

Leveraging the Cloud for Improved Performance in Agricultural Trading Operations



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INTRODUCTION

While delivery of applications and services in the cloud has been a part and parcel of business for over a decade, adoption of cloud-delivered CTRM applications (not to be confused with hosted solutions), has taken time to develop. However, the collapse in commodity prices and profitability over the last several years has incentivized firms in the commodities space to rethink their approach to acquiring and managing IT solutions.

With increasing market experience with these products, market activity over the last few years indicates that adoption of cloud CTRM solutions is increasing rapidly as the lower cost of entry, benefits of a pay as you go approach, and realization that the cloud can actually be more secure than on-premises, have all aided its growth.

Changes in the overall structure of the industry, including divestitures, downsizing of trading staff, and more niche-focused start-ups have served to increase the number of smaller companies and non-traditional players in the market; while increasingly rigorous regulations have forced these same businesses (that might have otherwise relied on spreadsheets to manage their business) to adopt commercial systems in order to more robustly address regulatory and stakeholder mandates.

Given these influences, it's perhaps not surprising that Commodity Technology Advisory (ComTech) research indicates that cloud-delivered CTRM solutions now out-

sell (on a per unit basis) traditionally deployed, on-premises solutions. It's interesting to note however, that cloud adoption has not been consistent across all markets, industries, and commodities.

Early adopters of CTRM in the cloud tended to be very small firms, usually trading a single commodity such as oil, and were generally located in Europe, Asia, and Africa. It's only been within the last couple of years that other markets, including the US, and other commodity industries, like agricentric businesses, have turned to cloud-based offerings in significant numbers to manage their business and trading operations.

In light of this rapid shift in the market, ComTech now forecasts that spending for cloud deployed CTRM will grow by as much as 15-20% per year over the next 5 years, far outpacing any spending increases for traditionally installed solutions.

WHY THE CLOUD?

In a recent ComTech survey of CTRM buyers and industry consultants, fully 70% indicated they felt that the ability to deliver CTRM software via the cloud was of at least some importance to potential buyers, a significant increase over previous years' measures...and given the trends ComTech has observed in recent months in terms of CTRM procurement activity, that percentage has likely already grown significantly.

Though the reasons for adopting cloud solutions will obviously vary from buyer to buyer, ComTech's research indicates that cost, both entry cost and ongoing costs, has been a major factor, if not the primary factor, that has motivated many buyers of these systems. This isn't to say that cloud solutions will necessarily be cheaper to license, deploy, and maintain for all - that will depend in a large part on the comparable licensing and annual maintenance fees charged by a particular vendor for a traditionally installed system. However, in most cases, cloud solutions, with lower initial acquisition costs and more rapid deployment, may in fact be less expensive. Beyond these noted cost benefits, experience has demonstrated a number of other additional financial and operational advantages have been realized from cloud-delivered CTRM solutions:

- / Ability to shift capital expenses to operating expenses - meaning reduced yet more predictable costs and potential tax advantages; and, making it easier to get spending approval
- / Reduced spend for internal IT infrastructure and internal support costs as cloud solutions usually provide environment management services, upgrades and updates, DBA support, helpdesk, and technical support
- / Simplified scalability and elasticity allowing customers to add new users or expand the breadth of system access within hours
- / Seamless and easy to deploy integration with third-party systems via rich APIs and web services
- / Improved reliability vs. internal servers and support
- / Improved access for remote offices or employees

CLOUD CTRM FOR AGRICULTURAL MARKETS

Though most commodity industry participants are confronted with fairly complex supply chains, uncertain and volatile prices, and difficult to control margins, agricultural producers, processors, merchants and CPGs face many additional unique challenges and uncertainties.

For example:

- / Each agricultural or soft commodities has their own unique physical characteristics that affect the production, processing, transportation, and valuation of that specific commodity
- / Most agricultural supply chains include highly specialized and complex processes specific to the individual commodity, and therefore specific types of assets and different inventories of bulk, packaged or containerized product or materials
- / Many agricultural products are perishable and optimizing the time from production to processing for these commodities is critical in reducing spoilage and managing inventories
- / There is now also significant effort to adopt traceability processes for a variety of reasons including brand protection, sustainability initiatives, child labor, deforestation, fraud, and other serious environmental and social reasons

Given these complexities, few CTRM vendors have the market experience to provide a solution, either in the cloud or on-premises, that can fully address the entire breadth of commercial and operational activities across multiple agricultural or soft commodities.

While there are some cloud systems that provide the ability to capture and manage contracts for multiple types of agricultural commodities, the upstream and downstream supply chain processes associated with those deals usually prove too complex for most systems. As such, when contemplating the purchase of a new system for a complex, multi or single commodity business, particularly a cloud-based solution, buyers should consider a number of potentially complicating factors, including:

- / Tracking and Valuing Quality Attributes - Specific quality attributes that impact pricing and/or treatment of the commodity during transportation such as, for example, purity, polarization, moisture content, and others. These must be captured by the solution in an appropriate way (for example, by pile, bag, bale, weight, trade, contract, location, etc.) at multiple points and times in the supply chain. Often, this data is collected by independent agents or third-parties and this data must be able to get into the CTRM automatically via an API or interface. Changes in quality attributes can also trigger changes to prices and conditions or, the addition of penalties or premiums. Various quality attributes are expressed in the contract and pricing terms, and

need to be tracked by the CTRM for pricing and settlement purposes, as well as to determine cost accruals, and in valuation calculations to gain an accurate picture of Profit and Loss.

- / Pricing Flexibility – The ability to calculate value via a diverse range of indexes, quality parameters, and deal types. This will include use of quality criteria, indexes, futures, deposit terms, and much more.
- / Packaging and Shipments – Depending on the commodity, it may be shipped in bulk, in sacks, bags, bales, containers, tanks, barrels, or any number of packages. This means that many different types of product specifications and INCO terms must be handled by the CTRM solution from both a logistics perspective, as well as a pricing, inventory and financial perspective. Additionally, a commodity can be transformed from bulk to packaged during its movements, or a shipment can be broken up into smaller lots. These circumstances need to be addressed explicitly within the application.
- / Futures Markets – Agricultural futures markets exist around the globe for most common agricultural and soft commodities, and will range from large long-established exchanges such as the CME to smaller regional exchanges. Some agricultural commodities however, have no associated futures and therefore require the ability to set up specific pricing terms. CTRM solutions that address ags and softs need to offer the flexibility to configure multiple trading books, each of them reflecting the hedging market to be used or a proxy of that hedging market.

- / Inventory – Inventories may be held in varying amounts at multiple locations and each requires management. Inventories may also be of different qualities and so choosing how to supply a specific contract or trade from inventory can take on a number of complexities and issues unique to the commodity,
- / Supply chain optimization – Managing complex supply chains and associated documentation and processes that may include agents, insurers, banks, shippers and storage, for example, not just in terms of movements, but also in terms of supplier and vendor management, estimated and actual costs and documentation. Traceability is a key requirement here as well.
- / Flexibility and Adaptability – Though ags & softs have been traded longer than many other commodities, these have been primarily merchant markets in which commodities would be purchased at the source, transported, processed, repackaged and sold to consumer markets. With the advent of global trading markets and electronic exchanges, these traditional markets are evolving rapidly to look increasingly like financial markets. This evolution and increasing sophistication of the market participants continues and impacts the technologies used by those participants. Any CTRM solution, particularly one that covers multiple commodities, should be architected and supported in such a manner that it can readily adapt to changing trading practices and regulations.

/ Availability of sophisticated analytics – As the global ags & softs markets continue to evolve, growing more complex and globally integrated, profits are more difficult to ensure. Companies operating in these markets need to constantly adjust and optimize their operations and strategies. Testing new strategies or measuring performance against plan throughout the supply chain requires sophisticated analytics that can reach beyond the CTRM solution - aggregating data from multiple internal and external sources.

Given these significant complexities, it can be difficult for a company seeking to leverage the benefits of the cloud to identify a solution that addresses the complete breadth of their needs. While there are a number of cloud providers that can and do address specific niches of the markets, either a specific commodity or some portion of the supply chain, few solutions exist that can be deployed via the cloud and still provide the depth and breadth of capabilities necessary to address the challenges faced by today's agricultural market firms.

The bottom-line for companies seeking to buy or procure a new CTRM/CM solution is that depending on the nature of your business and which commodities you buy, manage, or sell, the best fit solution may be difficult to initially identify. Historically, this challenge has resulted in a multitude of different approaches – ranging from buying and deploying multiple CTRM solutions from various vendors to manage each specific commodity or commodity group, to attempting to build multi-commodity bespoke solutions internally.

Despite the growing demand for cloud delivered, multi-commodity CTRM solutions, few vendors have made the significant investment required to enable their complex solutions to run effectively in a true cloud environment. However, the customers of those that have, such as Eka and their Trading and Risk Management platform, now have the option to leverage the many advantages of the cloud, without sacrificing the sophisticated capabilities they need to manage their complex and wide-ranging businesses.

EKA IN THE CLOUD

Eka has a long and successful track record in servicing the agricultural markets around the globe. Eka's customers across a wide range of geographies and commodities have not only leveraged the advantages of the cloud, but have improved their financial performance via increased operational visibility, access to real-time data, advanced analytics, and enterprise-wide transparency across the scope of their businesses. Delivered in the cloud (or in a traditional on-premise model), Eka's CTRM solution captures, analyzes, and manages physical trading, procurement, logistics, bulk handling, processing, risk, and compliance across softs, grains, feeds, edible oils, oilseeds, livestock, and other agriculture-based businesses. The CTRM software solution, relied upon by four of the top five global agriculture companies, also optimizes decision-making by providing real-time scenario and intelligence capabilities.

Below are two brief case studies of the most recent examples of companies that have transitioned to Eka Trading and Risk Management in the cloud to improve the bottom-line and operational performance of their complex businesses.

Asian agricultural trading company

This company had been relying on a wide variety of manually populated spreadsheets distributed throughout their organization to manage their increasingly complex business. Lacking a centralized store of data and information or the ability to support formalized and auditable business processes, the company's strategy and trading decision making was slowing as time was wasted reconciling errors and merging information from various spreadsheets and outside sources. Without real-time reports of trading positions, P&L, and forecasts, the company's trading decisions were ultimately based on inaccurate and/or incomplete information, leading to suboptimal financial performance.

Seeking to improve their systems and processes, without making a significant investment in IT hardware and

hiring an internal support team, the company selected Eka's cloud-based CTRM solution for agriculture to replace this myriad of spreadsheets, improve real-time visibility into data, and improve their analytics capabilities. By providing the ability to aggregate all their data in real-time and expose the metrics and insights necessary to react quickly to changing market conditions, the company's traders and execute staff are ensured that their trading decisions are based on accurate information, not error riddled spreadsheets. By leveraging the capabilities of the cloud, including seamless system upgrades delivered by Eka, the company decreased the cost of acquiring and maintaining a system that has positioned them for success as their business grows and the markets and regulatory environments in which they operate grow increasingly complex.

Global agricultural trading company

This large multi-national firm was relying on their accounting systems (SAP) along with Excel spreadsheets to manage their wide-ranging business; an infrastructure that required significant manual effort for commodity trade capture, shipments, settlements, and other activities. These systems didn't provide adequate insight into any number of key metrics, such as counterparty risk exposures and risk reporting. The processes were unable to produce timely and accurate business reporting, especially the vessel P&L and other physical and derivative P&L reports. Additionally, reconciliation of several custom-made Excel spreadsheets by different users was difficult and time consuming, and long reporting cycles did not provide real-time information and inhibited decision making.

After a comprehensive search for a solution to address their complex needs, they selected and implemented Eka's cloud-based CTRM solution for their agriculture commodity trading and risk management. Once fully implemented, the company was able to manage and optimize their entire commodities value chain including trade capture, logistics, invoicing, and settlement. With seamless integration with SAP, invoices and pay statements, EOD results and counterparty master data is now automatically posted from Eka to SAP, resulting in accelerated cash flows, lower costs and greater insights into counterparty credit exposures.

Additionally, with improved decision-making via real-time scenario and intelligence capabilities the company has been able to provide their deal-makers and staff with the market insights necessary to excel in an increasingly complex marketplace.

SUMMARY

It has taken some time for the commodity trading and commodity management markets to fully embrace the benefits of cloud delivered solutions and overcome lingering cybersecurity concerns. Though traditional on-premises installations will continue, it's increasingly clear that cloud delivered CTRM/CM solutions will dominate the market in the coming years as more vendors make the necessary investments to enable their solutions to run effectively in a cloud environment.

For agricultural-centric businesses, the recent availability of cloud delivered solutions provides them the opportunity to take advantage of lower deployment costs, increased scalability, improved security and on-demand advanced analytics. Those companies that have selected these systems, like Eka Trading and Risk Management, now have the ability to leverage the many advantages of the cloud, without sacrificing the sophisticated capabilities they need to manage their complex and wide-ranging businesses.

ABOUT EKA

Eka is the global leader in providing Commodity Management software solutions driven by Cloud, Blockchain, Machine Learning and Analytics. Eka's end-to-end Connected Commodity Management platform enables companies to efficiently and profitably meet the challenges of complex and volatile markets.

The company's best-of-breed solutions manage commodity trading, enterprise risk, compliance, procurement, supply chain, operations, logistics, bulk handling, processing, and decision support. Eka partners with customers to accelerate growth,

increase profitability, improve operational control, and manage risks and exposures. Eka is a team of 315 staff with offices in the Americas, Asia, Australia, and EMEA, serving a rapidly growing global client base across multiple commodity segments.

For more information, visit www.ekaplus.com



ABOUT

Commodity Technology Advisory LLC

Commodity Technology Advisory is the leading analyst organization covering the ETRM and CTRM markets. We provide the invaluable insights into the issues and trends affecting the users and providers of the technologies that are crucial for success in the constantly evolving global commodities markets.

Patrick Reames and Gary Vasey head our team, whose combined 60-plus years in the energy and commodities markets, provides depth of understanding of the market and its issues that is unmatched and unrivaled by any analyst group.

For more information, please visit:

www.comtechadvisory.com

ComTech Advisory also hosts the CTRMCenter, your online portal with news and views about commodity markets and technology as well as a comprehensive online directory of software and services providers.

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