

Prepare Yourself for the Next ETRM Project Race

(... it just might save you a few million).

By Coleman Fung

An ETRM project is an extensive deployment of a mission critical solution. There are countless challenges to overcome, and more than a few have struggled in these marathon-like project races. There are a myriad of truisms that relate to any large scale, enterprise-wide project. Communicate, plan, know where you are and where you want to be, document everything, resource appropriately and – above all – manage rigorously. What follows are hard won truths that may get you better prepared for the next endurance race.

MAKING THE RIGHT DECISION

Every ETRM project starts with one big decision: Which ETRM solution to select for your organisation. Since this article is not intended to discuss the system selection process, we simply need to revisit a few key evaluation issues.

After years of vendor consolidations, there is still a vibrant ETRM software market, offering energy firms and banks many choices. Overall, the current ETRM solutions can be grouped into two major camps: Off-the-shelf vs. adaptable. Obviously, these labels are just general descriptions. No ETRM solution is truly off-the-shelf nor is any solution completely adaptable – the challenge is to determine which solution is the right one for your organisation. Or you can build your own custom applications.

In general, an off-the-shelf solution – which provides very limited functionality and very limited customisation – is typically cheaper from both a licensing and implementation perspective. However, this may not necessarily translate into actual savings! Savings will only materialise if the ‘off-the-shelf’ solution truly addresses your internal business requirements, removes your current pains, supports your current business needs, and addresses your future growth plans and potential market changes.

There are numerous other issues to consider with ‘off-the-shelf’ packages but the most important one is the large number of workarounds you may need to

develop because of the inherent limits of these systems. The deployed workarounds are expensive enough to manage and maintain, but those that evolve over time can be even more detrimental to your on-going operations. Then, more workarounds will be systematically or clandestinely created by various groups of users.

Here is a typical scenario: Workarounds in spreadsheets are run and stored on individual personal computers across the firm; some of them may be properly managed and tracked by the admin group, but many are not. Hence, the panacea you had hoped to create with the new solution disappears as silos of decision-critical information are scattered across the enterprise, essentially putting your organisation back to where it was!

Once the number of workarounds exceeds a certain pain/tolerance threshold, you will find yourself adding a few other costs into your financial equation: Reduced trading profits, inefficient hedges, higher staffing budgets, increased consulting fees for additional auditing and compliance requirements, potential operational losses, and the dearest cost – opportunity costs. Also you may need to get a replacement system much sooner than originally planned.

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Building your own custom ETRM solution is never a cost effective option, but the appeal or temptation is always there, with either internal or outsource development resources. With a custom built solution, you should be able to address your unique, proprietary requirements exceedingly well. You may also receive good services from your own captive development team. However, there are many complicated custom solution-specific issues (in fact, too many to review here) you must consider

and manage. Among them, two stand out to make this ‘internal build’ option a rare case in today’s ETRM world: Cost and sustainability. The cost equation is fairly easy to understand; it takes up a lot of resources to build and maintain a robust, core development team, capable of designing, developing, and maintaining an enterprise-class application. Not to mention the concentrated risk or exposure to a small number of key developers and the associated costs.

Then, you have to contend with the sustainability issue. It’s like a contest between dictatorship vs. democracy. Within an internal development organisation, you have one voice, one mandate. If you happen to have an enlightened, competent team for the development effort, you will be in good shape. But how do you maintain that competency level and for how long? Working with vendor solutions, you do give up certain flexibilities, but you will, in turn, get other tangible benefits such as well-tested applications, functionality designed to satisfy the demanding requirements of a diverse user community, infrastructure that can scale and support larger trading operations, an ecosystem with many voices and excellent ideas, etc. Since the vendor community is still very vibrant, you get to choose not only the product but also the community that can best support your trading and risk management needs.

Given the challenges mentioned above, you may decide to choose a more efficient ‘hybrid’ solution that is in between the ‘off-the-shelf’ camp and an in-house solution: A more flexible, robust solution that can be better tailored to your unique and proprietary needs. The benefits are many. If an ‘off-the-shelf’ system is chosen, you will be handicapped by the ‘sameness’ – with limited options – like other firms that you know using the same ‘off-the-shelf’ systems. If an internal-built solution is chosen, you will need to sweat over every detail of an enterprise-class application. A hybrid solution maximises the efficiency of your team by providing practical solutions –

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as your trading and risk infrastructure – developed from years of experience working with the vendor's user community. Your technical team can then focus on value-added capabilities. Whether it's your proprietary views on the markets, your custom analytics beyond plugging in another 'me-too' third-party library, your more sophisticated ways to decompose market risks, your super-efficient balancing mechanisms for scheduling needs, or your ultra smooth workflows for your back-office, it is about how easily and quickly you can customise your solution for that elusive arbitraging edge.

So, it comes down to your requirements and a threeway decision: *less-short-term-pain-now-but-more-long-term-pain-later vs. more-short-term-pain-now-but-less-long-term-pain-later vs. much-more-short-term-pain-now-and-much-more-long-term-pain-later*. In other words, making the right, most cost effective, decision today may actually require an expanded perspective with more – but not too much – cash investment upfront. The long-term savings will then derive from many areas: Higher trading profits, higher risk-adjusted returns, lower operational costs/losses, captured market opportunities (such as the collapse of Amaranth), etc.

BUILDING THE RIGHT TEAM

Implementing a new ETRM solution should be a rewarding experience, both personally and professionally. As part of a dedicated team, you will have the opportunity to work with people from other departments/divisions of your company, subject matter experts from the selected vendor, and (usually) independent consultants. More importantly, you should gain a valuable experience and a detailed understanding of a sophisticated application at the heart of your company's operations which will provide great benefits to all aspects of the business. So why do most people try to avoid getting involved with ETRM implementations?

The unfortunate reality is that many ETRM projects are poorly managed and,

therefore, are delivered late, over budget, and short on actual deliverables. A project team that is not organised optimally and not incentivised accordingly is the most common mistake. In the end, ETRM projects are intensely knowledge-based, complex, mission-critical, and enterprise-wide exercises. Without your best people actively engaged, your rate of success is very low.

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These projects touch and affect all the critical areas – the heart and soul of your firm: How you trade, manage risk and credit, schedule your deliveries, run your operations, make payments, post accounting entries, generate reports, and synchronise-up with the rest of your enterprise. Therefore, the implementation must be run as a business project by a business lead – the *Commander* – in the command chain. This commander will also need a number of internal business Lieutenants covering all key areas (like trading, risk, logistics, operations, and IT). Reporting to the board or steering committee, this command chain must have the full authority to make decisions on whatever project issues that may come up. And the steering committee should clearly

lay out all project guidelines, specifically stating how difficult issues should be addressed. For example, a defined cost-benefit analysis would be extremely useful when dealing with competing requirements or never ending scope creep and changes.

It is a command chain because you will need the authority, decisions, control, and discipline to make it work!

Here is a list of common, costly command chain mistakes to avoid:

- **Running a part-time command chain:** Instead of making the whole chain a full time job and creating proper financial incentives for the team, many firms would either make the whole chain a part time job or just make one or two positions full time jobs. If you cannot dedicate top people for such a critical undertaking for the firm, you may want to address some underlying issues before taking on an ETRM project.
- **Sourcing the most qualified people for the chain:** This is easier said than done due to the full time requirement. But there are simple rules. The Commander post should go to the second most able person (assuming the best person is running the group) in the trading or the risk group because, as the name ETRM (Energy Trading and Risk Management) implies, it's a trading/risk business project. A business lead from either group must take full control of the command chain and the project ownership. For the



Lieutenant jobs, the same second most able rule applies. The only way to take on the challenge of delivering the best 'core' team (the command chain) possible is to properly incentivise professionals assigned to the project. Executive management must put the proper incentives in place to ensure that the command chain keeps its focus on getting the solution delivered. This may include providing materially better financial rewards than normal packages if the core team can get the project done according to a set of performance criteria. Yes, paying more in incentives – if structured correctly – WILL generate more savings for the whole project!

■ **Transferring the responsibilities to the IT team:** As mentioned, an ETRM project must be run as a business project, not as a technology 'adventure' for certain aspiring technocrats. The IT team will be intimately involved, both at the core team level with its IT Lieutenant and at the detailed level with its technical staff. But this is a business project, and the Commander, not the IT Lieutenant, must take control of the overall project strategy, business initiatives/priorities, payoff analysis, decision making responsibilities, resource deployment, conflict resolution, etc.

■ **Outsourcing the responsibilities:** For many large scale ETRM projects, vendors and independent consultants do have supporting roles, like providing resources for project management and specific subject matter expertise (e.g., system knowledge from your vendor consultants, accounting expert for the GL interface, etc.), but outsourcing any command chain or decision making roles would be counterproductive to the entire project as the vendor and the consultants are by design advisors. They do not own the end result – your business does and will live with the end result. Additionally, third party consultants have incentives to produce a range of alternatives while rarely advocating any particular alternative. Without a strong command chain taking full ownership and making decisions on key issues, the entire project timeline could easily be extended. Furthermore, the scope of the project must be understood and agreed upon by all

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members of both the command chain and all project sponsors. These expectations must be set and clearly documented, through detailed business planning sessions so that these expectations result in a clear Mission Statement for the project, along with detailed Project Plans, Resource Plans, and ultimately budget.

RUNNING THE PROJECT RIGHT

Making the right decision and building the right team will provide your company with the strongest foundation for a successful ETRM project. Now, it must run correctly – by avoiding common project management mistakes – to realise the actual savings by getting the project done according to plan, on time, and within budgets.

Managing ever evolving business requirements within the approved timeline/budget and expecting a perfect, problem free project are the two white elephants in the room. The scope, timeline, and budget are the three dependent, interlinking variables. In an ideal scenario, if you know exactly what you want and how long everything will take to get it done, the implementation will be a walk in the park. But if your goal is to implement an ETRM system to manage your business for years to come, it is an imperative business decision to allow your team time to

explore and discover the optimal processes and trading platform. Although ideal, it is rarely possible to pin down all the details on what you need and accurately guesstimate the timeline, or worse comply with a timeline that is pre-set before you complete a design phase and agree on what your actual business needs are. The traditional 'phase' approach works for the most part, but the phases are often too big, taking too long to get through, not 'discovery process' friendly, and, as a result, reducing the

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overall project flexibility for the evolving and/or fast changing requirements.

A modified 'phase' approach – we call the Micro Deliveries – is a more effective project management measure to accommodate the unknowns and contingencies. And it's easy and straightforward to implement. For any given phase, instead of having just one big deliverable or milestone, divide the phase up into smaller micro deliveries – each one lasting an equivalent of 1/3 of the time allotted for the overall phase (but no more than 3 months maximum). And initiate each micro delivery with a detailed design workshop where all internal stakeholders will participate and articulate their needs and requirements. Some of these requirements may not make it to the approved list, probably rejected by the timeline limit and/or the firm's defined cost-benefit analysis, and will be rolled into the next micro delivery. Under this rolling scheme, all the requirements will be managed, but none will become obstacles to any particular micro delivery as long as the command chain is in charge, sticking to the project guideline and discipline.

This rolling micro delivery scheme will also alleviate the demand-it-or-lose-it symptom of traditional project management plan. In real life, no solution will ever have the functionality to address 100% of all the

tasks or requirements ever raised by your team; there is no Holy Grail! The key is to manage them and let the timeline limits and cost-benefit analysis do their work to control the 'fat tail' requirements. And you can further reduce your project risk by applying the following common sense rules:

- Treat your vendor as a trusted partner and do not expect the vendor to assume all the project risks. Your vendor should provide critical support, both in terms of resources and product expertise. However, only you understand your business needs completely and what your company wants from an ETRM solution.
- Managing Expectations is critical. The details around the scope of what the project will do, for whom, in what timeframe, and ultimately at what cost. Communicating this clearly to all members/owners of the project and then directing the project around that scope, managing to it, and resourcing it properly will allow for success.
- Communicate, communicate, and communicate some more. The weekly status meetings, the detailed project plans, action items and tasks need to be reviewed, highlighted and escalated as necessary. It is vital that the project is run methodically, and that each task is worked through to completion, with requirements from the client resulting in system configuration. There will be issues with any project; however, constant communication resulting in immediate resolution of the issue is the key to success.
- Expect problems to occur. Anyone who has worked on an implementation project knows the applicability of Murphy's Law. Ensure that you have created the proper infrastructure to deal with problems as they arise. This includes not only the proper communication mechanisms, documentation,

prioritisation reviews and executive participation review, but also making sure that you have the contingent time and resources to address them.

In the end, running an ETRM project is not unlike running a marathon race: It's long, and can be painful as you fight to reach the finish line; but when you finally do it is ultimately a very rewarding experience. That's assuming you have done the best training and preparation and used the most powerful management techniques along the way. If not, you may not be able to finish the race.

For your next ETRM project, *Making the Right Decision, Building the Right Team, and Running the Project Right* will help you manage and overcome many race related issues. It is still no walk in the park and there are no easy answers, but when you are finally done, not only will you and your team get to appreciate a sense of accomplishment, but you will have added great value to your underlying business ■



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