Today, the pharmaceutical industry is facing numerous challenges like increased regulatory oversight, rising R&D cost with decreasing productivity, increased digitization in the value chain, etc. The industry is increasingly looking at the concept of cloud, mobility, and social media to rationalize internal costs, facilitate an integration of information and processes across departments and better profiling of clients.

Every business would have silos of business data in its marketing/sales department. This data has hidden treasures. It contains information that can help target right audience more effectively, bring in more efficiency in the sales process and also forecast the future of business. To generate these insights from the large unorganized databases we use business analytics.

One of the most effective ways to boost profitability and increase sales and market share is to start understanding the business geographically.

The actual location intelligence and spatial insights can be the key to unlocking new opportunities in the Pharma industry. The geospatial industry has been growing rapidly in the past few years and its innovations have significantly impacted Pharma businesses. Obtaining and understanding location data can help businesses make better and more precise decisions when considering marketing and sales territory alignment.

With that said, here are multiple benefits that location analytics can bring to your business.

Marketing campaigns are one of the most important assets when it comes to any type of business. Proper marketing efforts will not only increase sales but also raise brand awareness and improve the reputation of any business.

With that said, marketing decisions play an important role in the overall success of companies in the Pharma industry. One way to increase the business visibility and achieve better results with targeted marketing campaigns is to obtain and analyze spatial insights of the marketing activities.

Let's picture the following scenario –

Sales Territory Alignment

Location analytics allow businesses to understand the geographical aspect of sales patterns, thus allowing them to steer their sales efforts in the most profitable direction. Sales Territory Alignment has multiple advantages such as minimizing travel time for sales reps, making sure that they all have equitable work load and are able to maintain a consistent communication between the doctors to improve customer service.

Let's say you are big Pharma company who wants to distribute a new drug that is aimed at people above the age of 50. You divide your sales territories among your sales reps. In a few weeks when you look at your stats, you realize that some of your sales people make much

Location intelligence can help you create new marketing strategies or optimize the old ones to achieve mor desired results. Either way, it is recommended to take into consideration the geographical aspe of the whole marketing process.

Combine External and Internal Data & Take Advantage

Location analytics solutions serve to help businesses analyze different type of data. By combining external and 3rd party data with internal data sets such as sales, territories, and visits, every Pharma company can gain a comprehensive view of their business procedures and marketing efforts. Combining this data in a geographical perspective also allows businesses to understand the prescription journey and the impact that their sales representatives are making.

Marketing Using Data Analytics

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By Robin Robinson

Data analytics are crucial tools for pharma marketers, allowing them to harness the power of both traditional and real-world data. Using data analytics through the commercial life cycle can bring valuable insights to bear that enable better targeting and understanding of today's consumers.

Within the pharmaceutical industry, marketing and sales functions are using data analytics most often and have been for more than a decade. In today's big data environment,

Big data sets can provide insights to inform high-level strategy and enable pharmaceutical marketers to achieve their commercial objectives, says Robert Lien, associate partner at Beghou Consulting, and there are many types of big data sets that hold valuable insights for pharma marketers. Mr. Lien outlines three types: the first is patient data, which can help a manufacturer's patient-support team analyze its workload and determine case statuses. The data can inform field access teams as they work with patient-support programs, specialty pharmacies, and medical offices to help with patient access and reimbursement.

Second are transaction-level claims, such as prescription, medical, and hospital data, which help companies understand patient journeys, including the order of specialists seen, diagnosis, therapies, and tests. These insights help targeting efforts and serve as inputs for forecasting. And third, affiliations data allow companies to draw insights from metrics available at both the physician- and account-levels.

Marketers have had access to data sets for years, which have fueled traditional applications, including market sizing, patient journey analysis, pricing strategies, customer segmentations, and marketing mix.

Data Analytics Cause Strategy Shift

Often advanced data analytics can be used to compare and contrast areas where patients experience different outcomes with the same treatment regimen.

"This allows marketers to optimize engagement and education tactics that drive better ROI," Mr. Rago adds.

As one example of the power of data and analytics, McKesson collaborated with a biopharma company that had a therapy where most patients would discontinue treatment after a few months, an outcome that differed from the clinical trial results for that drug. At the same time, a subset of patients performed better than others

Inventory analysis is an unremitting balancing act: Warehouse managers need to estimate the right resources and minimize the costs of holding them while confronting the headwinds of a volatile market. There are many approaches to analyzing and managing inventories, but they need to be holistically integrated with the right data and tools.

Inventory analysis entails knowing the optimal number of products that a business should carry. It involves understanding the different variables that affect the production, sales, demand, and distribution of goods. By

knowing their difference.

Inventory analysis is more than just matching stocks with consumer demand. Transactions and inventories change hands between vendors, suppliers, manufacturers, packagers, distributors, warehouse workers, delivery drivers, and even multiple warehouses, to name a few. They influence the movement of merchandise, and they must be accounted for as they go to their final destination — the customers.

To track this movement, however, warehouse managers and their staff must know which type of inventory is going to where, what inventory should be prioritized, or when it's expected to be delivered. Inventories are classified differently at various points in the supply chain and become data points that must be tracked to ensure their seamless transitions.

- **Raw materials**: Resources used to create products. Raw materials become unrecognizable when they transform into finished goods.

- **Components**: Similar to raw materials, but they remain recognizable from their original form when they become finished goods.

- **Work-in-progress (WIP)**: Also known as in-process or work-in-process inventory, which encompasses resources used in production (including raw materials or components, labor, and packing materials).

- **Finished goods**: Products that have completed the manufacturing process and are available for sale and distribution.

- **MRO goods**: Resources that support the production and manufacturing process or ensure business continuity.

- **Packaging and packing**: Resources that separate and protect the product, further secure it, and provide labels and stock keeping unit (SKU) information. They also include materials that package SKUs in bulk and ready them for transportation.

- **Safety and anticipation stocks**: Extra inventory meant to cover unforeseen situations or meet expected increases in demand. Safety stocks carry additional costs but ensure availability for the customer. Anticipation stocks are commonly based on trends in sales and production, or supply and demand in the case of raw materials and components.

- **Decoupling inventory**: Additional resources or WIP inventory set aside at the production line to avoid disruption. Decoupling inventory mainly applies to

- **Cycle stock**: Products, raw materials, and components that are reserved to fulfill minimum production quotas or immediately satisfy sales orders.

- **Service inventory**: The capacity or bandwidth of a service in a given period. It's related to sales and revenue management. Examples include airline seats that expire once the flight takes off, hotel rooms that have a certain number of stays in a month, and table reservations in restaurants.

- **Transit inventory**: Also known as pipeline or transportation inventory and refers to goods in transit between the manufacturer, warehouses, distribution or fulfillment centers, and buyers.

- **Theoretical inventory**: Also called book inventory and refers to inventories reported on bookkeeping systems. This is mostly used to compare with actuals.

effective as your data.

In inventory optimization and management, less is more — as long as you can replenish the product and deliver it on time. Having "less," however, means having more data. After all, you can't manage or improve the warehouse's operations without measuring it.

That's where warehouse analytics figure into inventory analysis. By analyzing key data points on the warehouse and the inventories it produces, holds, sells, or distribute, managers and decision-makers can proactively strike a balance between efficiency and profitability.

Many organizations already recognize the significance of data and analytics in their supply chains. In fact, 91% of surveyed chief supply chain officers said they are actively investing on advanced analytics to bridge the operational and strategic divide. This means transforming their data into actionable sales, supply, and demand forecasts, assessing

Lingaro All-in-One Warehousing KPI Dashboard

Lingaro provides comprehensive warehouse analytics solutions that empower businesses to build custom warehouse dashboards and use data to identify key processes that can be automated, make capacity improvements, minimize pallet routes, monitor workforce performance, and plan workloads.

Lingaro also provides supply chain analytics to help businesses gain full visibility across their supply chain, make informed decisions, and achieve operational excellence. By optimizing processes and harnessing cutting-edge technologies, Lingaro delivers tailored AI- and ML-powered solutions that map new opportunities and improve key areas in the supply chain — from demand forecasting, logistics networks, and inventory of warehouse management.

Four Key Data Analytic Trends

Patient-Centric Approach: Just like medicine, marketing strategies are becoming more personalized. Biopharma companies want to educate and empower patients with the information relevant to each stage of their journey. The guiding principle is that every patient matters. Therefore, understanding each patient's unique journey using deep, reliable data sources like EHRs helps marketers target specific messages to the right patient and provider at the right time. Also, technology solutions, such as patient portals and apps, allow patients to document their experiences and communicate more easily with

Physician Behavioral Targeting: Another trend in data and analytics is the ability to understand physician preferences and patterns in care delivery. These insights enable marketers to establish more effective marketing tactics that are aligned with the physician's preferred mode of engagement. To accomplish this, a richer and more granular data set is required, typically generated from an electronic health record (EHR).

Optimizing and Employing Point-in-Time Marketing: The third trend is the ability to optimize marketing tactics to deliver the right message to the right care provider at the right time in the patient's treatment journey. This means leveraging data

to identify the optimal points for critical interventions and associated message delivery.

Data Consolidation and Transformation: The fourth trend is consolidating data from different sources to gain a deeper understanding of the marketplace and help triangulate and inform marketing strategies. Data, especially in the specialty drug space, is fragmented and requires companies to leverage multiple sources to gather the insights they need to deploy their market strategies.

Source: McKesson Specialty Health

Sales analysis:

- Regional Sales Manager wise
- Product wise
- Location wise

Target Analysis:

- Location wise
- Month wise
- Comparison between Sales & Target value of each Regional Sales Manager

Analysis Done :

Analysis 1: Each Regional Sales Manager sales for different year's each month was analysed & chart were generated.

- **Analysis 2:** Each product's sales for each year was analysed.

- **Analysis 3:** Each location's total number of unit sold & total Sales value was analysed.

- **Analysis 4:** Location wise comparison was done between total amount of sales & target.

- **Analysis 5:** For sales & target data trend analysis was performed.

- **Analysis 6:** Sales & target were compared for different year.

SALES DASHBOARD

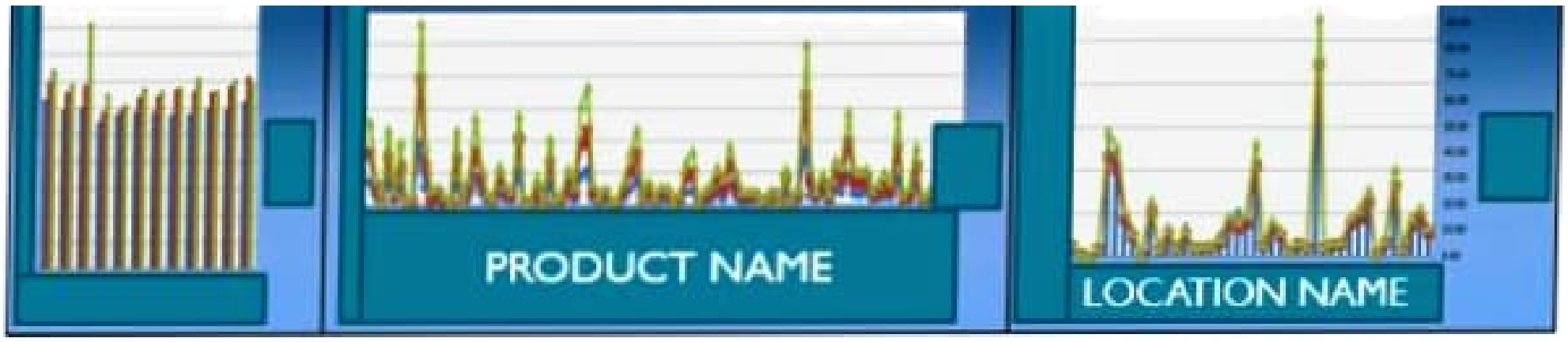
TARGET DASHBOARD

SUMMARY

Year	(All)
Month	(All)

Sum of Amount	Column Labels			
Row Labels	Collection	Sales	Targets	Grand Total
R1				
R2				
Grand Total				

Sales Dashboard Page:



Target Dashboard Page: