

5 Optimal Steps for Creating a Pilot Data Warehouse



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In health care, business intelligence is often only as good as the data warehouse that supports it. The challenge comes in creating a high-quality data warehouse to ultimately aid organizational decision-making.

What sounds enticingly simple about a warehouse at its outset – gather disparate data sources on a given subject into a single “source of truth” – can prove maddeningly complicated in construction. Besides addressing fundamental design, data quality and cost considerations, a data warehouse build must also factor in performance, quality assurance, security, and user acceptance. No wonder some people liken creating a well-performing data warehouse to building an automobile from scratch!

Rather than becoming frustrated by the potential vastness of a data warehouse build, consider instead the advantages of thinking small. As in, start with a single data warehouse pilot project, learn your best practices from that experience, and expand accordingly from there. That’s the successful approach a private health care company took to its data warehouse needs. By applying the five primary lessons below that this company learned, you can get a head start on your next data warehouse project.

1. **Think specifics** – The more specific you can make your data warehouse need within your pilot project, the

better. In the case of the private health care company, it wanted its new data warehouse to improve its staffing and clinical services at its various client locations. With better and more readily accessible data to predict potential staffing bottlenecks and shortages, the company could take remediation action faster, improve its clinical capabilities, and ultimately enhance its clients' patient throughput and satisfaction. This would help improve patient care and provide a key competitive advantage for the company. How and where could your operations be enhanced with better, more actionable data? Create a charter for the pilot that includes specific, measurable, achievable, relevant, time-oriented (SMART) goals that you may benchmark against throughout the implementation. Keep in mind that the data-building and analysis lessons learned from a single data warehouse pilot project can be applied to other data warehouse builds, down the road.

2. **Think external assistance** – Rare is the organization that has sufficient internal bandwidth and expertise to oversee a data warehouse build on its own – even for a small-scale pilot project. Depending on your data analysis needs and type of organization, consider hiring an external vendor to handle project planning, construction, implementation, integration and analytics. Seek a firm with expertise in your specific type of data flow as well as a vendor with a strong project management background. These attributes will pay off exponentially during implementation.
3. **Think tools and templates** – As you're creating a pilot data warehouse, you will also likely need tools and templates to aid both your pilot project and future data warehouse implementations. Based on input you gain from pertinent managers, end-users and related departments, start first with a requirements-gathering tool to help all parties quickly and easily document requirements. Such a tool will enable all involved to re-check and ensure that the warehouse will meet stakeholders' needs. In addition, documented requirements will go a long way toward helping business users connect with your data warehouse developers, and vice-versa. Similarly, you may also benefit from having a technical specifications template to translate your business requirements into technical implementation. A template will allow your developer and design review team to have a common understanding of your requirements, enabling the team to craft an implementation approach and also eliminating the ambiguity that can extend the effort through re-work. It will also serve as a key artifact for identifying change management-related impacts.
4. **Think implementation** – The most common point for data warehouse failure is at implementation. Proactively reduce or eliminate this issue by creating an implementation playbook that walks team members through the implementation process and identifies key considerations and questions to cover for a variety of scenarios and needs. Consider buttressing this playbook with a test execution toolset that will allow business users to plan their approach for testing, documenting appropriate test scenarios, managing execution and remediating any defects. Revise this playbook based on learnings from the pilot implementation.
5. **Think training and documenting** – All of your technical emphasis and work can go for naught if your end-users and others aren't sufficiently knowledgeable and trained on your new data warehouse. Plan on designing and offering both group and individual training to your designated business intelligence experts as

well as other stakeholders, such as the business owners responsible for requirements. Whoever owns and manages the warehouse documentation and tools will also need to be trained. Finally, keep in mind that since this is a pilot project meant to be applied elsewhere, document all facets of the project for future data warehouse builds.

Through the sequential steps above, you can successfully create a pilot data warehouse and gain the documentation needed for future applications. As your data rolls in and is applied operationally, you will be able to produce critical deliverables more quickly and efficiently to improve your organization's ability to execute strategic initiatives.