
Commercial Data Aggregation, Management, and Analytics: Resourcing Practices and Preferences




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Within biopharma companies, data rules. It has the potential – when it is properly aggregated, curated, and analyzed – to transform the way decisions are made across the organization. To guide lifecycle strategies. And to advance patient outcomes. In the commercial sphere, it can help marketing and field sales teams understand disease landscapes, physician prescribing patterns, and patient usage. With such insight, they can make timely and informed decisions that drive peak performance.

In this fast-paced and demanding environment, the volume of commercial data is exploding, and the requirements for aggregating and analyzing it are constantly evolving. At the same time, the technology needed to collect, organize, analyze and report these data is also changing. But, is it keeping pace? Are today's solutions meeting biopharma industry users' needs? Beyond that, what will commercial teams need in the foreseeable future to help them make better informed decisions as they bring treatments to market?

To answer these questions, Acorn AI, a Medidata company, conducted in-depth research with decision makers in various commercial roles at top biopharma companies, the highlights of which are presented here. One key takeaway is that no matter the size of the organization, biopharma companies are turning to vendor-provided technology solutions to manage commercial data and delivery insights. Emerging companies are graduating from their basic legacy software solutions, and large companies are discovering that their proprietary solutions are costly and inefficient compared to today's advanced vendor offerings.

A Shift to External Solutions

Initially, small biopharma companies commonly rely on basic software solutions to collect, analyze, and report data to support the commercialization of their drugs and medical devices. However, as their sales operations become more complex and expand in scope, they typically reach a point at which these solutions no longer serve their purposes. Factors that can push a company over this tipping point include the organization's sales volume, sales force size, number of marketed products, complexity of the distribution network, competition, and the complexity of their commercial and market access strategies.

“Biopharma companies are turning to vendor-provided technology solutions to manage commercial data and delivery insights.”

When small biopharmas need to progress beyond basic software solutions, they need not build their own solutions (as so many large pharma companies did years ago). Rather, they can go straight to outsourced solutions. One smaller company explained, “It would've been very difficult to build the capability ourselves vs. relying on outsourced vendors who do this very well.”

While some larger companies are also choosing outsourced solutions without attempting to create their own capabilities in this area, most mid- to large-sized biopharmas have invested heavily in data and analytics expertise. Even so, they often lack the bandwidth to fully support all aspects of the work in house. Therefore, they increasingly turn to external providers to deliver clean, aggregated data that can be used to develop insights for multiple stakeholders across the enterprise.

In terms of infrastructure, it's more common for large companies to build their own internal platforms, but that trend is changing; many no longer see value in building their own solutions due to the high cost, their own lack of technical expertise, and the need for customization for different projects and therapeutic areas. The notion that all system requirements can be satisfied internally is a “mirage,” as there are always resource constraints.¹

¹ Doig, Chris, “Best-Fit Enterprise Software,” CIO, Nov. 5, 2015. Accessed at <https://www.cio.com/article/3001357/how-to-determine-when-to-build-or-buy-enterprise-software.html>

Consequently, they're shifting to external, expert solutions. This allows them to focus on their core competencies. One respondent said, "The build mentality is not there since we're looking for best practices."

Opportunities for Improving Data Aggregation and Analytics

Overall, respondents look to their data aggregation and analytics solutions to achieve operational efficiencies; they want to be free to focus on the science of treating disease and on their business strategy, rather than on crunching multiple datasets. They want solutions that "advance institutional data fluency, by synthesizing data for decision making."² To ensure that they are using those solutions that best deliver against this need, large biopharma companies routinely evaluate vendors as part of their continuous improvement process

Although the data aggregation and analytics solutions available today generally meet respondents' needs, improvement is always possible. Respondents indicated that there is a clear demand for simplified, but powerful data aggregation technology that trims costs and speeds the time to insight. "Simplification is the word of the day right now," as one interviewee put it. (Many consultancies and technology providers still use a manual data aggregation process that is very complex and labor intensive – which results in additional cost and time in delivering therapies to the market.)

"There is a clear demand for simplified, but powerful data aggregation technology that trims costs and speeds the time to insight."

At the same time, there's a critical need to accommodate a wider array of disparate data sources (including Real-World Data (RWD) such that they can be aggregated and integrated for ready access by commercial users. Commercial organizations typically draw data from 300+ different sources such as pharmacy records, medical records, insurance claims, patient services, marketing promotions, formularies and commonly licensed third-party prescription data.

Commercial teams also still struggle to understand their performance due to multiple, disconnected reporting applications.

The prospect of switching systems is not undertaken lightly, and doing so is quite onerous for companies. However, there is simply no room for data management systems that function poorly, and if commercial performance is disappointing enough, companies are open to considering replacing their systems. Interviewees recognized that there is an opportunity cost associated with poor data management and, in the end, the value of moving to an improved solution far outweighs the cost.

What Commercial Leadership Seeks from Vendors

When it comes to evaluating software and services, biopharma companies are increasingly adopting broader enterprise strategies. In general, they're looking for solutions that offer seamless integration of commercial data from disparate sources, aggregation and analysis, customizability, scalability, and a wide breadth of capabilities. They're looking for technology partners with deep industry experience in life sciences and commercialization of therapies who instill confidence in their expertise.

² "Predictions for 2019: Ten trends that will shape the future of drug development and commercialization," Syneos Health, pharmaphorum, Nov. 29, 2018.

While cost reduction has long been the main driver of outsourcing, that may no longer be the case. "...companies are looking at more than cost details when it comes to attracting outsourcing partnerships... an outsourcing partner should have a strategic eye and experience in leading the digital transformation and should be seen as a solution provider that aligns with overall strategic business objectives."³

More specifically, survey respondents want a data aggregation solution that is automated and performs asynchronous data processing as well as accelerates time to insight. Users do not want to experience lag times in aggregating data. In selecting a data aggregation/management solution, companies base their decision on the capabilities of the technology. For data and analytics solutions, companies make their decisions on two different dimensions. Due to the complexity and criticality of accurate data mastering, aggregation and management, the data solution is the primary consideration for selection. At the same time, that technology must be compatible with other solutions.

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Respondents are eager to have harmonized views of data that deliver accurate and consistent insights. They want a system that offers both report templates that deliver the most valuable insights, as well as the ability to do *ad hoc* reporting using BI and analytics tools.

Envisioning an Integrated Future

Rather than having to stitch together separate implementation teams and technology solutions, many respondents expressed interest in having one, integrated solution that can do it all. This would provide greater cost efficiencies and make for vastly easier management and governance. One respondent, in describing the benefits of using the same vendor or both data aggregation and analytics, said, "It's easier and cost effective a lot of times. We can leverage the vendor if we have a history of working together."

McKinsey & Company contends, "Many of the next major opportunities for biotech will require companies to develop new and different technologies and operating models" in order to "streamline the introduction of new products and new technology platforms to support the ambition of pushing a far greater number of molecules through technical development and manufacturing launch."⁴ It is in furtherance of this that many respondents are envisioning a unified platform across clinical development and commercial functions. Combining clinical and commercial data sets will empower biopharma companies to optimize value from the beginning of drug development to its eventual commercialization. One respondent explained, "We're trying to do very interesting things, like weave our clinical data into our other types of data."

"There's a critical need to accommodate a wider array of disparate data sources, including Real-World Data."

³ Hayseni, Fatmir, "The top 8 outsourcing trends for 2019," Dec. 20, 2018. Accessed at <https://www.thedigitaltransformationpeople.com/channels/people-and-change/the-top-8-outsourcing-trends-for-2019/>

⁴ Otto, Ralf; Santagostino, Alberto, and Schrader, Ulf, "Rapid growth in biopharma: Challenges and opportunities," Dec. 2014. Accessed at <https://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/rapid-growth-in-biopharma>

Summary

Biopharma firms are under ever greater pressure to achieve peak commercial performance due to the competitive landscape and the need to realize value. They must cope with an increase in the volume and velocity of data – which is, in effect, a double-edged sword. On one hand, the complexity of data and the number of disparate sources poses a management challenge and makes it difficult to derive valuable insights. Yet, on the other hand, when done correctly, the data and insights create a competitive advantage that can drive business and accelerate the delivery of critical therapies to patients.

In this environment, and with so much at stake, the age-old “build vs. buy” question appears to be answered: the trend is moving toward outsourced solutions provided by experts in the space. Respondents are in agreement that they’re looking for solutions that simplify data aggregation, are seamless, offer speed to insight, and are backed by domain expertise, especially in data analytics and business intelligence.

About the Survey

Medidata contracted with an independent third party to screen potential respondents via an online questionnaire and then to conduct hour-long interviews with participants. In-depth interviews were conducted with 12 respondents in decision-making positions in nine biopharma companies of varying sizes. The research was completed in April, 2019.

About AcornAI

Acorn AI™ is a Medidata company that represents the next horizon of the industry leader’s 20-year mission of powering smarter treatments and healthier people. Acorn AI is designed to make data liquid across the entire lifecycle and to answer the most important questions in R&D and commercialization for customers. Built upon the Medidata platform comprising more than 20,000 trials and 5 million patients, Acorn AI products feature one of the industry’s largest structured, standardized clinical trial data repository connected with real world, translational and other datasets. For more information:

www.medidata.com/acornai | contact-us@acornai.com | +1 866 515 6044