

ENERGY AND COMMODITIES

FIVE CRITICAL DIFFERENCES BETWEEN DEDICATED CTRM SOFTWARE AND ERP FOR COMMODITY TRADERS

Five Critical Differences Between Dedicated CTRM Software and ERP for Commodity Traders

While there's some overlap between the Enterprise Resource Management (ERP) and Commodity Trading and Risk Management (CTRM) systems, there are many critical differences. In a recent whitepaper, ComTech Advisory analyzed the intersection of ERP and CTRM in the context of a Commodity Management (CM) architecture; and looked at many of the complexities that companies should consider when seeking to address sophisticated functional needs for managing the commercial exposures inherent in a commodity-centric business. After several decades of doing business specifically with and for commodity firms, we thought we would elaborate on that paper and share the knowledge and experiences we've accumulated delivering solutions to commodity-centric markets, including the critical differences we see between CTRM and ERP.

Commodity Risk Management Is Not Native to ERP

It's a common occurrence that large and mid-sized corporates with an existing ERP system deployed will turn to their ERP provider and ask about a "commodity risk management module." While many of these ERP providers (like SAP, Oracle and MS) have developed broad functionality to address commodity supply chain management and enterprise level risk, in our experience, we've yet to see any that have made the investments necessary to restructure their core product in order to bring to market sophisticated commodity risk functionality. As such, the increasing numbers of commodity-centric companies seeking capabilities that will help improve their bottom line performance and limit price risks via active management of their commodity exposures, have limited options:

- 1) Contract with their ERP vendor to develop bespoke capabilities
- 2) Utilize off-system, non-integrated solutions like spreadsheets (with all their attendant risks and issues), or
- 3) Seek a vendor-supplied CTRM solution that has been designed from the ground up to provide these specialized capabilities.

"We've identified five critical capabilities that CTRM software addresses and that ERP software, given the nature of its core design, cannot adequately address without costly customizations and future maintenance issues."

Unfortunately, experience has again shown that there is simply no way to achieve a reasonable ROI by customizing a large ERP system to do something it was not built to do. While these systems provide strong capabilities in integrating and tracking most common operational and business activities, they are not designed to manage the complexities of risk management and valuations in a commodity-centric business. These custom development efforts more often than not take far more than a year to complete; and given the limitations of the underlying data structures, the final product rarely meets the expectations of the users, particularly as their business, and the markets, evolve. Furthermore, these custom coded solutions burden the company with additional complications and expenses as the underlying ERP solution is updated, forcing near continual changes to the custom functionality.

Spreadsheets, given their inherent risks of errors and omissions, limited organizational visibility and compartmentalized knowledge, should never be considered more than a stop-gap approach – particularly in this era of increased stakeholder scrutiny and regulatory oversight.

Given the alternatives, and informed by the experiences of companies that have gone down these paths, more and more commodity-centric businesses are integrating CTRM products as part of a larger CM infrastructure. Using purpose-built CTRM solutions allows these companies to leverage the core capabilities of their ERP system, yet have the critical tools they need to effectively manage the risks and optimize the returns of their commodity procurement and management activities. And, with the growing acceptance of cloud-delivered CTRM solutions, companies are finding even greater value and

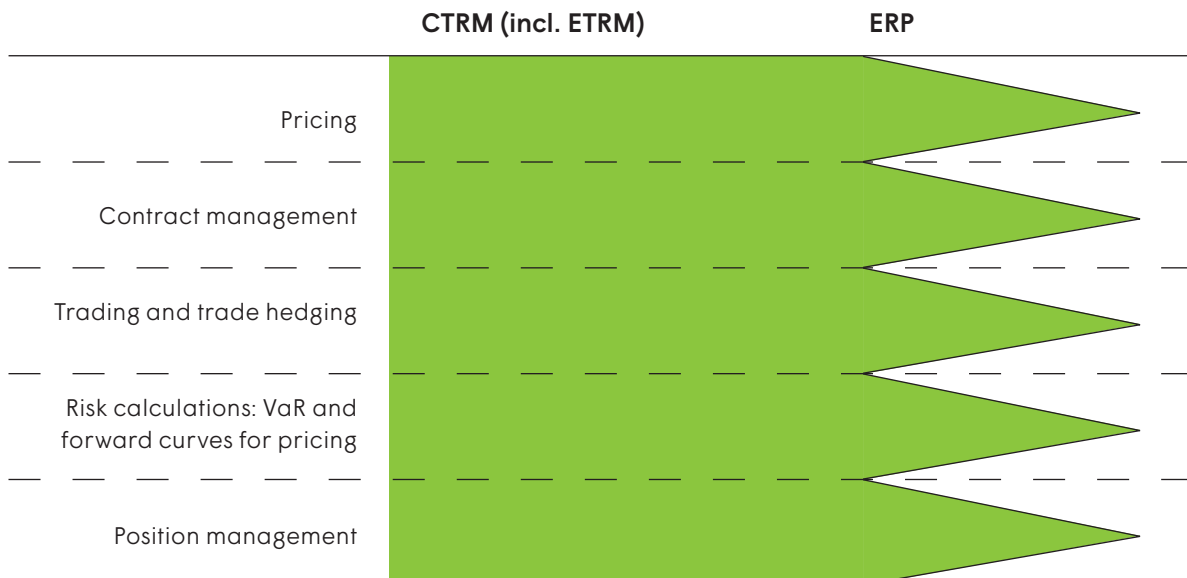
improved ROI with SaaS systems like Kiorex, which can deliver those critical capabilities in a package that can be quickly deployed and seamlessly integrated to both General Ledger (GL) and ERP platforms.

The Differences Are Critical

In our experiences working with these companies that have adopted CTRM tools to augment their ERP solutions, we’ve identified five critical capabilities that CTRM software addresses and that ERP software, given the nature of its core design, cannot adequately address without costly customizations and future maintenance issues:

1 Fixed vs variable pricing: ERP solutions are designed to take snapshots of the Enterprise Resources at a certain point in time for planning purposes. They are designed to be unambiguous, exact and fixed. The concept of variable pricing or contracts “to be fixed” sometime in the future are at odds to their core function. But as those of us in the commodity markets well know, fixings and unpriced contracts are the norm and the risks we need to hedge for unpriced contracts and future commitments are core in the businesses that we manage. In the South American grains markets, for example, the ability of the farmer to fix volumes at one stage, prices at a second, and delivery dates at a third, render most traditional ERP platforms unable to capture any semblance of the true risk profile of a firm’s exposures. True CTRM systems can understand and capture these subtleties in the commodities business.

Five critical differences between CTRM and ERP systems:



2 Complex contract management: The same logic above flows through to the contract management side of the business. In most manufacturing businesses where the price of goods is known throughout the supply chain, the unpriced and partially priced nature of commodities procurement are core differences in the way a commodity is bought, sold, shipped, stored, invoiced, accounted for and valued throughout the supply chain. The novation of contracts from unpriced to fixed or from one delivery volume to an average is simply not compatible with the linear, black and white world of ERP architecture. It is similar in nature to the challenges faced by traditional server based systems when they try to adapt themselves to the cloud. If it was not designed to work that way from the start, it will never function correctly.

3 Trading and trade hedging: Though many commodity-centric companies don't think of themselves as engaging in "trading", simply transacting in commodities requires much of the same capabilities. ERP systems don't address the core concepts and constructs of commodity trading...dynamic forward price curves, trading agreements, trades, books and strategies. It's common that what would be viewed as a portfolio of complex deals across a number of locations, markets or business units in a CTRM system may be treated simply as a singular contract in the ERP, limiting the ability to measure the current and forecast performance of hedges, physical trades or locational swaps. Using CTRM tools that are designed to properly value commodity exposures and measure risks from the trade level up can help reduce supply costs, accurately value intermediate products and provide a true financial picture and forecast values of widely dispersed assets and inventories. While ERP systems are great at telling you where you've been, CTRM systems help you see the "road ahead" – allowing you to optimize commercial strategies to improve bottom-line performance and limit down-side exposures.

4 Risk calculations: VaR and forward curves for pricing: The most important difference between ERPs and CTRMs, however, almost always comes down to risk calculation. Let's face it – the commodity markets are just different. Seasonality, methodology, holiday calendars, averaging conventions, settlement rules, terminology, and even weather...ERPs are unable to capture, track and account for these subtle differences, and attempting to do so via "workarounds" introduces critical corporate risk and a lot of manual input (and error) into the process. What is a core CTRM functionality – managing forward pricing curves – is an often-overlooked source of error and labor cost when using Excel or ERPs for commodity risk, and brings us to our final critical point which regards the fundamental difference between ERPs and CTRMs.

5 Position management: Static vs dynamic environments: ERPs are designed to capture and quantify the actual current state of resources in an enterprise. They are by nature designed to capture a static snapshot for managers to see where they are. CTRMs are designed for more dynamic risk analysis and allow companies to measure what probable outcomes should be expected given their current state. It is a subtle but crucial difference in capabilities. Both systems may be able to measure that a company will have to purchase 10,000 Metric Tons (MT) of wheat, and both may be able to capture that No.1 Hard Red Winter, FOB Gulf of Mexico, is currently \$157.20 per MT, but only a CTRM can help you understand what the possible impacts to your cash flow could be six months later, and whether physical purchases, options, structured products or futures will most effectively cover your specific risk profile. The ability to run VaR, scenario analysis to simulate shocks in the market, and manage the dynamic changes in basis locations are only available in commodity-specific CTRM platforms.

Summary

In our opinion, it's simply not possible to design and develop commodity-specific systems and functions without the benefit of many years of experience in these markets. There really is no substitute for experience, and there are no shortcuts in this matter. Systems that were developed for treasury functions or firm-wide enterprise risk can't simply be "adapted" to commodities by "shoehorning" in CTRM capabilities.

Attempting to modify traditional ERP solutions, even those that promise to monitor risk and commodities, will invariably lead to an expensive, poorly functioning and often inaccurate solution.

CTRM platforms have been designed to address the complexities of the commodities markets. They will also be consistent in staying ahead of changes in the marketplace as their providers spend every dime of their R&D of addressing changes in, and deriving the most value from, the international commodities markets. And, of course, the people working for these technology companies are commodity experts, capable of making the system implementation and post go-live support for your commodity teams more effective. And speaking of technology, the latest generation of cloud-based CTRM platforms, like FIS' Kiodex, provide even greater cost efficiencies as they can be implemented in as few as 30 days with as little as eight hours of client's IT support resources' time. Our experience in developing and delivering critical risk capabilities via the web, and having established frameworks for integrating seamlessly with leading ERP solutions, allows us to help commodity businesses achieve greater success in an increasingly complicated market.

FIS Solutions for Energy & Commodities

FIS solutions for energy and commodities help utilities and retailers, pipeline and storage operators, marketers and traders, as well as integrated energy companies, compete efficiently in global markets, by streamlining and integrating the trading, risk management and operations of physical commodities and their associated financial instruments. Through real-time data, connectivity and analysis, FIS solutions help you achieve transparency and regulatory compliance, optimize end-to-end transaction and operational lifecycles, and meet time-to-market needs with flexible deployment options. As your technology partner, we can help take advantage of the latest innovation and explore new opportunities. For more information, email us at getinfo@fisglobal.com

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