Can You Afford Not to Run a CTRM System?

By Alex Hofmann, Brady plc

OVER THE LAST ten years, the profit margins of industrial commodity processors in metals, agriculturals and softs have come under increasing pressure (Box I). This has led to an increased focus on preserving profits and many companies are now examining the efficacy and robustness of their hedging strategy.

In order to initiate a corporate hedging policy which can be understood by all stakeholders and executed in line with company policy, full visibility over physical and derivative positions is required, as well as auditability of transactions. For most companies, there is a genuine challenge in maintaining and reporting on this data using spreadsheets.

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But how do you go about removing spreadsheets and selecting a Commodity Trading and Risk Management (CTRM) system and what are the crucial factors in that selection process? Cost is a prime consideration for all companies when selecting enterprise software and there are many ways to reduce the overall cost of ownership, some of which are described below. Robust architecture is another critical factor which is often assumed to exist, without being fully tested in a live environment or observed in action at a reference site. Finally, software extensibility should not be overlooked: can the business users add functionality and customise their views and data without commissioning bespoke development?

Can CTRM Software Ever be 'Out-of-the-Box'?

It was clear that the commodity processor/fabricator segment was not being catered for by existing software providers (ourselves included). There were a number of challenges which needed to be met before we could deliver a solution.

Recent entrants to the CTRM market for industrial commodity processing have proclaimed the benefits of 'next

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BOX I: Key Trends in Commodity Processing

- Soft commodity and metals price volatility and in particular premiums have seen dramatic increases (see charts).
- Low cost competitors often based in areas where the cost of power and wages are low.
- The market has seen a shift from price fixation services arranged by suppliers to an environment where the processor is expected to manage their own price risk.
- Hedging is seen as a back-office activity and treasury staff often lack the expertise and resources to manage a hedge book in a spreadsheet.
- The regulatory environment continues to shift, with the introduction of IFRS 9 and new reporting requirements, along with stricter controls on origination set against a tightening credit environment following the global financial crisis.

Key Base Metal 10 Year Prices

generation' trading and risk management software, often delivered as a service. The advantages of such an approach are numerous: software can be rapidly deployed via the Internet and the software is built on an n-tier model which is scalable and flexible.

However, unless the software is functionally rich enough to handle the complexities involved in trading and marking-to-market physical and derivative commodities, selecting such a system could prove to be a costly mistake. If your SaaS CTRM provider has not developed broker trade feeds, broker reconciliations, broker mark-to-market, flexible margin tools for initial margin and variation margin calculations, real-time price feeds, and advanced curve servers, and support for the listed and OTC products you use now and may use in future, then you will be faced with no choice but to foot the bill for developing these services. And when it comes to assessing an RFP for risk and cost factors, building new bespoke software for an individual client will raise an immediate red flag.

Functionally Rich, Technically Advanced

In order to meet the challenges of delivering a cost-effective solution which builds on existing, proven architecture and which

the user can configure to meet their needs, Brady designed a new product in Q4 2014 called the Brady Hedge Manager. Born out of thirty years' experience in the commodities markets, the *Brady Hedge Manager* combines the functional richness of our existing platform with the simplicity and speed of a SaaS

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solution. The Brady Hedge Manager is deployed via Brady's Cloud Service and is shipped with a series of pre-configured reports.

One of the strengths of the system lies in the fact that it is possible to extend functionality using existing optional modules to an almost limitless extent following go-live. In

Key 10 Year Corn & Cotton Prices
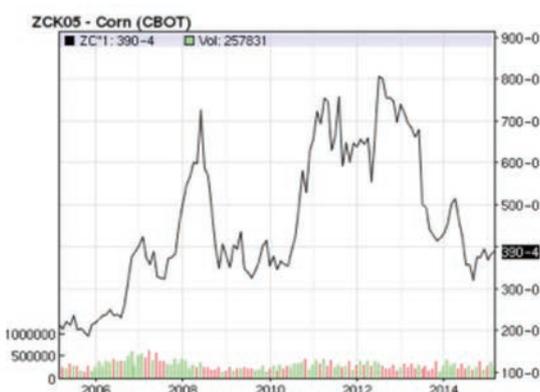
Source: www.Nasdaq.com

Future Expansion Enabled Via Optional Modules & Customisable Reports

Source: Brady plc

One of the biggest challenges ... is getting visibility over the physical, derivative and FX positions

Market Visibility

In this example the customer is under-hedged by 7 tonnes in March 2014 – position will often be hedged to the nearest LME Lot

Source: Brady plc

addition, experienced users do not need technical skills to configure their own reports and views; they can also set up new products without assistance from Brady. As you would expect from such a solution, implementation time from contract signature to go-live is massively reduced.

The Challenges of Hedging Price Risk for Commodity Processors

First of all, the physical commodity positions need to be extracted from the customer's ERP or physical trading system and imported into the Brady Hedge Manager. This can be done using a web service interface to your physical trading system or the file can be dropped into our FTP import folder as frequently as is required. The import format caters for both forward contracts and inventory positions so the Brady Hedge Manager will always have an up to date view of your total physical position. Having your physical positions in the Brady Hedge Manager allows you to view a consolidated report of your risk, incorporating all of your hedging activity.

Measuring the Effectiveness of Corporate Hedging Policy

One of the biggest challenges for the COO and CEO of a large industrial company is getting visibility over the physical, derivative and FX positions at an aggregated entity level and at a particular facility. Brady's combined risk position report gives a calendar view of pricing risk which will show any un-hedged positions and will tell you which months need to be hedged. It is also possible to create rules which facilitate the automation of 'contra FX trades' which back out the FX risk from the risk book.

When the hedges have then been entered into the system, this will flatten the risk report showing the result of hedging out the price risk. This gives immediate visibility to market exposure allowing customers to successfully implement the company's hedging policy.

Another major challenge for our customers is monitoring and reporting on hedge effectiveness: new hedge accounting rules were introduced in 2014, IFRS 9, updating the previous IAS 39. The main impact of these changes is a reduction in the formal hedge effectiveness testing requirements. It is also now possible to hedge individual components of the risk and account for this (for example, hedging the metal price risk of a physical sale, and then hedging the FX risk of the combined physical and metal hedge at a later date without having to de-designate the first hedge). Brady can provide the tools to facilitate this.

Being able to split the FX risk out from the commodity price risk and getting visibility over the current cashflow position allows senior management to make timely decisions and appropriate actions.

Managing Margins

One of the major challenges for producers today is a reduction in credit lines in the wake of increased legislation. Managing broker margining requires a system to predict cashflow and the Brady Hedge Manager provides a complete mark-to-market by broker and by month, allowing the validation of current variation margin (VM) exposure with each broker. We also provide the option to include initial margin calculations (IM) using SPAN methodology, which allows better visibility of what the broker's margin call will be. The margin module may also indicate where savings can be made by offsetting positions.

Successful Implementations Start With a Scoping Exercise

Although Brady Hedge Manager is a simple solution for hedging, we would still recommend that you enter into a limited scoping exercise before purchasing any enterprise software. A scoping exercise for out of the box software will take the client through what the package does and check that it covers enough of the requirements, whereas a more customised solution would have a scoping where we start with the users' requirements and then tailor the solution to meet those requirements.

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If you decide not to progress with Brady, the resulting document serves as a record of your processes and requirements which can be used for any purpose.

In order for the scoping exercise to be a success, it is critical that the right personnel are made available on both sides, in order that the scope of the project is made clear from the beginning and there are no nasty surprises once implementation begins.

Can CTRM Software Ever Be Delivered Out-of-the-Box'?

In our view, the answer to this question would have to be a qualified 'yes'. Providing the customer and the supplier are fully engaged in the system selection process and both sides are able to understand and capture the business processes – and the vendor

Roles & Expectations Within the Scoping Exercise
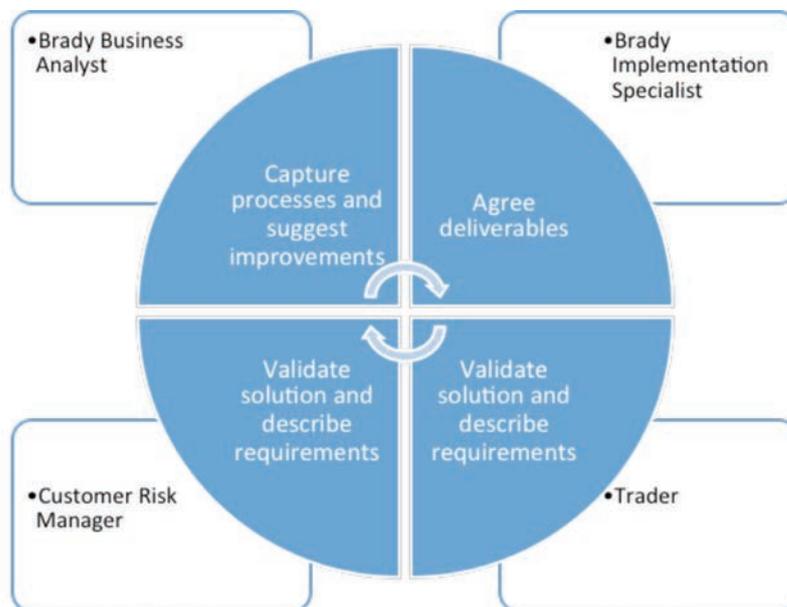
Source: Brady plc

has a proven track record – it is possible to deliver a simple solution for hedging commodity price risk which comes 'out-of-the-box'. In order to make sure that your solution is able to adapt as your business expands, it is essential to ensure that you have selected a solution which is underpinned by thousands of man-hours of development expertise in commodity markets. •

The commodity processing sector comprises the following industries & asset types ...	
Industry	**Commodity type**
Rolling mills	Aluminium
Wire & cable manufacturers	Copper
Industrial consumers (automobiles and cans)	Lead
Brewing	Tin
Baking	Zinc
Food companies	Nickel
Fabricators	Steel
Extruders	Oil
Refiners	Precious Metals
Foil mills	Cotton
Custom smelters	Cocoa
Alloy makers	Coffee
Secondary processors	Grains
	Oilseeds
	Sugar

Alex Hofmann is Business Development Manager with Brady plc, a leading provider of software solutions for global commodity trading. Brady offer a choice of trading and risk management applications designed to enable producers, consumers, financial organisations and trading companies to manage all of their commodity transactions in an integrated solution.

www.bradyplc.com