

## Powering growth by adopting CTRM as an architecture



## Why the shift?

#### Commodities are complex

Each commodity is unique. Building enough flexibility into a monolithic solution to provide all users in all commodity markets exactly what they need is impossible. A commodity-specific approach is necessary to address the specific needs of each commodity.

#### For example:

- A commodity-specific solution must support the supply chain for the commodity, and different commodities have vastly different supply chains. LNG shipping is not the same as shipping grain, nor is dairy the same as wheat. One monolithic system cannot manage the vastly different physical assets, logistics (vessels, warehouses, tanks, etc.), documentation, taxation, etc. for commodities as diverse as crude oil, milk, grains, and gold across every continent, ocean, and political zone
- Commodity management in today's volatile, global commodity markets requires both transactional data management and advanced analytics. These require completely different systems. Transactions are best managed in a transactional data management environment and calculations are best handled using in-memory technology or other approaches. These systems must work together, but it's challenging to build both as part of the same monolithic system.

#### Data is vital to good decision making

The reason for these changing requirements is based in part in the advent of big data. Today, commodity trading companies – both buyers and sellers – have access to an abundance of real-time data and all parties want to use that data to make smarter decisions. The same data often needs to be captured, analyzed, and reported on in different ways by different users. Advanced analytics is essential in new CTRM systems, and users need automated, real-time data processing without manual manipulation to analyze data quickly and gain insight fast.

#### Cloud

The advent of cloud-based systems has also fueled the shift towards CTRM as an architecture. SaaS systems do not require the long and expensive implementations that on-premise systems require, making a modular piece by-piece approach more logical. Using 15 different apps to manage trading is challenging if you have to implement each one on your internal servers and build integrations so they all work together. However, if you have a cloud-based platform you can implement exactly the functionality you need when you need it, because cloud implementations are faster, less expensive, and less disruptive to your business.

#### In 2018, ComTech Advisory highlighted the rapidly changing CTRM landscape.

"Throughout, the twenty - year history of the [CTRM/ETRM] software category, the perceived 'Holy Grail' has often been to bring to develop a singular comprehensive solution - one that covers all (or at least the most common) commodities, geographies, supply chains, and assets. ComTech now believes that the 'Holy Grail' - a singular, monolithic Commodity Management/CTRM solution that addresses all commodities and markets - is almost certainly impossible to commercially achieve and, frankly, is ultimately less than desirable. Rather, the most reasonable approach is an architectural approach - one that combines specific modules or individual products that can address the specific needs of an individual company and the market or markets in which they operate."

## Benefits of architecture approach

Adopting CTRM as an architecture creates a more robust trading system because each individual component in the system is specifically designed for each company's exact situation – be it mining iron ore in Australia, trading sugar in South America, or shipping natural gas in Canada. Breaking CTRM into its smallest components enables commodity trading companies to implement just the functionality they need to power their business quickly and easily – without spending time and money on features they don't need. They can create a custom system that provides what they need today and scales easily as they grow.

In addition, they get the benefits of a component system:

- Upgrades and fixes are at the component level, reducing testing and upgrade burdens that monolithic enterprise solutions incur. Upgrades to cloud-based apps are seamless, and often occur without any impact to users
- Real-time risk and position reporting are often missing from monolithic CTRM solutions but building a foundation that ties all the component apps together enables a consolidated view of companywide risks. Risk management is easier with a true, accurate, and consistent view of the business
- Building an underlying platform for commodity management apps ensures that every app uses the same data for analyses. This is extremely important when making trading decisions in volatile markets because using the wrong data ensures traders will make bad decisions and using different data fuels confusion. When there is one view of the business, and the data of record is consistent and properly maintained throughout the process, better decisions are made.

## The cost of relying on traditional systems

In rapidly changing markets, choosing a monolithic system is costly.

- Higher upfront costs of implementation. Traditional monolithic CTRM software is implemented on premise and involves lengthy implementations and heavy IT involvement. Breaking commodity management into smaller components, or apps, ensures a faster, less expensive go-live. The time spent implementing traditional CTRM/ETRM systems - many months to over a year - is time spent without access to the system you need. During that long implementation time your business is not running optimally.
- Buying more than you need. Traditional CTRM and ETRM systems have an all-or-nothing framework, so you purchase the system and pay for the functionality whether you need it or not. An app-based platform enables you to buy just what you need, and nothing more, with the ability to add functionality quickly and easily as you grow.

## The platform approach

Adopting CTRM or ETRM as an architecture ensures commodity trading companies get the functionality they need but they must adopt a system that ties all the individual components together. The point is to avoid manually aggregating data from disparate systems, not to adopt more systems that do not connect. You want to improve information flow and speed up processes to cause less work, not more.

To create a modern, flexible commodity management system, you must lay the right foundation. The foundation of the platform is connected data. Creating one data pool tying all relevant data from across the value chain to every application ensures that every person and every system has access to the same information at the same time. Decisions are made based on one single truth.

The platform must provide easy integrations to ensure all systems can use the data. Using open APIs ad in-built connectors will ensure the data connects with applications, tying information from all systems, exchanges, market feeds, etc. together.

With this foundation, the entire system can be created by adopting the functionality – or apps – that each business needs. Each app can access all the information at any time to create insight and custom reports.

#### Security

A platform built on connected data must provide up-to data, independently verified data security. It must deliver:

- Enterprise-grade security for your data Independently assessed for compliance to industry standard strict security guidelines, including SOC 2 Type I, GDPR Single sign-on (SSO) via industry standard authentication protocols Encryption of data in transit and at REST Integrated with best-in-class DLP, EMM and archival partners
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#### Cloud

One of the key benefits of the platform approach is the flexibility to build a customized commodity management system tailor-made for your business. This benefit can only truly be achieved in a cloud-native environment. Traditional, on-premise solutions take months (sometimes more than a year) to implement, and they cannot be easily altered. If your business expands, you may have to purchase more hardware, implement more software, and build more integrations. If you need new functionality, you need to invest in integrating new functionality into your existing system. It's expensive, disruptive to your business, and time consuming.

Cloud-based commodity management systems are quicker, cheaper and easier to implement, because there are no hardware installations and the software is hosted on cloud servers. That means that adding users or functionality is easy. The servers are already in place and you can expand quickly and easily to accommodate more users.

Adding functionality doesn't impact your business because the software and hardware work occurs offsite. It's quick, easy, and inexpensive, and you can sometimes add new apps in a manner of minutes.

When choosing a cloud-based platform, make sure it adheres to smart business practices.

- Ongoing support and maintenance of the applications
- 4x7x365 infrastructure support
- 100% network uptime guarantee
- 99% application uptime guarantee
- URL, port availability and hardware monitoring
- Managed firewall and VPN access
- Bandwidth and backup performance utilization monitoring
- Managed data backups and restores
- Guaranteed response times for support requests
- Advanced system performance and device monitoring

#### Enterprise apps for commodity management

The platform approach breaks monolithic CTRM/ETRM systems – and beyond – into smaller components and delivers these components as apps. These components enable each commodity business to choose exactly the apps they need without the burden of systems they will never use.

Each business is unique, why should they be assumed to have the same commodity management requirements?

What's more, the **platform approach does not require commodity businesses to purchase CTRM software and only CTRM software.** The apps can extend across the entire value chain, from sourcing through supply chain, inventory management, shipping, and settlement. Each business simply chooses the functionality they need to improve commodity management, regardless of whether it's CTRM functionality, commodity analytics, regulatory management, or reporting.



## The power of the platform

Eka's Cloud Platform delivers all the functionality you need when you need it. It expands with your business quickly and seamlessly and provides real-time insight to help you make better decisions faster.

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#### **Advanced analytics**

No modern system would be complete without advanced analytics. There is so much data - real-time, structured, unstructured, historical - and smart commodity businesses use this data to make better decisions. Using the power of AI and machine learning, Eka's apps deliver real-time insight, rich what-if scenarios, and in-depth reporting to enable commodity management companies to optimize their businesses. Run simulations, analyze real-time and historical data, look for trends, optimize production, improve shipping and logistics, and more.



#### Self-serve reporting

Eka's enterprise apps with userfriendly UIs enable real-time, selfserve reporting. This is essential for businesses in volatile markets, where traders do not have time to request reports and wait hours or days for analysts to aggregate data, analyze it, and create reports. Userscan quickly and easily create their own insights to enable rapid responses to changing markets or run complex what-if scenarios to make better choices.



#### Mobile

Market changes don't wait for you to reach your desk, so you cannot always wait to reach your desk to check on your business. **Eka's platform provides real-time mobile access to all our apps and all your data - from any mobile device.** If you need to create a report on your phone, you can create the report and share it with the chat feature. The ability to collaborate when you need to, not just when you are sitting at your desk, provides a first mover advantage that can drive profits.

Eka's apps also provide alerts so you are warned the moment your business reaches user-defined thresholds. Don't wait for disaster to hit - stay ahead of your business.

The power of CTRM as an architecture is the power to look beyond traditional CTRM and connect the entire value chain to make better decisions. Using all available data, advanced analytics, and modern technology, commodity trading companies respond faster to market shifts, take advantage of new opportunities more quickly, and reduce risk – increasing profits.









# The power of one.





## To learn about how Eka can add value to your operations.

www.eka1.com info@eka1.com



### About Eka Software Solutions

Eka Software Solutions is a global leader in providing digital solutions for Trading & Risk, Supply Chain Management and Financial Services driven by Cloud, Blockchain, Machine Learning and Analytics. The company's best-of-breed solutions serve the entire trading value chain across agriculture, energy, metals and mining and manufacturing markets.

Eka's Cloud Platform provides advanced analytics, one source of data and an automation engine, providing maximum flexibility and investment protection as business needs and market requirements change. Eka is committed to ensuring its 100+ clients can work from anywhere and collaborate across ecosystems within a secure and trusted environment.

For more information, visit www.eka1.com and follow us on LinkedIn and on Twitter.