



INT.

The Boom of Analytics in the
**Pharma &
Healthcare Industry**

Business benefits through the power of data

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An Indian Economic Survey summed it up perfectly by stating how the domestic market is poised to achieve triple-fold growth within the coming decade. The pharmaceutical sector is one of the fastest-growing industries in the country, with excellent future prospects.

Here are some key moot points:

How the Industry Stacks Up

USD\$42 Million Estimates for the domestic pharmaceutical market in 2022

Could touch **USD\$65** billion to USD\$120-130 billion by 2023

Domestic medicine spending forecasted to grow by **9-12%** in India over the upcoming five years

Even when India becomes one of the world's biggest pharma markets, challenges remain

Challenges include drug pricereduction pressures, counterfeit products, reputation losses, R & D spending, compliance and regulatory needs and data management/governance issues

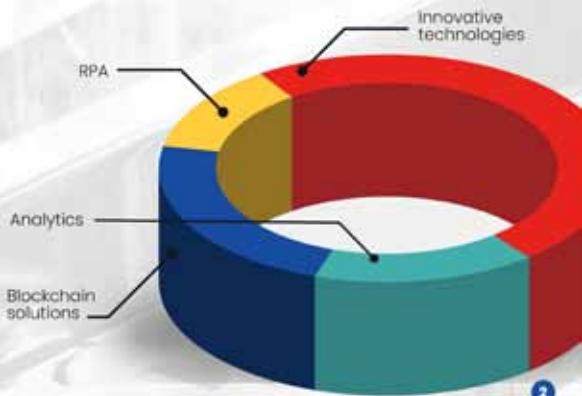
Emerging Trends in the Pharma Space:

RPA (Robotic Process Automation) and more intelligent automation solutions for higher cost and time savings, better value chain dynamics, superior cash flow, and more speed in revenue/market upliftment.

Blockchain solutions for identification of the return of counterfeit drugs from the pharma market.

Innovative technologies for computer-simulated trials and higher testing cycles in lower time, leading to superior results.

Analytics (based on workflows) and insights for businesses through leveraging data, along with platforms for tracking compliance, risks, regulatory guidelines, and financial and operational risks.



Analytics- Driven Pharma

There is a pressing need to tap into gargantuan data volumes in the pharma sector in a more efficient and high-value method. This sector has multiple layers of operational dynamics, with each one of them coming with diverse business procedures and several risk associations.

Risk-based analytics solutions go a long way in helping take care of vital risks, while also offering higher certainty and stability for the entire network through proactive and efficient risk tracking. There is also identification of the prime causes for swift resolution of the issue at hand. The insights gained with analytics may help in building more flexible, reusable, and efficient working solutions that may contribute towards better sector-wise decision-making as well.

Analytics in the pharma sector will examine procedures specific to the industry, helping companies anticipate and track risks, while also maximizing opportunities through data-based insights at the same time. There are quality insights garnered via analytics-based dashboards for all central and supporting processes of business, leading to better decision-making by CXOs as well. They help with superior management of risks, leading to enhanced governance and control environments alongside. The solutions also enable the identification of opportunities for optimising procedures, automation, and digitization alike.

Analytics in Pharma Industry

Accelerate Drug Discovery and

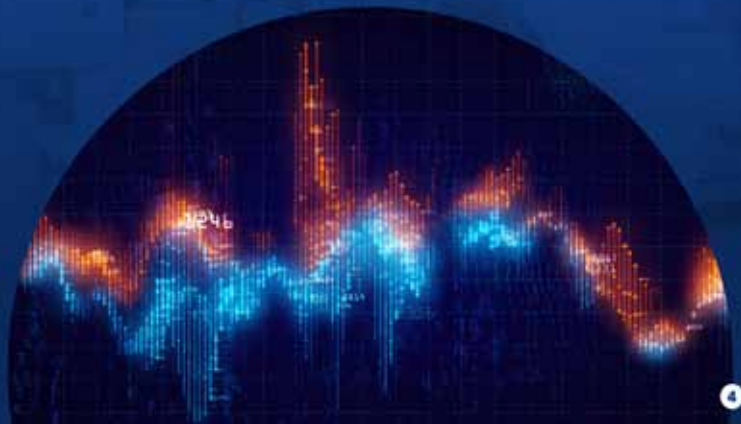
Development- Ensure better insights and historical data analysis to help firms find newer drugs and fast-track their development. Analysis of market data also helps companies capture emerging needs better.

Personalise and Create Targeted

Medications- With historical and real-time analytics on client purchasing preferences and needs, companies can personalize medication bundles while targeting them specifically for their clients.

Drive Effective Sales and Marketing

Operations- Data analytics also provides insights into the purchasing preferences, needs, trends, and patterns of pharmaceutical companies. This drives higher efficiencies in terms of reaching out to the right consumers at the right times with targeted marketing campaigns.



Analytics in Pharma Industry

Increase the Efficacy of Clinical Trials- Better clinical trials are ensured through proper analytics and insights on formulas, their components, and other parameters.

Improving Operations and Employee Training- Analytics also gives companies a bird's eye view of the entire sales, operations, and marketing process. This fosters better employee training strategies in a bid to maximize efficiency and productivity as well.

Reduce Cost and Increase Drug Utilization- With in-depth analysis of existing inventory, analytics helps maximize the utilization of drugs, while also lowering costs considerably that would otherwise occur due to pent-up stocks, lack of targeted marketing, logistical or operational inefficiencies, and so on.

Prescribers' Analysis

Prescriber segmentation and targeting- Analytics helps classify prescribers for various drugs of the pharmaceutical firm. There is also an in-depth analysis of what they prescribe the most and their preferences. This can help in targeting them with tailor-made solutions as per their specializations and needs.

Identifying the doctors who have a high probability to prescribe your brand- Through historical transaction and sales analysis, along with doctor sales patterns, companies can identify doctors more likely to prescribe their brands.

Predicting what sort of engagement channels and contents would be beneficial to engage the Prescribers- Analytics can also mine data for predicting the content and relevant platforms for better engaging prescribers and reaching out to them at the right time and place.

Identifying a combination of medicines that can upsell/cross-sell- Insights can be gained on medicine combinations that can be upsold/cross-sold by sales representatives to prescribers. This is possible by analyzing sales data, market trends, and prescriber activity and requirements.

Text analytics to analyze the feedback received from the doctors /pharmacies- Tailored software solutions can also analyze feedback garnered from pharmacies and doctors to collate helpful insights on what is selling, what needs improvement, and what more can be done.

Predicting Prescribers' churn- Prescriber turnover rates can be controlled and forecasted with data analytics. Firms will have a better idea of how long a prescriber is likely to stick with the company and its products and identify those who have not purchased in some time. They can be targeted with better solutions as a result.

Identifying Prescribers' Lifetime Value- Forecasting the lifetime value of a prescriber is possible by assessing his/her order requirements, historical sales data, market factors, and other parameters.

MRs' Analysis

Time series model for better target allocation for the MRs- MRs can be given more specific and productive targets, based on time series models which analyze historical data. This enables better decision-making on who and what to target.

MR's route/Schedule optimiser- Analytics can track and optimize schedules and routes of MRs for enabling the highest possible productivity and efficiency. It can create more efficient routes for saving time and money while ensuring that targets are reached in time.

Product/territory assignment to MRs for enhanced conversion and sale- Through analysis of varied regions and territories and MR performance, companies can get insights on allocating particular regions to particular sales teams for better sales figures and conversion rates alike.

MRs attrition prediction- Predicting attrition rates of MRs is also possible, based on region, area, segment, and other specific data. Historical analysis can help companies identify gaps and plug them in terms of MR retention.



Operations

Equipment failure prediction- Predictive analytics can also help companies track equipment efficiency and chalk out strategies for replacements or upgrades, depending on historical analysis and failure predictions.

Predictive procurement analytics- Procurement is simplified with suitable analytics identifying inventory, needs, sales figures, turnover ratios, logistics, and more.

Anomaly detection for increasing shop floor efficiency- Shop floor efficiencies automatically increase with swifter and more accurate detection of anomalies including inventory and operational gaps.

Patient analysis

Time series modelling for better demand forecasting- Time series models may again be used for historical data analysis in a bid to forecast patient demand and target products accordingly.

Patient segmentation for effective marketing- The software can also classify and segment patients which will help the company market specifically to diverse groups with their preferred solutions.

which patients will not adhere to the treatment plan for efficacy monitoring-

Through analyzing patient behavior, these models may also predict patients who will not abide by treatment plans, thereby helping companies enhance overall efficiencies.



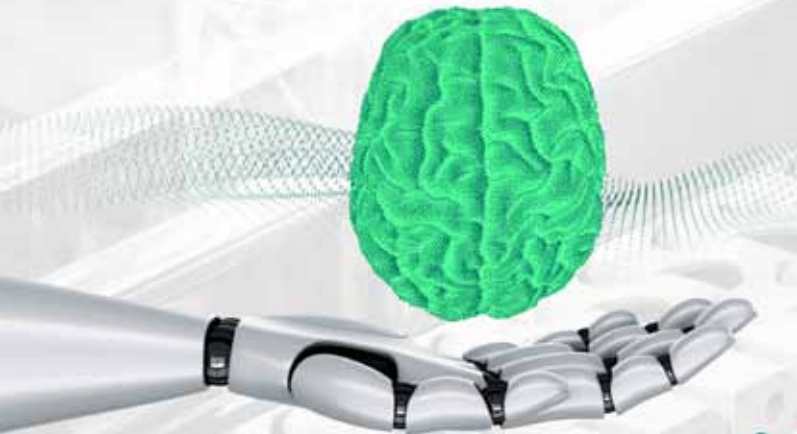
Analytics in Life Sciences Industry

Optimising health insurance delivery-

Analytics can greatly contribute towards optimizing the delivery of health insurance, enabling companies to target suitable consumers at the right time.

Improved customer experience- Through insights into consumer patterns, preferences, behavior, queries, and other data, companies can strategize and plan support mechanisms accordingly for better experiences.

Preventive care- Through historical patient data analysis, demographic and medical condition analysis and other models, preventive care solutions can be worked out for patients vulnerable to specific conditions, or likely to contract them in the future.



Hospitals

Hospital readmission prediction- Patient data and medical records may be analyzed for predicting future readmission to hospitals. This helps hospitals prepare strategies accordingly for future treatments.

Healthcare cost prediction- These models can also predict healthcare costs across groups, patients, and categories. This gives the organization total visibility on the same.

Forecasting patient inflow- Similarly, the inflow of patients can be forecasted, after analyzing market data and historical hospital admission data as well.

Risk profiling of the patients for better and prioritised treatment- Patients with higher risks can be identified and profiled accordingly. This will help hospitals reach out to them with better and more specific treatment solutions on priority.

Forecasting ambulance demand- Ambulance demand can be predicted for particular time thresholds, depending on historical data and other factors.

Predicting machine failures- Machine failures and their lifecycle can also be forecasted in the same way by data analytics. This will help hospitals have backup plans in place, along with chalking out upgrade timelines and costs better.

Predicting No show (OPD department)- No Show predictions also help hospitals greatly in terms of minimizing losses and scaling up productivity. Data analysis of patients and historical trends will enable the same.

Predicting inventory usage to facilitate a better supply chain- Advanced data analytics models can also track and analyze the usage of inventory for building better supply chain networks. With proper forecasting based on demand and historical utilization patterns, hospitals will be able to minimize inventory lags and supply issues.

Diagnostic centers

Next test prediction- Patient data can be thoroughly analyzed for predicting their upcoming tests, based on their medical history and other factors.

Patient Risk Score- These models may assign specific risk scores to every patient, enabling diagnostic centers to have a clearer picture of how to serve those most at risk of various conditions.

Network analysis- These data analytics models can also help with analyzing networks for enabling better decision-making and targeted campaigns.
Segmentation model- Patients and clients can be segmented into various categories, based on their risk profile, medical history, requirements, and more.

Patient Lifetime Value- Data analytics can go a long way towards predicting the lifetime value of each patient, depending on their usage and other patterns, along with their medical history.

Sentiment Analysis- This works greatly towards examining the attitudes and feedback of patients and customers. This will help centers find unhappy patients or those who want more and target them with proper services and solutions.



Diagnostic centers

Prescription analysis- This model analyzes prescriptions for working out which tests are more in demand along with the needs of patients in the long run.

Staffing model- Data analytics can go a long way towards helping diagnostic centers and companies work out suitable staffing models for maximum efficiency, revenues, and patient or customer satisfaction.

Test recommendation- Through analysis of medical records and patient data (as per their risk profile and classification), data analytics can also recommend tests to be done at the center.

Cart Abandonment- Patients abandoning shopping carts is something that every center or platform suffers from. Data analytics can predict the same based on patient data and behavioral trends, along with helping centers to minimize this with targeted solutions and strategies.



How our Analytics Solutions Benefit You



Better Prediction of Results

- Analytics helped businesses and organizations
- to make better decisions by optimizing
- operations efficiencies and reduce risk.

Improved Customer Experience

- It provided insights into the vital
- customer pain points and allowed
- them to improve their offerings.

Reduced Overall CAC

- Analytics helps to take right
- decisions, which improved the
- overall operations and growth
- process.

Increase in Opportunities

- It helped to increase more opportunities.
- It also completed in better predictors of
- competition moves and overall profitability.

Better Business Decisions Making

- It helped to understand your
- business needs of all
- stakeholders. It also ensured to
- identify specific expectations.



INT.

INT. (Indus Net Technologies) is an award-winning full-stack software engineering solutions company with a pioneering legacy spanning 25 years, over 500 clients, and 11,000 plus client projects.

Today, after an eventful journey of two and a half decades, INT. stands for innovation, trust, and sustainability.

We

- 1 Are constantly innovating and adapting to the new opportunities that the digital world presents
- 2 Trust our clients, partners, employees and people-at-large
- 3 Are committed to Sustainability, as everyone needs an anchor to rely on, in such a fast-changing and uncertain world

INT. operates at the confluence of technology, web 3.0, analytics, and marketing in the digital space.

Factsheet

25+

Years Of Experience

850+

Solution Experts

45+

Countries Client Base

India • UK • USA • Singapore • Canada
Mumbai • Kolkata • Delhi • Chennai • Hyderabad

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