Digital Transformation of Biotech and Pharma with MicroStrategy
The challenge

Biotechnology and pharmaceutical companies operate in intensely competitive, global markets where the battle to discover new drugs and successfully bring them to market requires high-stakes investments, cutting-edge research, fine-tuned manufacturing processes, and specialized commercial sales teams. It can take 17 or more years to bring a new clinical product to market, so biotech and pharma organizations need to make well-informed initial investments and maximize development efficiency to beat their competitors to market. For newly approved drugs, firms are typically granted a period of market exclusivity (generally 5 years in the US), during which time it’s essential for them to maximize sales and optimize production to generate a return from their massive development efforts.

The solution

MicroStrategy helps some of the world’s largest biotech and pharma companies bring insight and efficiency to every aspect of their value chains, from drug discovery and trials, to manufacturing and distribution, to marketing and sales. Using MicroStrategy’s sophisticated analytical capabilities, drug companies can accelerate R&D processes and bring new products to market faster. Customized mobile apps can boost the effectiveness of commercial sales teams, while interactive dashboards can help executives harmonize supply chain, marketing, and sales operations in order to maximize returns on new product offerings.

MICROSTRATEGY provides biotech and pharma industries with a platform to digitally transform their businesses.
MOBILE APPLICATION: FIELD SALES ENABLEMENT

The challenge
It’s increasingly difficult for commercial reps to get meeting time with physicians. According to a 2016 study, just 44 percent of physicians are considered “accessible” to sales reps, down from nearly 80 percent in 2008. Salespeople need tools that can help them get the most of their limited meeting time and maximize the impact of their conversations with physicians.

The solution
Using MicroStrategy Mobile solutions, life sciences organizations can deploy highly specialized field enablement apps that boost the efficiency and effectiveness of commercial teams. These apps help sales reps tailor their interactions with physicians by giving them on-the-go access to analytics and information about customers, accounts, competitors, and products.

With the analytical reporting available through the app, reps can dynamically prioritize customer visits using geospatial visualizations that highlight the top and bottom accounts in the vicinity, along with their interaction histories. In advance of physician visits, reps can analyze reports on the physician’s prescribing trends, study product documentation, and review the latest market and competitive intelligence.

In addition, sales reps can easily view their own performance versus goals and compare their rankings against peers. Leveraging MicroStrategy’s transactional capabilities, reps can capture notes, conduct surveys, approve orders, and tend to administrative matters while on the go—even while they’re offline.

Deploy highly customized mobile apps to boost the efficiency and effectiveness of commercial teams.
MOBILE APPLICATION: E-DETAILING

Connect with physicians by providing detailed product information and training.

The challenge
Physicians are increasingly unwilling to participate in face-to-face meetings with commercial reps, so drug firms need to find other avenues to build mindshare for their products.

The solution
Using MicroStrategy’s mobile capabilities, commercial sales reps can boost brand awareness and communicate product benefits by sharing information and training with physicians on mobile devices in lieu of face-to-face meetings.

Through these applications, reps can easily share a wide range of multi-media content, including product presentations, videos, and market research. The content is continually updated and even available offline, so sales reps and physicians can always access the most current information.

Using transactional features, reps and physicians can complete assessments, surveys, and product training certifications at their own pace.

Give reps and physicians easy access to training resources and corporate information.

Deliver a wide range of multi-media content, including presentations, videos, product info, and market research.

Content is continually updated and even available offline so sales reps and physicians can always access the most current information.

Using transactional features, doctors can complete training exams and obtain certifications at their own pace.

Give reps and physicians easy access to training resources and corporate information.
The challenge
To thrive in the highly competitive biotech and pharma sales environment, commercial reps need insight into the prescribing behaviors of their target physicians to have more informed, productive interactions.

The solution
MicroStrategy solutions aggregate and analyze prescription data from industry sources, giving commercial reps detailed visibility into the prescribing behaviors of care givers. Reps can readily examine the prescriber’s TRx and NRx trends for their company’s products and compare against goals, and they can drill deeper to see if the physician has higher prescription rates for a certain treatment, or a preference for a competitor’s product.

Within the app, reps can also monitor their touchpoints or conversations about specific products to ensure they’re keeping physicians fully informed. In addition, reps can log touchpoints on the fly using transaction services to write back to the CRM system and update communication records.

This particular screen provides the rep with the prescribing behavior of a particular physician, a count of touchpoints over the past 12 weeks, and a view of the physician’s use of competing products.

With insight into the prescribing behaviors of physicians, reps can tailor their interactions and boost success rates.
MOBILE APPLICATION:
EXECUTIVE DASHBOARD

The challenge
Many life sciences organizations have sprawling global operations, so it can be a challenge for executives to stay focused on their top priorities. In the US, pharma companies typically receive a 5-year period of market exclusivity for newly approved drugs — making it even more important for executives to make timely decisions, avoid delays, and resolve problems quickly.

The solution
By combining data from disparate internal systems, MicroStrategy can provide biotech and pharma leaders with a single version of the truth across their entire organization. Through intuitive visualizations and threshold-based KPIs, executives can quickly assess performance across their value chain and identify potential problem areas.

When coupled with MicroStrategy Mobile, officials can leverage embedded data input features to issue directives or approve actions directly from their mobile devices. They can retain oversight over core operations while on the move — even when they’re offline.

Give executives real-time visibility into the business
Drill deeper into other critical areas
Monitor revenue by region and profit trends over time
Track market share and competitor positions in key treatment areas

Give executives visibility across their entire value chain with KPIs on essential business activities.
ANALYTICS APPLICATION:
MARKETING PERFORMANCE

The challenge
Drug makers spent $5.2 billion on TV and print advertising in 2015*. Their marketing teams need analytical tools to help them evaluate the effectiveness of those campaigns.

The solution
MicroStrategy helps marketing executives gauge the effectiveness of advertising campaigns by analyzing their influence on drug purchases and prescription renewals. By blending and analyzing data from multiple industry sources, brands can track changing trends for Total Prescriptions (TRx) and New Prescriptions (NRx) for their products. Using intuitive visualizations, marketing executives can look for shifts in market share and purchase volume during specific time periods to monitor the effectiveness of their advertising campaigns. This particular example gives marketing executives a comprehensive, current view of market trends for their brand’s products versus competitors. The top visualization provides a rolling 12-week view of market share for selected markets while the bottom area reveals percentage changes in market share by vendor for the current 4 week period versus the previous 4 weeks.

*https://www.statnews.com/2016/03/09/drug-industry-advertising/
**MOBILE APPLICATION: SALES MANAGEMENT**

**The challenge**
Life sciences organizations typically have multiple commercial sales teams, each specialized on certain products or treatment areas. It’s a major challenge for sales leaders to monitor these large, globally distributed teams and stay on top of progress and problems.

**The solution**
MicroStrategy solutions aggregate data from multiple systems to give executives a real-time, rolled-up view of sales performance through intuitive KPIs and visualizations. MicroStrategy’s analytics platform can aggregate data from CRM, SFA, and other sales systems, giving management a comprehensive view of current performance.

Because you can build dashboards with data from an existing CRM system, such as Salesforce.com, users can not only tap into their existing information, but instantaneously add or modify existing opportunity details, contacts, and leads. MicroStrategy’s out-of-the-box connectors to SFA and CRM systems ensure an easy, seamless integration without any custom coding.
The challenge

Competition for market share in biotech and pharma is fierce. Organizations need greater visibility into public sentiment, brand reputation, adverse events, and their competitive standing so they can make more informed marketing and strategic decisions.

The solution

MicroStrategy can aggregate data from Facebook, Twitter, and other social media sources to give organizations real-time awareness of brand perception and product satisfaction. By monitoring likes, comments, shares, and tweets related to their brand, firms can obtain early indications of adverse events related to their products, giving the company an early warning about potential issues before they become PR challenges. The company can respond proactively and improve its pharmacovigilance efforts.

In addition, social data on consumer behavior can be used to identify unmet needs and potential new R&D opportunities. Marketing teams can also monitor social posting activities to gauge consumer sentiment about new product releases or to assess the impact of advertising campaigns.

This particular screen features social media analysis for a particular drug. It includes sentiment analysis versus competing products alongside visualizations related to adverse events associated with that drug.
The challenge
In 2011, the UK’s life sciences and healthcare industry suffered $2.9 billion in losses due to IP theft.* With the massive investments they make in new product development, security should be a top concern for every biotech and pharma organization.

The solution
MicroStrategy can help life sciences companies protect their intellectual property and sensitive clinical data using sophisticated physical and logical access controls that restrict access to offices, R&D centers, manufacturing sites, and sensitive digital information. Usher enables employees to use secure digital identity badges, available on their smartphones, to unlock doors and gates through digital keys or Bluetooth proximity. Further, Usher generates real-time location data on all users, enabling managers to see where their teams are working—helping to boost communication and collaboration.

*https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Life-Sciences-Health-Care/gx-lshc-2016-life-sciences-outlook.pdf
ANALYTICS APPLICATION: PRODUCT ANALYSIS

The challenge
Life sciences companies need to maximize the market penetration for their products, particularly newer ones that have limited market exclusivity periods.

The solution
MicroStrategy enables biotech and pharma companies to analyze trends related to product purchases and prescription renewals so they can identify new product opportunities. By blending prescription data from multiple industry sources, brands can analyze the specialty areas, medical conditions, and patient demographics for which their drugs are most widely prescribed. Likewise, they can identify the treatment areas and patient segments where their products have weak market presence.

With this insight, brands can explore new drug and product variations tailored directly towards different age groups and risk factors. Ideally, brands can uncover opportunities to target the “quality of life” needs of patients. These lifestyle drugs improve the day-to-day living standards of patients by alleviating non-acute medical conditions.

In this particular screen, prescription behaviors are analyzed by specialty area, giving product managers and marketers insight into the preferred treatment use cases for their drugs.

Analyze buying tendencies and prescription renewals to uncover new product opportunities.
ANALYTICS APPLICATION: CLINICAL TRIAL INTELLIGENCE

The challenge
Bringing new drugs to market is a high-stakes game: it can take 17 or more years to bring a new clinical product to market. Because of this reality, it’s important that life sciences organizations carefully scrutinize the marketplace before committing to new drug development efforts.

The solution
MicroStrategy can help biotech and pharma organizations evaluate the feasibility of a new drug development effort by analyzing the clinical trial landscape before investing resources. With MicroStrategy’s multisource capabilities, drug makers can combine clinical data from public entities, such as clinicaltrials.gov, to assess the risk and viability of potential new drug development efforts by analyzing the status of products in related clinical trials or those at similar phases.

They can also apply predictive algorithms to benchmark patient recruitment rates and assess the quality of potential trial sites based on their historical performance. And MicroStrategy can help firms identify Principal Investigators (PI) and Key Opinion Leaders (KOL) in related studies who could potentially expedite the costly process of patient enrollment.

This particular example aggregates clinical trial data related to a particular form of breast cancer, highlighting the phases, PIs, and patient enrollment counts for related trials across the globe.

https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Life-Sciences-Health-Care/gx-lshc-2016-life-sciences-outlook.pdf
MOBILE APPLICATION: EVIDENCE-BASED REPORTING

Compile real-world evidence to demonstrate how your products improve patient outcomes and reduce healthcare costs.

The challenge
Increasingly, life sciences organizations are expected to provide real-world clinical and economic evidence to healthcare providers, payers, and decision makers demonstrating that their products improve patient outcomes and reduce healthcare costs.

The solution
MicroStrategy enables organizations to aggregate data from multiple clinical sources to track KPIs across patient demographics for hospitalization rates, comorbidities, and overall healthcare costs across different treatment options. By aggregating medical claims and pharmacy data, drug brands can analyze the quality of patient outcomes versus the overall healthcare costs for a specific course of treatment.

The quality of care can be inferred by tracking the number of repeat hospital admissions and the frequency of side effects associated with the course of treatment in question. Overall costs can be tracked by monitoring the medical and pharmacy claims generated by each patient. By visualizing this data, a brand can clearly demonstrate that its products improved patient outcomes and lowered healthcare costs when compared to alternatives.

This particular screen provides Health Economics and Outcomes Research (HEOR) reporting associated with a long-acting versus a short-acting epilepsy drug.
MOBILE APPLICATION: SUPPLY CHAIN MANAGEMENT

The challenge
Life sciences companies maintain complex supplier networks that involve providers of active pharma ingredients and raw materials, contact manufacturers, and packagers. They need to keep all of these moving parts harmonized to avoid production delays and backorder situations.

The solution
MicroStrategy gives drug manufacturers instant visibility into the end-to-end health and status of their supply chains, generating the critical KPIs and threshold-based alerts necessary for smart, fast decision-making. With MicroStrategy, executives can keep their complex supplier networks running smoothly, ensuring that sufficient product is available to meet demand, which is particularly critical for market-exclusive products. Executives can also receive real-time alerts when potential stock-out situations arise. Drug manufacturers can continuously evaluate suppliers of raw materials and active pharma ingredients (APIs) in terms of on-time deliveries, order fulfillment rates, and invoice accuracy. In addition, they can monitor the performance of contract manufacturer organizations (CMOs) to ensure they are delivering product at the negotiated volumes and quality levels.

Give executives real-time KPIs on supply chain performance so they can rapidly identify and resolve potential problems.

Better manage distribution center processes and operating costs
Track order units and fill rates for commercial customers

Additional information:
Transportation performance
Supplier analysis
Alerts for shipments that need to be expedited
ANALYTICS APPLICATION:
QUALITY CONTROL

The challenge
Modern biological drugs require closely-monitored manufacturing processes and pristine environmental conditions. Slight changes in the production process can greatly impact the effectiveness of the product, and poor storage discipline can significantly reduce its lifespan. Manufacturing processes are also heavily regulated and must comply with CGMP regulations. Biotech and pharma companies need a way to stay on top of manufacturing processes to ensure quality standards and optimize production.

The solution
MicroStrategy helps life sciences companies stay on top of their manufacturing processes. By continuously analyzing telemetry and testing data associated with drug ingredients, environmental conditions and product yields, drug companies can maintain an optimal production environment.

At the same time, they can analyze product quality against the manufacturing equipment, personnel, and component suppliers used in production to quickly uncover the root cause of quality degradations in a particular batch. Brands can also track product storage histories to ensure drugs are distributed before losing their intended potency.

All of these practices will help manufacturers ensure ongoing compliance with the FDA’s CGMP regulations.

Ensure that product quality measures and manufacturing processes comply with Current Good Manufacturing Practice (CGMP) regulations.
ANALYTICS APPLICATION: INVENTORY OPTIMIZATION

The challenge
Life sciences companies can have tens of thousands of commercial customers, so keeping inventory balanced with demand can be an ongoing challenge. Brands with new, market-exclusive drugs need to avoid any shortfalls in supply, while also accommodating the special handling requirements and limited lifespans of modern biological products.

The solution
MicroStrategy helps life sciences companies keep their inventories of drug products balanced with demand to avoid stock-outs or stagnant supplies. Manufacturers can leverage predictive analytics to forecast demand based on historical information and trends. Additionally, they can experiment with hypothetical “what-if” scenarios to prepare for unexpected events, such as weather-related issues.

Intuitive visualizations and interactive dashboards give distribution managers real-time insight into inventory operations, so they can take steps to improve performance, reduce costs, and minimize risk. Customized reports show KPIs and comparisons in real time, such as what shipments have already departed from a distribution center.

This particular screen focuses on fulfillment, with visualizations that monitor on-time delivery, fulfillment cycle times, and missed revenue analysis.

Keep inventory balanced with demand to avoid stock-outs or stagnant supplies.

Combine data from disparate sources like Salesforce and SAP in a single dashboard
Benchmark suppliers and locations against each other
Use advanced analytics to help forecast revenue missed due to delays in order fulfillment
Create on-the-fly metrics including the average and median number of days taken to fulfill an order
MOBILE APPLICATION: DISTRIBUTION CENTER OPERATIONS

The challenge

DC supervisors are tasked with managing warehouse operations as well as the productivity, safety, and career development of their workers. However, they often have to leave the warehouse floor and go to a back office to access reporting and to input data related to safety, operations, and employee interactions. This process is inefficient and often leaves the warehouse floor unattended.

The solution

MicroStrategy mobile allows DC supervisors to be on the warehouse floor instead of in a back office. These solutions arm them with the operational information they need to efficiently run their distribution centers and provide them the ability to scan barcodes for item details, initiate back stock pulls, and proactively adjust shipping and receiving process workflows. These capabilities help ensure that drug products with short shelf lives ship out in a prioritized fashion.

With MicroStrategy mobile apps, DC supervisors can instantly capture images of safety issues and upload them to the appropriate system. Furthermore, these apps provide them with the ability to log conversations with their workers revolving around attendance, training, safety, and quality of work. Comments can be input directly into the app, and employees can acknowledge that the conversations took place via the signature capture functionality—increasing their accountability.

MicroStrategy distribution center operation apps promote higher supervisor productivity, increased adherence to policies and procedures, streamlined operations, and improved employee engagement through side-by-side supervision.

Equip DC supervisors with real-time KPIs and mobile tools to streamline warehouse operations.

Scan barcodes to view item details, initiate back stock pulls, and make changes to warehouse receiving and shipping operations.

Use transaction services to instantly log supervisor conversations with warehouse workers, capture worker acknowledgement signatures, and upload photos of safety violations.
Customer case studies

Learn how our customers are using MicroStrategy to digitally transform their business.
Ceva Santé Animale built a sales enablement app using MicroStrategy, which aggregates CRM, ERP, and sales data, and makes that information available to sales reps both online and offline.

Ceva’s Chief Information Officer, François Tricot says, “Our sales reps only have a short 15 minutes with their clients and they need to use all this time for their visit; they can’t waste time waiting for technology or information. The MicroStrategy sales app is very easy to use and provides quick access to all the data they need to customize a conversation with a client, even if they don’t have network connectivity.”

The MicroStrategy app also helps sales reps to focus on the right client and to optimize their time. They can reschedule their days quickly using an integrated Google map view to select an alternate client in the area to visit in the event a meeting is cancelled last minute.

PROFILE

Industry Specifics: Pharmaceutical Preparation Manufacturing
Location: France
Products: Architect, Desktop, Mobile, Server, Web
Core Capabilities: Enterprise Analytics, Mobile Analytics, Mobile Productivity Apps