# Business Intelligence – What to think about

## Summary

Companies continue to struggle with obtaining reliable, timely and meaningful information regarding their business.  Most firms that we have encountered have good intentions of providing information to the end-users but more often than not miss the mark.  The reasons for this vary by company, but there are common threads that can't be ignored.  The following provides a road map of what companies should focus on when re-evaluating their information and reporting needs.

**Have a vision and purpose**

Each industry has unique information and reporting requirements which can be boiled down to a few significant differentiators:  The type of industry, assets traded, risk profile of the assets, the regulatory requirements the firm must comply with, requests by the business and clients and what their competitors are providing.

While evaluating the firm's information needs, the firm should consider outlining the reporting requirements for all interested parties.

- Prioritization of the work effort and the quantity of reporting
- The reporting frequency
- The format and method of delivery of the information/tool to be used
- Who in the firm will be maintaining/running the report
- Ensure that the users of the information know what they want

*Implementation of a new reporting platform and associated reports may not achieve the desired results unless there is a solid vision from front to back*. While the platform will evolve over time, some deliberate early planning will ensure that an efficient platform and support process will emerge (versus an incremental "melt down" of spreadsheets and emails).

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**Starting the Process**

The first step in the process is selecting and empowering an owner for the project.  Once the project is approved, implementing a successful reporting platform necessitates the development of deliberate requirements to insure that the scope of the early work doesn't get hijacked to other deliverables which were not originally envisioned (something that happens regularly with reporting platforms that can't deliver some results early on).  This phase must include the participation of all owners/interested parties of the data and reports.  By following this approach, the result will be a more efficient, intelligent build-out of the system architecture and a more informed purchase of a reporting platform/tool. Your time will be well spent by designing the reporting flows and determining the source of the data.  A great design will reduce issues once your firm is in the build and testing phase.

**Data sourcing & Data Governance (the forgotten quality issue):**

The data required to build reports will inevitably be derived from more than one in-house application or source such as multiple custodians, fund administrators or platforms.  Also, there is a likelihood that data will be obtained from third parties in order to enrich the information.

Many firms wrestle with the joining of information into a single repository or linking the information through data mining (which tends to be a complicated task). The system architecture will need to be addressed to ensure the data is retrieved timely, efficiently and accurately. Concurrently, the ownership over the data and its reconciliation controls, also become a material issue when such data repositories (i.e. data warehouses) are created as part of a firm's standing structure.  With new compliance and regulatory reporting requirements, firms need to either buy a container or build their own to ensure the information produced will fill the needs of the regulators. The adoption of the use of a common repository will provide the firm with normalized data; however, it also means the management of an additional layer of data to deal with.  Firms should consider the following in addressing information sourcing:

- The firm should determine the original sources of the required data.
- Determine whether all the attributes that are necessary for reporting are available in the source data, otherwise, data will need to be enriched from other sources.
- Is the source data reconciled with other systems from front to back? Is the data from third party applications accessible and can it be "pushed or pulled" if necessary into a data repository?
- Does your company currently have a data warehouse?
- How often is data updated per application?  How much of the data is loaded manually on a regular basis?

**Industry trends**

Most firms are currently reporting an end of day estimate of daily profit/ loss and positions by security, trader, and fund with associated risk metrics.  However, there is mounting pressure for firms to provide more robust and transparent information, much of it tied to "attributable" information which places accountability for the investment decisioning and auditability of a fund's financial performance.

**Industry Trends - continued**

Some of the reporting demands that are being articulated by our clients are as follow:

- **Performance measurement**:  As the investor base shifts towards institutions, clients are requiring more comprehensive IRR performance analytics.  This shift also has led firms to review their own portfolio managers' performance on a more granular basis.  Future consistency with the OPERA standards is also contemplated in some organizations.
- **Key indicators**: Firms are increasing their measurement of performance against industry benchmarks or internally generated benchmarks.
- **Dashboards**: Senior managers are requesting the information in graphical form.  Again, information can be overwhelming.  Dashboards provide a simple and consistent way to view information.
- **Analyzing data/'what if' scenarios**:  Firms want more user flexibility and the ability to design what if models.  However, to provide this flexibility means more complexities in developing reports and more work around the design and deployment of any tool sets (e.g. data models, universes, etc.).
- **Drill down capabilities:**  Firms are requesting that on line reports offer the ability to obtain more detail at a click of a mouse suggesting a data warehouse configuration behind any delivery vehicle or tool, whether in-house or third party developed.  The sophistication of the users

also impacts tool selection and flexibility inherent in any selected tool.  Under or over shooting this decision can result in implementing tools that are not "in-synch" with the internal user level of sophistication.

- **Alerts**: Firms are issuing more exception reporting to inform senior management, compliance, traders, risk and operations of situations that might trigger a break in firm or regulatory rules.
- **Mobile reporting:**  As tablets, smart phones and other mobile devices gain popularity, reports and information delivered to these appliances are becoming more popular.  Delivery is not only demanded as a viewer but firms want to be able to manipulate/edit the information.
- **Push/pull and ad hoc information**:  Firms are requesting the automatic delivery of reports and the ability to pull a report from the system without much effort as well as scheduled pushes.  The end-user also wants the ability to create ad hoc reporting from the reporting platform.
- **Investor/Client reporting & Portals:**  Reporting is certainly migrated to outside the organization.  Clients are looking for standard reporting packages so they can aggregate information across investments and funds.  Reporting should be able to be pushed out to a portal or emailed to the firm's clients or internal users.
- **Regulatory reporting:**  With the advent of Dodd-Frank and the related Form ADV Part I & II, Form PF/FATCA reporting requirements, information must be properly organized for the regulators as well as be auditable and repeatable.
- **Portability/Flexibility:** The reporting platform should be portable so it can be bolted to any future applications without a "high IT angst."  Exchange of data should integrate seamlessly with Excel.
- **Implementation/Vendor Support/Licensing Upgrades**: Firms want reporting modules that will be easily implemented and have a simple upgrade path.

## Difficulties with implementing a new reporting platform

Once the reporting requirements are defined, a budget is determined, the system's architecture is designed and a reporting platform is identified, the work of implementation begins.  Firms always start out with good intentions but are they prepared to be successful in the implementation?  Inevitably, many firms run into implementation issues.  Firms should be cognizant of the pitfalls they might encounter during the road to production.

- Do not allow report creep/scope expansion: Stick to the original plan and do not overreach by adding incremental reporting or do not bring in unintended sources of data.  Getting to the first production milestone is critical to developing real experience that can be applied in the future. Reduce or eliminate contradicting information priorities and justify the number of standard reports that will be produced.  Have a clear owner of the starting scope of the project/program.

- Obtain the information from the original source.  That will be your best opportunity to ensure the information is accurate.  Taking data from "secondary sources" always leads to a "house of cards" effect that data can't be reconciled back to its original owners.

- Ensure that your firm has a good project team and has capacity to commit to the project.  Do not have the project led by individuals who have no experience (in running a project) or do not have the time to perform the full tasks required for the deliverable (the "part-time people effect").  With that said, you have to ensure that

your company owns the project.  A difficult balance to maintain.

- Does your firm really need real time information?  Most firms we speak with want real time information however do not always understand the complexities of obtaining this information on a fully auditable level (e.g. corrections, etc.).  Trading firms will have a front-end trading system that will usually provide real-time positions and prices with certain risk metrics and alerts.  A firm should try to use the capabilities of these platforms and not try and reproduce them elsewhere.

- The design, build and implementation of a new reporting platform will take time so be patient.  The project does have a start date but never ends since there is always organic growth and maintenance of the core structure of the platform.  This is a marathon with a goal, not a sprint.

- As in any project, ensure that there is sponsorship and high transparency from and with senior management on major decisions, milestone achievements and issues.

# C&A Consulting LLC

## Achieving Performance Excellence

C&A can provide your firm with the expertise necessary to navigate through the Gartner Magic Quadrant.

C&A will review your firm's business intelligence requirements, determine the capabilities of your IT department in supporting a complex platform, gage the user's IT sophistication and the firm's business culture.

The result of this analysis will provide your firm with a roadmap for an enhanced data warehouse repository that is organized and flexible. The reporting platform will provide the end-users with timely and accurate robust client, regulatory and management reporting.
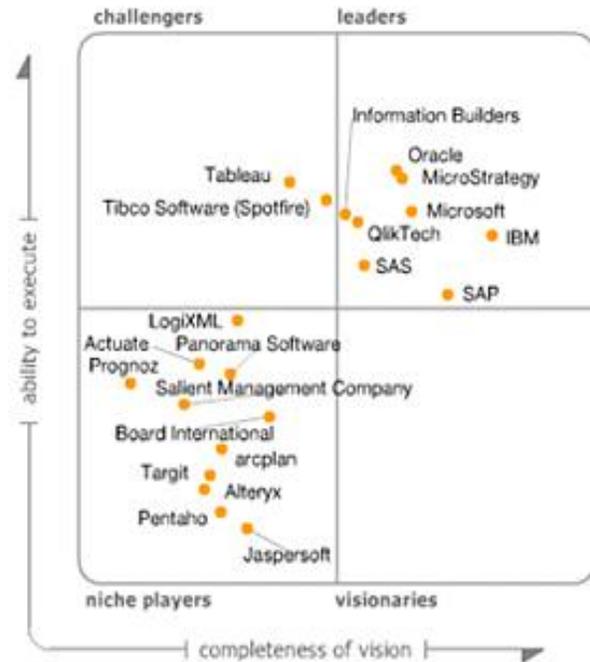


This chart has been reproduced from the Gartner 2012 BI platforms

Through our many years of experience, we have seen how many firms struggle with these issues and strive for a disciplined approach to fulfill and accomplish the objectives. C&A Consulting has the breadth of experience and skill-set to build the roadmap to allow your firm to organize and prioritize the data supporting both its investors and internal reporting. Email info@caconsultingllc.org or contact Rob Barsky at (646) 233-2112.