Buyer Case Study

"Why Didn't We Do It Sooner?" — Deployment of a New BI Solution at The Pain Center of Arizona

Dan Vesset

IDC OPINION

Investment in analytics, business intelligence, and big data technologies is evident across industries and company sizes. Requirements for better insights, faster access to actionable information, and improved decision support are not the exclusive domain of a few large organizations. Increasingly, the availability of new technology at attractive price points is making it feasible for small and medium-sized organizations as well as large enterprises to modernize their information management, access, and analysis capabilities. One of the organizations that recently undertook such an investment is The Pain Center of Arizona. The company implemented a new software package from the IT vendor Ducen and as a result reaped benefits ranging from productivity gains and operational optimization to the ability to drive continued expansion of the company. As part of the solution deployment process, the company learned lessons that are applicable to other organizations looking to undertake a new business intelligence and analytics project. These include:

- A business intelligence and analytics project is not just about technology.

- BI and analytics projects are iterative by their very nature. Don't let the unknown stop you from launching the project.

- Don't assume you can't launch a new project if it hasn't been budgeted.

IN THIS BUYER CASE STUDY

This IDC Buyer Case Study describes the deployment of a new business intelligence and analytics software solution at The Pain Center of Arizona and describes the business need, technology implementation process, and lessons learned from this project.

SITUATION OVERVIEW

Data-driven decision making has become a goal for many organizations and a driver of much of the investment in business intelligence, analytics, and big data technology. But it's not only the very largest organizations in financial services, retail, or social media that are investing in solutions to improve information access and decision making. There is broad investment and adoption across company sizes and industries, including healthcare.

For example, IDC estimates that in the U.S. healthcare sector, organizations spent $1.7 billion in 2014 on software ranging from data integration and management tools to business intelligence and analytic tools and applications. This spending is expected to grow at a compound annual growth rate of close to 10% over the next five years – even among small and medium-sized healthcare companies with fewer than 500 employees.

One of the organizations that recently went through the process of new business intelligence and analytics software selection and deployment is The Pain Center of Arizona.

Organization Overview

The Pain Center of Arizona is a comprehensive pain management practice, with multiple locations across the state of Arizona. The privately held company has about 300 employees and sees on average 15,000 unique patients monthly. In the past two years, The Pain Center has been the top-ranked pain management practice in Arizona.

Challenges and Solution

Challenges

Founded in 2002, The Pain Center experienced steady but slow growth during its first eight to nine years. However, in the past three years, the company doubled its size and is currently focused on building its brand for further expansion. During this period of rapid growth, the company realized the limitations of its existing tools for information sharing and decision support.

The company's staff was spending too much time creating complicated queries, generating reports, and looking for information rather than accessing timely and relevant content on demand to make ongoing decisions. In many cases, staff was required to access multiple, siloed systems to gather and consolidate data. It became evident that the lack of consolidated data and the productivity loss from the manual effort needed to generate reports would hinder the management of The Pain Center in its ability to operate the expanded company. The existing business intelligence shortcomings also acted as an unnecessary speed bump on the road to further expansion. Speaking about the lack of a consolidated view of the data needed for strategic and operational decisions, such as data on how and when to staff the call center or when to change clinic hours, Vikas Khanna, the company's COO, said, "It's a risk to the company when employees are the only repository of information." Addressing the lack of an intuitive information access solution, he further explained, "if you don't know how to pull a report a certain way, you wouldn't get the right information."

To address the internal information access and analysis inefficiencies and to ensure that all employees had on-demand access to actionable data, The Pain Center's management made the decision to find and implement a new business intelligence and analytics software that would help in integrating data and provide an intuitive, visual interface.

Solution

After evaluating several software packages and even considering internal development, The Pain Center selected software from Ducen, a provider of business intelligence and analytics software and services. The software provides users an intuitive, visual, and browser-based user interface as well as scheduling and notification capabilities. The software package, called Analance, can connect to multiple operational source systems such as The Pain Center's EMR and ERP applications.

With appropriate authentication, users can get access to the business intelligence and analytics solution from anywhere (including mobile devices) and access either standard reports or change report variables as needed.

Implementation

From the first project kickoff meeting, which followed a Ducen demonstration of its solution using generic data, it took only 30 days to produce the first set of reports, and within 60 days most of the initial scope of the project was completed. Given The Pain Center's sensitivity to data security and patient data privacy, the company decided to implement Ducen's Analance in the company's own datacenter – although a cloud option was also available.

The ongoing relationship between The Pain Center's IT staff and Ducen was facilitated by weekly phone calls and regular emails that created a close working relationship between the two organizations. Like many successful business intelligence and analytics technology implementations, the project followed an iterative approach to implementation.

Once the initial rollout was completed, The Pain Center's medical compliance officer became more heavily involved in the process. One of the questions the company needs to answer now is whether there are new risks that have been uncovered because of new data availability. Today, two people in IT continue to support and work on expanding the deployment of the business intelligence software. This working group continues to receive new requests for information from internal users. The users of the solution include employees across the company, including executives, clinical directors, IT, finance, and marketing groups, and others. The new requests are vetted before IT builds new reports or data views.

Another process triggered by the new solution and the initial set of reports was data governance. The previous, siloed approach to information management, access, and analysis created inconsistency in data definitions. The Pain Center is now ensuring there is agreement across the company about the meaning of specific terminology and performance metrics as well as calculation methods that drive reports and dashboards.

Khanna expects to expand the solution to include additional data sources from across the company. The majority of the source data today is coming from the company's EMR applications, but there is an opportunity to pull together information from the company's finance, purchasing, and human resources systems. The next phase of the project is focused on the data from the human resources system. "We don't know what we don't know," said Khanna. "As new data sources are added, we'll expose opportunities to gain further insight into the business and to better manage risks and compliance requirements."

Results

Benefits

The deployment of the new business intelligence and analytics solution at The Pain Center is likely to be an ongoing process as new data sources are added and internal user needs evolve and expand. However, already the company has experienced many benefits, which include:

- **Improved insights.** Newly integrated data has enabled the company to expose new metrics and key performance indicators (KPIs). For example, it is now possible to look at performance by individual healthcare provider and to create models for fully loaded cost per patient. Appointments scheduling and procedure data is now combined to recommend staffing levels. In another part of the company, the marketing group can now access patient referral source data, which before was available only by calling someone in IT with the ability to generate a custom query.

- **Greater confidence in the data.** Elimination of data silos has increased users' trust and confidence in the data by eliminating questions about data sources, time of data extraction and report development, and definitions about metrics and KPIs.

- **Productivity improvement.** Besides significant decreases in the time needed to create operational reports and aggregate data, The Pain Center is spending less time on compliance reports. The company's compliance officer estimates fully 20 hours per week savings in report writing. This productivity improvement, in turn, results in decreased risks of potential fines from regulatory authorities and enables the company to focus on launching new services.

- **Faster time to information.** Dashboards and reports provide access to information on demand and personalized to the specific role of the user. For example, the company can now assess staffing requirements on a daily instead of weekly basis and modify them as needed.

- **Information personalization.** With the new system, the company has tailored reports to the various roles across the full employee population of The Pain Center, including executives, general managers, staff managers, clinical staff, and others. At the same time, it was able to decrease the number of reports from 100 to 20 by focusing on only actionable information and personalization.

Consistently, the best qualitative reaction from users, according to Khanna, has been "why didn't we do this sooner!"

ESSENTIAL GUIDANCE

Lessons Learned

The deployment of Analance software at The Pain Center presents several lessons to be considered as any organization proceeds to new business intelligence and analytics projects:

- With the availability of the current generation of business intelligence and analytics software, characteristics such as ease of use and flexibility are often in the "eye of the beholder." It's imperative to conduct proof of concepts or demonstrations to understand the appropriateness of any particular software package to your organization.

- Any business intelligence and analytics project is not just about technology. Be prepared for active communication and collaboration among IT and business groups to understand existing processes and pain points. Data governance is likely to become a key component of such projects as new data sources and new combinations of existing data sources are exposed.

- Don't let the unknown stop you from launching the project. Business intelligence and analytics projects are iterative by their very nature. Availability of the first set of new information inevitably leads to new requests and new ideas. Start, try, explore, and iterate should be the attitude brought to these projects.

- Don't assume you can't launch a new project if it hasn't been budgeted. This was the case at The Pain Center. Proliferation of licensing and subscription options, competition among commercial vendors, open source software, and a mix of local and offshore vendor staff can often present flexibility in payment terms that was not available even a few years ago. Also, the ability to start small, iterate, and expand plays into the opportunity to take action on a project decision sooner.

LEARN MORE

Related Research

- *U.S. and Rest of World Business Analytics Software 2014-2018 Forecast by Industry and Company Size* (IDC #249747, July 2014)

- *Business Strategy: IDC MaturityScape Benchmark – Big Data and Analytics in U.S. Acute Care Hospitals* (IDC Health Insights #HI249682, July 2014)

- *IDC PeerScape: Critical Practices to Improve the People Dimension of Big Data and Analytics Projects* (IDC #249163, June 2014)

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Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-insights-community.com
www.idc.com