



# Improving efficiencies and time-to-market in clinical trials and drug development

Client | Global Pharmaceutical



A global pharmaceutical giant, leaders in the care of diabetes, obesity and other chronic diseases had the vision to be a Top 5 player in clinical trials and drug development by 2025. As a first step, they needed to understand the best-in-class market standards today and where they stand in terms of operational processes, technology platforms/infrastructure and digital capabilities.

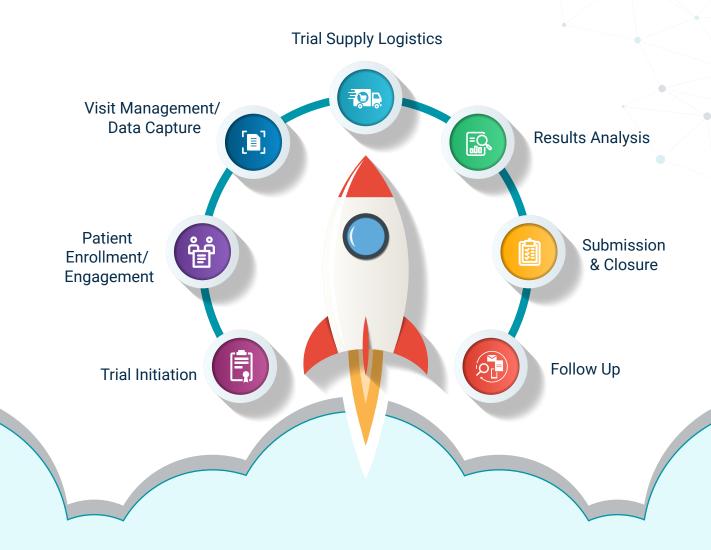
Bringing a new drug to market involves a complex web of processes cutting across stakeholder groups. Friction between sub-processes typically costs the industry tens of billions every year. Delayed time-to-market results in escalating costs and the risk of missing market opportunities.

The goal was to increase the efficiency and velocity for research, development, and launch, making the new therapies more affordable and accessible to patients and providers at the earliest time possible.

In the past, the company had engaged large consulting companies to adopt best-in-class drug development processes which did not result in actionable plans. Altimetrik was engaged based on expertise in data sciences and deep domain knowledge, and a proven track record of delivering an outcome-based digital business solution.

# Challenge

The client executed a number of complex processes – interconnected, but operationally self-contained leading to several process and information silos. The first step was to organize these processes under seven standard areas to cover the full value chain, which are:



The client's processes were not organized around this value chain which implied the need to analyze organizational silos by breaking up their current structure into sub-processes and then casting them back into a standard value chain.

#### **Outcome-led Solution**

Altimetrik strategized an as-is assessment study of processes to dive deep into the processes and identify the areas to improve time-to-market in the organization—a critical factor in successful drug research and development. The program also did a reality check of management intent versus organizational readiness for change, and stitch processes end-to-end in a manner that improves business outcomes.

A 6-week study was conducted by Altimetrik practitioners that delivered an end-to-end analysis while benchmarking against four global competitors.

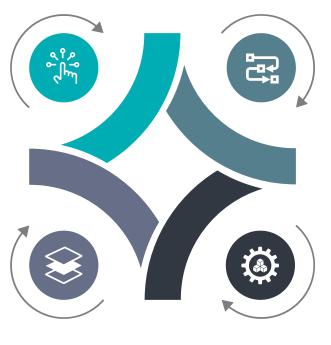
The study identified 36 sub-processes which existed as a part of different organizational groups, often cross-linked to various parts of the value chain.

The next step was to uncover the pain points between the seven areas and the friction points between the 36 sub-processes through SME interviews, technology stakeholder discussions, and inputs from executive leadership and their direct reports.

The assessment provided the client with insights around:



Process and digital maturity compared to the competition



Process friction points and the underlying reasons for the friction

Transaction platform choices and their alignment with industry best practices

Gaps in infrastructure such as the lack of a single source of truth and ability to share information seamlessly

As an "outsider", Altimetrik was able to drive consensus and facilitate change in the organization, which is an understated but high-impact benefit of partnering with a strong digital business enabler.

### The As-Is Assessment Strategy

**Qualitative Measurement:** Around 50 one-hour long interviews were conducted with SMEs, process owners, IT stakeholders, and executive leaders to assess user needs and expectations, identify potential opportunities for process improvement, detect hidden sources of friction, and gauge organizational readiness for change. These also gave an indication about the clarity with which the leadership vision and goals were cascaded across the development organization, extracting perspectives on IT strategy, current platforms, and the technological needs of process owners. Industry knowledge and best practices as well as existing strengths within the company were used to identify systemic and process improvement opportunities. From a user perspective, the qualitative measurements also examined specific pain points and wish lists of process owners along with their vision and interpretation of what it meant to be a best-in-class digital organization.

**Quantitative Measurement:** Facts and insights gleaned from the interviews were used to score each of the 36 sub-processes (on a 10-point scale) against four parameters of maturity:

**Process Friction:** 

How smoothly, repeatably, and predictably does the process operate?

2

Process
Measurement: Was
the organization
able to measure
each sub-process
for the quality,
timeliness,
efficiency, and
velocity?

3

Use of Data:

Understanding the use of data within an organization—acces s, consumption, sharing—has a profound bearing on the value of data as an asset and the ROI it delivers. Was there a scope to improve the use of data by adopting digital instead of manual techniques?

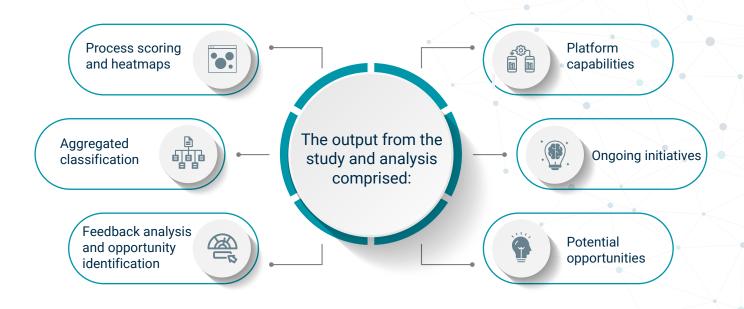
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**Leveraging Digital:** 

Effective use of digital technologies in clinical development is about making processes flexible, responsive, aware, and resilient.

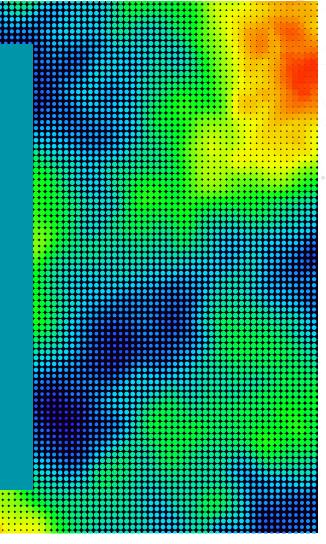
Simultaneously, a dipstick study was done with data from the last 25 clinical trials, but the information did not capture the details needed to measure efficiency or velocity of processes as well as chain of impact tied to delays and failures, indicating "all was not well." The client was not getting real-time insights because processes were siloed and they were not capturing and sharing much of the information relevant to driving efficiency and process quality. Besides, there was a disconnect between process-to-process groups and a gap between IT and business (business was implementing solutions without IT being aware and IT roadmaps were not aligned to business needs).

## **Gleaning Meaningful Insights**



Scorecard: A scorecard based on an easy comparison with industry leading pharma majors on the four parameters was presented to understand the organization's maturity level. The client could use the scorecard to see where they were strong and where they needed to improve. It also indicated the extent of deviation in maturity levels against the top pharma majors along with reasons that ranged from an integration gap to the lack of automation, lack of standardization, poor integration with upstream processes, etc.

Heatmaps: Additionally, heatmaps of the 36 processes across the four parameters further broke down the opportunities for improvement, flagging them as limited, medium, and significant, and then prioritizing these actions further based on ROI and feasibility.





### **Delivering Actionable Roadmap**

The final analysis and report concluded by providing high-level ideas and action plans while leveraging existing organizational strengths and investments. Several sound decisions on platform investments had been made in the past, but they were implemented without sufficient focus on ROI and were not being leveraged fully.

Defining KPIs at the value stream level, tied to business outcomes

Creating a common domain taxonomy so all participants could use a common terminology

End user tooling to maximize operational productivity

Driving adoption of the common data architecture while structuring teams for autonomy in relation to domain data management

Building a single source of truth

Defining standard procedures and tools for use case onboarding and information consumption

Examining a platform that uses Event Driven Architecture to orchestrate and integrate information and workflows across transactional platforms

Leveraging Veeva to modernize content generation management and consumption

Some illustrative examples of the ideas and recommendations included:



#### **About Altimetrik**

Altimetrik is a digital business enablement company. We deliver bite-size outcomes as organizations scale digitalization to accelerate revenue growth without disrupting ongoing business operations. Our practitioners and agile engineering teams create solutions that drive transformation and achieve business goals. With offices across the globe and 4,000+ energized practitioners, Altimetrik partners with Fortune 500 and mid-size companies alike to enhance their agility, empowerment, and success.

