the company's own network – to tackle computationally-intensive processes multiple times within a day," says Ken Piddington, chief information officer at MRE Consulting. He adds that a good enterprise architect should be able to find ways to vary computing power in order to streamline processes and reduce bottlenecks, even on systems that are not well-equipped for this type of activity.

Security alert

Cyber security is another growing concern. Of survey respondents, 4.5% picked it as their biggest challenge (see figure 1) – still a small number, but more than double last year's 2.2%.

And while IBM's Ramakrishnan admits it is good to see increased awareness, he is surprised that this figure is not larger.

Concerns about cloud-based services go "hand-in-hand" with cybersecurity worries for many energy companies, according to Deb at Sapient. "It is a major buzzword at the moment," he says.

"Growing numbers of energy companies want to move C/ETRM systems to the cloud, but they also want to know how to keep their data secure."

Bharat Petroleum's Singh agrees: "Because the software is hosted on the cloud and not on the premises, energy companies have more concerns

about cyber security."

Cloud use is certainly growing: 22.8% of survey respondents currently use mainly cloud-based applications versus 13.4% in 2017 (see figure 2). And while 30.4% do not use any cloud-based applications at present, 70.6% would like to, showing scope for further deployment within the energy space. Among those that do not use the cloud at present, 30.9% cite security concerns, while 40.3% say current offerings do not meet their needs (see figure 3).

"The platforms in the C/ETRM space are not perfectly suited or well-designed enough yet to be true cloud-based applications"

Ken Piddington, MRE Consulting

Even for those that are making use of the cloud to some extent, there are barriers; again complexity looms large over these efforts. "The sheer complexity of some of the existing setups that are out there make it tricky to move everything lock, stock and barrel to the cloud," says Lock, who was the chief information officer at EDF Trading until last year.

"There are a lot of very specific considerations and [. . .] unique implementations around different clients that make it difficult for [cloud migration] to happen faster."

He adds that current systems would need to be re-engineered and optimised to be more effective and to reduce the cost of running these systems in the cloud. Of survey respondents, 70.6% said they would like to use the cloud more; Lock warns they will face an "uphill battle" to understand how best to do it.

According to most experts, a piecemeal approach is the only solution at present, and many energy companies have already transferred certain non-core business services, products and activities to the cloud. But providers need to develop their offerings further to see more activity in this respect. "The platforms in the C/ETRM space are not perfectly suited or well-designed enough yet to be true cloud-based applications," Piddington says.

"But as some of those systems are starting to offer more — both in terms of the management of the cloud environment and in trying to create a cloud environment that's very specific to their platform — you're starting to see more energy companies make that push."

Many organisations are rushing to use newly-expanded budgets to develop sector-specific applications of popular IT trends such as cloud services and blockchain technology – potentially before the most efficient use case is clear, they say.

"There is definitely an element of a herd mentality in terms of investing in things such as blockchain and cloud," says Deb. "With blockchain in particular, companies are rushing to invest but, in my mind, it's almost a solution looking for a problem in many cases."

HOW THE POLL WAS CONDUCTED

The *Risk.net* commodity/energy trading and risk management (C/ETRM) software survey was carried out in January and February 2018.

It received 227 valid votes. Of the votes, 52.6% came from respondents at oil, gas and electricity firms; 20.2% came from consultants and IT implementation specialists; and the rest came from banks, brokerages, commodity traders, industrials and investors

The largest number of respondents (28%) were risk managers, followed by IT professionals (26%) and consultants (21.5%), with traders comprising 10% of respondents.



ETRM software providers

Custom	Customer support services		Market	Market risk: gas		
2018	2017	Vendor	2018	2017	Vendor	
1	2	Lacima Group	1	3	Lacima Group	
2	1	Pioneer Solutions	2	4	Openlink	
3	5	Allegro Development	3	2	Allegro Development	
4	4	FIS Global	4	1	FIS Global	
5	-	Openlink	5	-	Pioneer Solutions	

Market	ket risk: power		Modelli		
2018	2017	Vendor	2018	2017	Vendor
1	1	Lacima Group	1	1	Lacima Group
2	3	Openlink	2	3	Openlink
3	4	Allegro Development	3	4	Allegro Development
4	2	FIS Global	4	2	FIS Global
5	_	Pioneer Solutions	5	_	Pioneer Solutions

Market	et risk: oil		Portfolio management			
2018	2017	Vendor	2018	2017	Vendor	
1	2	Openlink	1	3	Allegro Development	
2	4	Lacima Group	2	5	Lacima Group	
3	3	Allegro Development	3	2	Openlink	
4	_	Aspect	4	_	Pioneer Solutions	
_	1	FIC Clabal	-	4	FIC Clabal	

_		•		_	-	
3	3	3	Allegro Development	3	2	Openlink
4		_	Aspect	4	_	Pioneer Solutions
5	1	1	FIS Global	5	1	FIS Global

Overall ease of using system		Best knowledge of market in which software operates			
2018	2017	Vendor	2018	2017	Vendor
1	1	Allegro Development	1	3	Openlink
2	5=	Lacima Group	2	4	Lacima Group
3	_	Aspect	3	2	Allegro Development
4	2	Openlink	4	1	FIS Global
5=	4	FIS Global	5	_	Pioneer Solutions
5=	3	Pioneer Solutions			

Ease of implementation		Vandan			RM/ETRM system	
2018	2017	Vendor	2018	2017	Vendor	
1	2	Aspect	1	1	Aspect	
2	_	Allegro Development	2	_	Pioneer Solutions	
3	4	FIS Global	3	4	Allegro Development	
4	_	Lacima Group	4	_	Lacima Group	
5	3	Pioneer Solutions	5	_	Openlink	



ETRM software providers

Widest p	Widest product coverage		Power t		
2018	2017	Vendor	2018	2017	Vendor
1	2	Openlink	1	2	Openlink
2	3	Allegro Development	2	3	Allegro Development
3	1	FIS Global	3	1	FIS Global
4	_	Pioneer Solutions	4	_	Pioneer Solutions
5	-	Lacima Group	5	_	Lacima Group

Degree of straight-through processing		Physica	Physical and financial integration		
2018	2017	Vendor	2018	2017	Vendor
1	1	Openlink	1	4	Openlink
2	3	Allegro Development	2	1=	Allegro Development
3	4	Pioneer Solutions	3	1=	FIS Global
4	2	FIS Global	4	5	Pioneer Solutions
5	_	Lacima Group	5	_	Lacima Group
		·			·

mpier	nentation	specialists			
Best im	plementatio	n specialist	Best for	project del	ivery within budget
2018	2017	Vendor	2018	2017	Vendor
1	_	KWA Analytics	1	_	Pioneer Solutions
2	_	Pioneer Solutions	2	_	KWA Analytics
3	_	Lacima Group	3	_	Allegro Development
4=	_	CubeLogic	4=	_	FIS Global
4=	_	FIS Global	4=	_	Lacima Group

Methodology

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.

Following closure of the poll, the results were subject to an internal review process, which can result in categories being dropped or aggregated if they do not have enough votes.