Data Warehousing is becoming more of a requirement than a nice-to-have.

Top 5 Signs that You Need a Data Warehouse

OVERVIEW

How much effort should I invest in a performance management solution? How can I quantify the return on investment for a solution with so many unknown results? What improvements will this make in my ability to operate my business? Since these are rhetorical questions with limited or no definitive answers, it is hard (if not impossible) to assign business value to your business intelligence project. Even though management might all agree that a solution is necessary, the definitive value is often relative.

That being said, it is difficult to decide what level of solution is most appropriate when planning the solution. With improvements in technologies and the development of new offerings, there are a lot of slick new tools, features, and gadgets to consider. Should I invest dollars in a commercial-off-the-shelf solution and then customize it? Should I look for an integrated solution with my ERP package? What else should I be considering when planning my project?

Surprisingly, the most common afterthought to most business intelligence projects is the data architecture. While it is easier to ignore this aspect and focus on the sleek analytical front-end tools, the ultimate success or failure of the solution usually resides in the data architecture supporting your solution. Lack of preparation or forethought in to a sound data architecture can result in an impact to system performance, adherence to regulatory compliance, security configuration, and analytical feasibility.

To help you determine whether your data architecture solution should include a data warehouse, I will ask you the following questions.

- Does your business demand better access to information? Do managers struggle to view a global picture of their business unit? Is it cumbersome for employees to retrieve all inclusive customer information to respond to inquiries or improve customer service?
- Is there a strained relationship between the business and I/S due to the relative value of current technical solutions? • Do you suffer from poor system performance relative to enterprise reporting and monitoring?
- Is your business or industry required to retain history for compliance, historical analysis, or trending purposes?
- Do your current technical offerings lack integration and/or continuity of business processes to support individual work flows from beginning to end?

If the answer to any of these questions is YES, you should consider adding a data warehouse to your business intelligence strategic plan.

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ACCESS TO INFORMATION

As business evolves beyond the command-and-control hierarchies of the industrial age, the expectations of all employees to make sound business decisions is becoming more apparent. With these expectations comes the necessity to support all individuals with the appropriate systems and information to carry out such duties. Where a manager's report and an executive summary might have sufficed as enough dissemination of information previously, more advanced corporate cultures will require information and analytical tool access for the masses. The net effect of these changing expectations is a culture of accountability. Each and every person in the corporate hierarchy is expected to understand the corporate strategy and make sound business decisions that support the objectives and initiatives aligned with this strategy. To be successful, it is absolutely paramount that each and every employee has insight beyond their individual work process. Where typical operational systems support data entry to capture information regarding an individual work flow, decision support systems need to produce a global picture spanning multiple processes in order to accurately display the current and/or historical state of affairs. This need often requires a dedicated technical solution, such as a data warehouse, to integrate, consolidate, and organize enterprise-wide information to ensure accuracy and transparency through the decision making process.

BUSINESS AND I.S.

When IS strategies are formulated, there is often inclusion of business executives to assist with business case development and system prioritizations. As the process continues, the inclusion of business users tends to fall off due to competing work priorities. The ultimate impact to this trend results in systems that maintain highly technical proficiencies but lack adequate business value. As the leading cause of I/S project failure, it is paramount that business users and I/S resources work together to produce solutions aligned to the business work flow.

Over time, it is inevitable that some work processes are restricted to information systems that offer only an isolated view of their information as it relates to the enterprise. To resolve this limitation, a data warehouse affords the opportunity to unite disparate systems in a manner easily digestible for data consumption and decision making.

SYSTEM PERFORMANCE

Access to real time information is becoming an ever increasing trend in today's business environment. Users want to be able to report on events as they occur. In addition to the timeliness of the information, users want to be able to process the complete status of an event. For instance, as an order is placed, it may be imperative to understand the customer's account balance, the product's inventory availability, shipping's transit costs, as well as a myriad of other related

data points ultimately leads to more system complexity. While this is not a bad thing as we evolve to handle more informational complexities, it is a current problem when operational systems suffer from poor performance.

To support the growing needs to visualize an integrated picture of the current state of affairs without impacting operational system performance, there is an increasing need to offload querying and analysis tasks to a secondary information store such as a data warehouse designed for great analytical performance without impacting operational processes.

INFORMATION RETENTION

Government and industry compliance standards have brought about an increased need to retain historical information. Since operational systems are intended for data entry and quick access to up-to-the-minute data, the need to retain and access historical information may impact day-to-day operations. As demand grows, there will be a net impact to operational system performance and maintenance unless a solution is established to offload historical information to meet compliance and/or analytical requirements.

Archiving routines that move data out of operational systems into a data warehouse offer an appropriate balance between operational system maintainability and the preservation of historical information. If an operational system retains the minimum amount of history to support today's current business process, the data warehouse can house the volumes of historical data to meet analytical and compliance requirements.

SYSTEM INTEGRATION

The complexities of most business processes are increases. As this trend continues, information systems are becoming more customized and tailored to meet individual work processes. Across an organization, this leads to a framework or well-aligned operational systems that require heavy integration between work flows to support big picture decision making.

To support this integration effort, a data warehouse offers the single data consolidation point to minimize repetitive processes and information is disseminated across an enterprise.

CONCLUSION

Whether an organization is looking to implement an enterprise-wide business intelligence solution or simply support their day-to-day activities in an ever increasing world of complexities, the data warehouse is becoming more of a requirement than a nice-to-have.

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ABOUT STRATEGIS

Founded in 2006, Strategis Consulting is a boutique technology consulting firm specializing in building strategic information solutions. Our range of services include advanced analytics, business process management, data warehousing, portals, reporting, workflows, mobile apps, integration, custom solutions, and training.

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