

Business intelligence in pharma

An aid in informed decision making

Currently, the demand for BI solutions is largely driven by MNCs & large enterprises. BI solutions seem to have gained more acceptance and significance in pharma industry where time plays a pivotal role in the future of the company. The article reviews the importance of BI solutions to the Indian pharma industry.



Courtesy: bytesizedsolutions.com

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As market pressures demand increased innovation and shorter time-to-market product lifecycles, pharmaceutical companies need to re-think and evaluate alternative business models, focussing on technologies like Business Intelligence (BI) tools.

With the heightened competitive environment among the new entrants in the pharma industry, pharma companies need to use all the tools at their disposal to operate more efficiently, increase revenue and re-balance the decision-making power. In order to build a significant marketshare in an expanding and competitive drug market, pharma companies need information management solutions that allow them to make better business decisions, thereby maintain revenue growth.

An allocation of assets & resources relating to new product development, the mix and priority of sales & marketing initiatives are important. The vertical structure of organisation around product or therapeutic-specific silos has fostered the creation of multiple, disparate data sources and formats – islands of data. Real-time business activity monitoring across brands and functional departments require that these data be integrated into a single repository, which represents a significant challenge to the pharma industry.

Further, the need for transparency has also impacted the way pharma CXO's think about their particular business processes and continued heightened regulatory environment. BI for pharma companies has now become what Enterprise Resource Planning (ERP) is for manufacturers.

Thus, it is difficult to keep track of important information. For the pharma industry, BI offers Management Information Systems (MIS) reports, data analysis and allows them to monitor the vast amounts of data.

The availability of these patient-centric data, combined with the need to address the decreased effectiveness of traditional promotions, has made pharma companies aware of the need to integrate information coming from both internal and external sources. BI solutions are being embraced as a means to translate and interpret this information in support of strategic & tactical business decisions.

In an increasingly competitive market, pharma companies can utilise BI for growth by improving product development, enhancing go-to-market strategies, increasing operational performance, optimising their supply chains, regulatory compliance and driving revenue & marketshare.

Again, BI can provide critical data analysis to pharma companies in order to support informed, strategic action. Data across functional departments can be integrated, providing context for critical business decisions. Thus, BI gives a true enterprise view across our value chain.

Enterprise-wide BI can integrate and co-ordinate data from R&D, sales & marketing, with critical external data vital to real-time adjustments to resources & priorities. Internal data, including information from product development, territory management systems, sales force automation tools and consumer direct marketing can be examined across brands rather than within specific product areas. Thus, BI helps decision makers make more informed decisions and supplies users with critical business information on their customers or partners, including information on behaviours & trends.

Furthermore, BI allows the comparison and review of past performances, in addition to looking forward with different 'what if' models, where the user can manipulate the data.

Again, BI enables a clear understanding of business, which is crucial. There is a need for an instant view of current sales against budget or break-even, and a view of administrative tasks that negatively affect cash flow, including improper tracking of running items, drug returns for expired ones & timely replacement orders, tracking timely utilisation of materials to avoid expiry, etc.

Customer analysis

BI can help to identify & target individuals and demographics that could be considered 'undiagnosed', with educational campaigns whose goal is to encourage these individuals to get screened and tested for possible issues. It can also combine product sales information with customer groups and customer channel information to analyse what makes customers fill prescriptions at a more consistent rate or what makes physicians prescribe certain drugs at a higher rate.

Sales & marketing analysis

BI allows companies to identify products that are most profitable, monitor consumer behaviour in terms of prescription renewal & product purchases, track the success of marketing campaigns, and analyse profitability by product, customer, geographical area or other factors. As part of their ongoing analysis of the market and competitive landscape of the industry, pharma companies can regularly track the marketshare of individual drugs & drug groups. Companies can do this by considering the following:

- ❖ Analyse the prescription activity in a geographic region
- ❖ Dissect buying trends of the largest customers
- ❖ Provide web-based analytics to a sales force
- ❖ Target physicians having high prescription rates of a certain drug or treatment with new drug information

Some of the companies who have implemented BI software solutions are Wanbury Ltd and Glenmark Pharmaceuticals Ltd. MAIA Intelligence has entered into a partnership and strategic alliance with ERP vendors like Soham for its Pharma Suite and other consulting partners like Religare Technova to jointly offer this BI solution specifically for the pharma industry.

There are many other small - to medium-scale pharma organisations that use *1KEY* BI, which has been bundled with their ERP. Most Small and Medium Businesses (SMBs) again look for a value proposition around three aspects - whether the solution is easy-to-buy, easy-to-use and easy-to-install & nurture.

Further, BI helps them build reports that compare trade in particular months with that in previous years, and all this analysis is available to the top management. In today's competitive market - whether SMB or enterprise - customers are demanding better quality of service at lower prices.

Penetration, adoption & importance of BI in Indian markets

BI represents significant market opportunity in terms of market size, mainly because they comprise large organisations. These companies accumulate vast amount of data through global discovery projects, numerous clinical trials and cost-marketing activities. These factors create a more pronounced and immediate need for BI tools across the product lifecycle in the pharma sector. As a result, a growing number of companies are turning towards enterprise-class BI solutions that provide a common underlying architecture & end-user interface and integrate data from different laboratories, both research & clinical.

The maturity of BI adoption can best be seen with the new economy companies, including those in the pharma sector. Currently, many pharma companies have deployed & stabilised ERP/CRM/SCM/HRM or core business (transactional) applications and are thus looking for a tool that can leverage the IT investment in these packaged applications. We are seeing great interest from verticals, such as pharma companies, to adopt BI for increasing their competitiveness & transparency. In India, there is a general awareness on the theory and concept of BI. They are spearheading BI adoption by going in for separate BI units within the organisation to provide the 'right' product to the 'right' customer and at the 'right' time & price. This industry is one of the early adopters of BI in India. Currently, the demand for BI solutions is largely driven by MNCs &



Courtesy: businessintelligencebi.com

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Return on Investment (ROI): ROI on BI is high and fast. An example of Human Resources (HR) analytics can be considered here. HR department, equipped with the facts & analysis, can plan and take the necessary action. This is just one area within an HR domain. Likewise, BI can help any pharma organisation for ad-hoc reporting, dynamic MIS thus enabling cost-savings, and increasing revenue. Hence, a high rate of ROI happens quickly on BI.

Total Cost of Ownership (TCO): Contrary to the traditional BI (MNC), operational BI leaders like MAIA Intelligence's 1KEY have low TCO, considering the Enterprise License Cost, IT-user involvement during deployment, IT-user involvement for support, implementation, training and overall business value delivered. Implementation of 1KEY happens as fast as within two days and business users are trained in just few hours. Hence, the TCO is low in case of BI tools like 1KEY.

Based on Gartner research, only 30 per cent of companies that have deployed BI consider their deployments 'very successful' – the vast majority is labelled 'somewhat successful'.

Moreover, most existing BI players (traditional BI) are primarily focussed on Strategic BI alone. These tools are expensive and used by only top management and the remaining 85 per cent of business user pyramid is deprived of a BI for MIS, analysis and monitoring or gauging performances, which, if provided, can help them gain visibility into the business.

BI Market: There is still scope for growth in the BI market. It has penetrated only 10-15 per cent of the known user base, but there is opportunity for BI well beyond today's known markets.

Gartner Report 'Hype Cycle for ICT in India 2008', expects BI market in India to reach \$46.8 million by 2012. India is a huge market for BI and is fast growing with double-digit figures even in this

economic slowdown. The overall BI market in India is at a nascent stage, with a huge untapped opportunity for vendors to capture. BI can deliver on this promise if deployed successfully because it can improve decision making and operational efficiency, which in turn drives the top line and the bottomline. As per *NASSCOM ZINNOV INDIA Software Product Business Study* report, BI is on the third opportunity priority list for Indian software product companies.

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Visible trends for further development of BI

We are now looking forward to new technology wave of Rich Internet Applications (RIA)-based BI. Business users have no experience of such an intuitive Graphical User Interface (GUI). We are releasing in coming months 1KEY Touch Dashboard based on RIA platform. We have rolled out with couple of guinea pig customer for initial feedback. We want our customers to develop a deeper, longer commitment with our brands even if they are priced the lowest in the market. Emotional customers are those who care, share their views with the world, pay a premium for the products and stay for the long run. In fact, they are often the most profitable customers for a company.

Simply put, BI is definitely a space to look forward in coming quarters. Innovation in technology and delivery model disruptions have made BI software more accessible to a larger customer base.

BI will be an integral part of the software bond that binds relevant information to intelligent decisions across organisations.


Product analysis: BI analyses buying tendencies and treatment outcomes to create more drug & product variations tailored directly towards different age groups and risk factors.

Supply chain analysis: It improves production schedules by analysing which products stay on the shelves for the longest time and how well each product is selling.

Regulatory compliance: BI's analytical and reporting capabilities allow companies to gather & integrate information from across the enterprise and present it in easy-to-run & easy-to-understand reports. Pharma companies, besides conforming with drug testing and health certification norms, can comply with the often rigid insurance and government standards for payment and billing with BI.

Clinical data analysis: BI's analytical capabilities enable companies to track the large amounts of information from clinical trials, identify the most efficient practices, and optimise resource allocation. By integrating data from multiple sources, BI also helps companies identify trends & anomalies and analyse risk during product development & launch.

Financial analysis: BI integrates both financial & operational information, enabling companies to monitor and forecast financial performance as well as produce statutory financial reports from the same platform that enables clinical data & quality control analyses.

Operational analysis: BI enables companies to track their supplier networks, inventory stocks, product quality and production levels. In addition, BI's ability to simultaneously analyse information from multiple sources allows companies to monitor costs and operational efficiency across the enterprise, examine employee productivity and allocate resources more effectively. 



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