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BUSINESS INTELLIGENCE ON PRESCRIPTION DATA ANALYSIS

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Abstract:

Prescription data analysis is a key to success in the Indian Pharma marketing and forms one of the most important pillars of Business Intelligence for the industry. Pulse pharmaceuticals utilizes KrisTab, a mobile application, to capture real time sales force data. This data provides with insights and helps in setting direction to the Marketing and Sales Managers for optimizing resource utilization and making informed business decisions.

Marketing department provides strategic & tactical direction to the field force for impacting the demand of Pulse Pharma products thru positive engagement of doctors. The tactical activities designed by the marketing team, including brand exposures and scientific communications to customers are implemented by the field force. The sales performance of each field personnel can be attributed to the effective and consistent implementation of the marketing directives. Hence, monitoring, analysing and providing feedback on implementation of field activities is critical to achieve positive sales outcomes.

The data being generated based on real time reporting by field personnel was used in this project to evaluate the impact of various parameters effecting the sales performance. The key parameters used for arriving at the conclusions were customer Visit frequency, prescriber status & actual territory sales data.

We are using methodologies like data mining, data analysis, data interpretation and reporting through Microsoft excel (Pivot, Lookup and various formulae) which is flexible and tailor-made for small medium enterprises in the region for Understanding doctor prescriber status, prescriber count, sales forecast, Comparing the projected and actual sales, Brand exposure etc.

Key words: Business Intelligence, Prescription data analysis, KrisTab, Brand exposure.

Introduction:

Prescription data analysis encompasses vast information relating to prescribing status for different brands, doctors and creates a value proposition to the company.

Prescription data Analysis helps to take decision on how to handle/omit non-responses.

BI (Business Intelligence) is a technology-driven programming, analysing facts and presenting actionable facts to help executives, managers and different level users make informed decisions. It includes information capture and control of the data warehouse, but mostly related to facts evaluation, gathering insights and reporting.

Excel Statistics used to organize and analyse data. Interpretations help in fixing business issues.

Objective:

The main purpose of this paper i**s** to optimize resource utilization and maximise business results through structured analysis of real time field data.

Materials and Methods:

Primary data: The work is done through the real time data reported by field force using KrisTab.

KrisTab application tackle sales, financial, Prescriber status, Doctor Information (location, specialization) and many other sources of business related data for purposes that include performance management.

Operating Software: Windows (All versions)

Application software: Microsoft excel (Pivot, Lookup and various formulae)

Data Sourcing: KrisTab is the data source for all the activities. It provides data in an organised spreadsheet. We can collect the data necessary for analysis.

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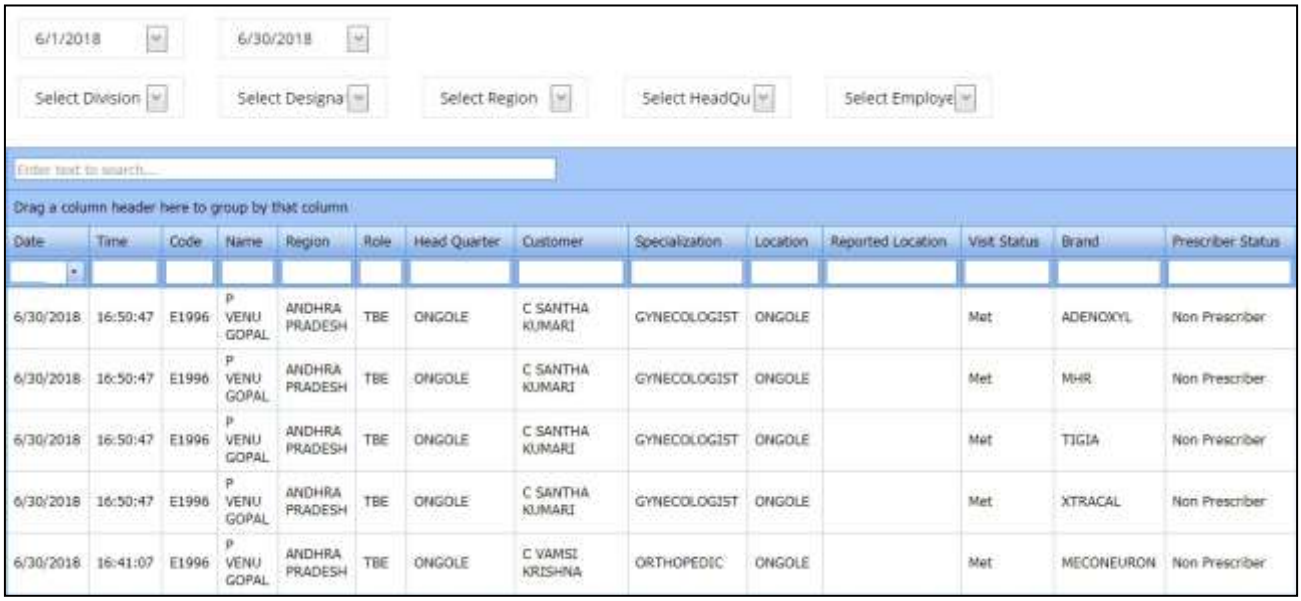
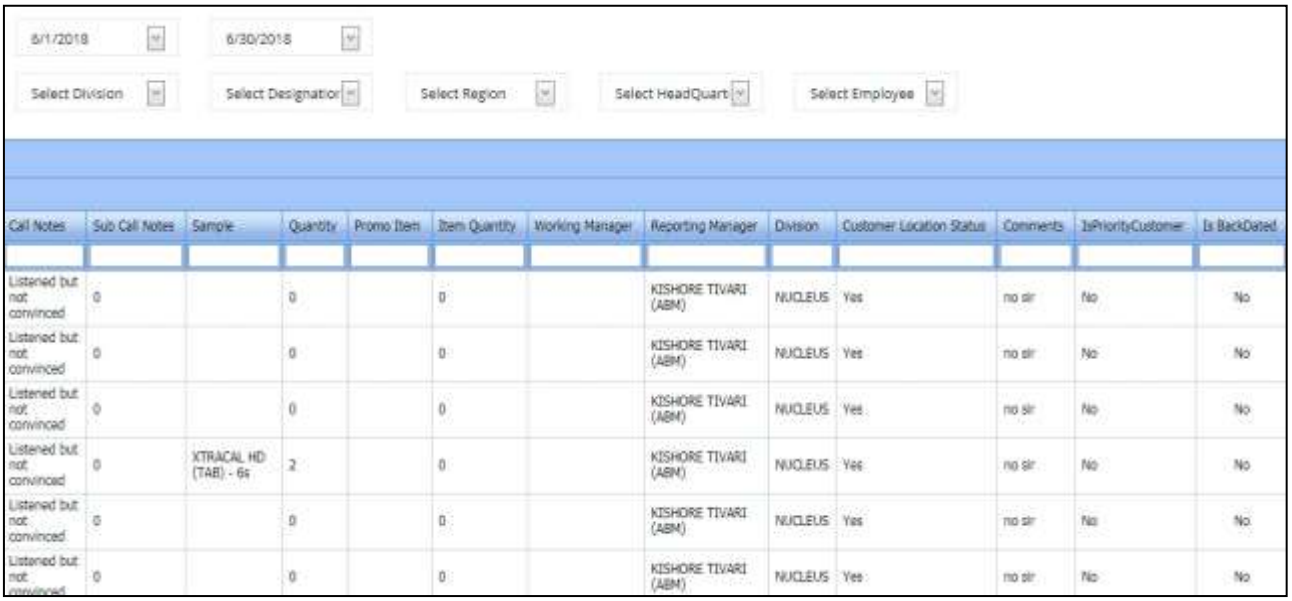


6/1/2018 6/30/2018

Select Division | Select Designa | Select Region | Select HeadQu | Select Employe

Drag a column header here to group by that column

Date	Time	Code	Name	Region	Role	Head Quarter	Customer	Specialization	Location	Reported Location	Visit Status	Brand	Prescriber Status
6/30/2018	16:50:47	E1996	P VENU GOPAL	ANDHRA PRADESH	TBE	ONGOLE	C SANTHA KUMARI	GYNECOLOGIST	ONGOLE		Met	ADENOXYL	Non Prescriber
6/30/2018	16:50:47	E1996	P VENU GOPAL	ANDHRA PRADESH	TBE	ONGOLE	C SANTHA KUMARI	GYNECOLOGIST	ONGOLE		Met	M+R	Non Prescriber
6/30/2018	16:50:47	E1996	P VENU GOPAL	ANDHRA PRADESH	TBE	ONGOLE	C SANTHA KUMARI	GYNECOLOGIST	ONGOLE		Met	TIGIA	Non Prescriber
6/30/2018	16:50:47	E1996	P VENU GOPAL	ANDHRA PRADESH	TBE	ONGOLE	C SANTHA KUMARI	GYNECOLOGIST	ONGOLE		Met	XTRACAL	Non Prescriber
6/30/2018	16:41:07	E1996	P VENU GOPAL	ANDHRA PRADESH	TBE	ONGOLE	C VAMSI KRISHNA	ORTHOPEDIC	ONGOLE		Met	MECONEURON	Non Prescriber



6/1/2018 6/30/2018

Select Division | Select Designation | Select Region | Select HeadQuart | Select Employee

Call Notes	Sub Call Notes	Sample	Quantity	Promo Item	Item Quantity	Working Manager	Reporting Manager	Division	Customer Location Status	Comments	IsPriorityCustomer	Is BackDated
Listened but not convinced	0		0		0		KISHORE TIVARI (ABM)	NUCLEUS	Yes	no str	No	No
Listened but not convinced	0		0		0		KISHORE TIVARI (ABM)	NUCLEUS	Yes	no str	No	No
Listened but not convinced	0		0		0		KISHORE TIVARI (ABM)	NUCLEUS	Yes	no str	No	No
Listened but not convinced	0	XTRACAL HD (TAB) - 6s	2		0		KISHORE TIVARI (ABM)	NUCLEUS	Yes	no str	No	No
Listened but not convinced	0		0		0		KISHORE TIVARI (ABM)	NUCLEUS	Yes	no str	No	No
Listened but not convinced	0		0		0		KISHORE TIVARI (ABM)	NUCLEUS	Yes	no str	No	No

After data sourcing, transforming prescriber status in to numerical for tabulating, counting and analysing

Prescriber status		No of prescriptions per Month
Non- prescriber	1	0
Trail user	2	≥2
Occasional user	3	≥8

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Frequent user	4	≥20
Prolific user	5	≥30

The inputs required for prescription data analysis are:

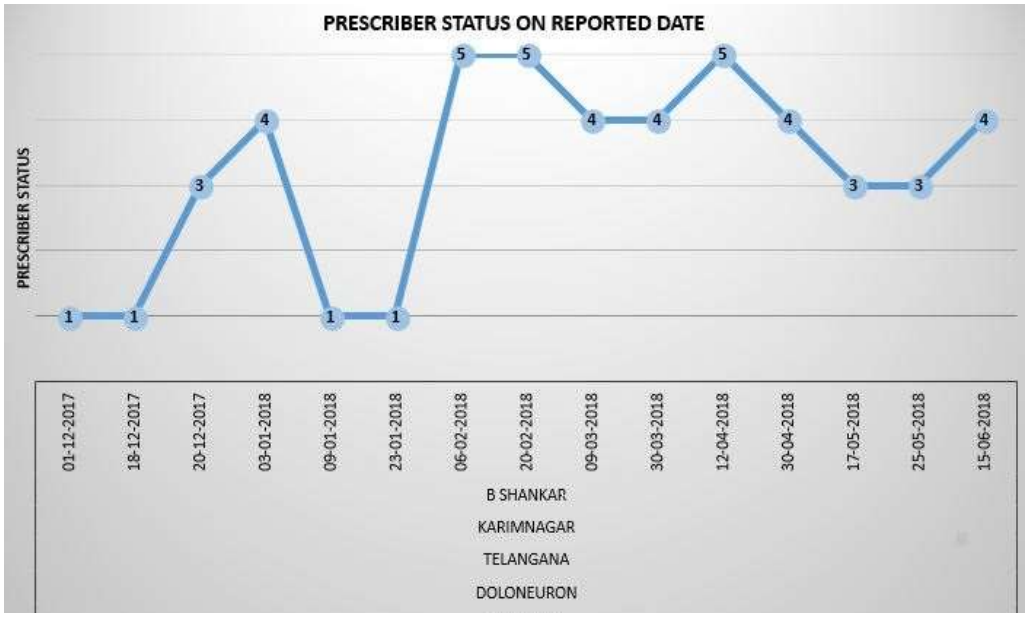
- ❖ Visit frequency
- ❖ Number of prescriptions
- ❖ location
- ❖ Reported date
- ❖ Brand name

Results & Discussion:

Stage 1: Prescriber Status

Initially we will analyse the prescriber status of the doctor for specific brand. The chief insights we get from this are

1. What kind of prescriber he/she is?
2. Which brand he/she is most preferring?
3. How many visits TBE does per month?



Stage 2: Count of prescribers

We need to select the parameters mentioned in the figure highlighted in green colour so that

We get the month wise statistics of prescribers and non – prescribers count

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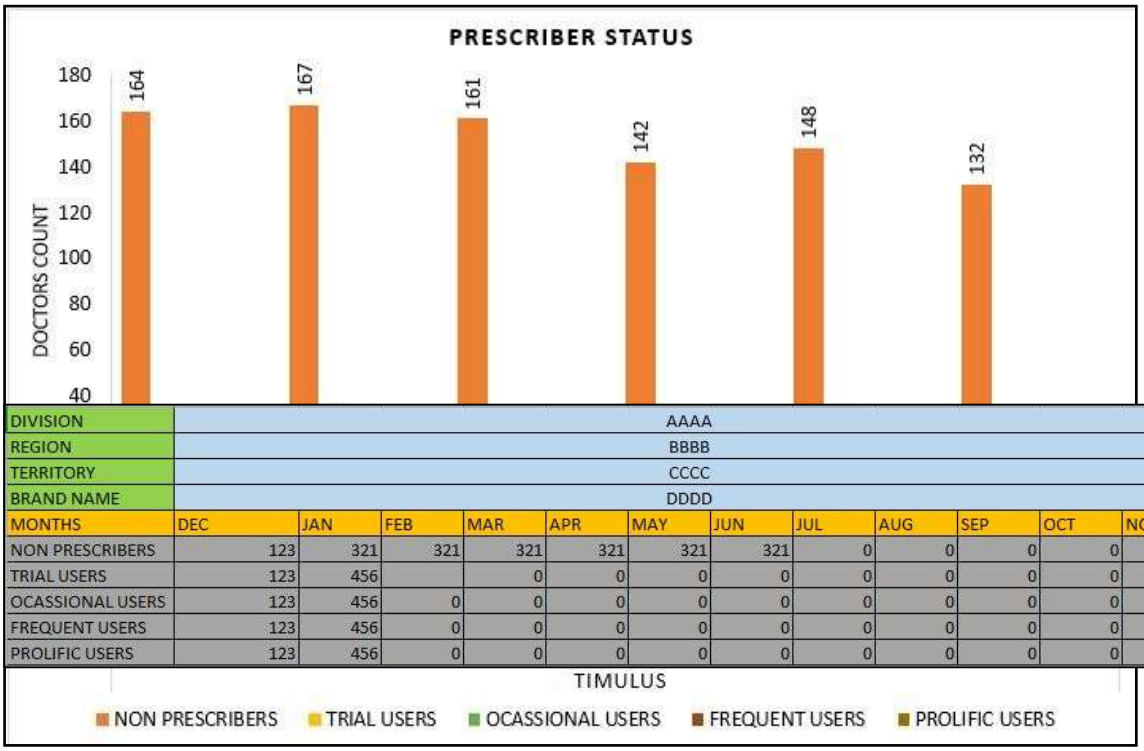
(division, brand, region, territory wise count of prescribers and non – prescribers)



DIVISION	AAAA											
REGION	BBBB											
TERRITORY	CCCC											
BRAND NAME	DDDD											
MONTHS	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
NON PRESCRIBERS	123	321	321	321	321	321	321	0	0	0	0	0
TRIAL USERS	123	456		0	0	0	0	0	0	0	0	0
OCASSIONAL USERS	123	456	0	0	0	0	0	0	0	0	0	0
FREQUENT USERS	123	456	0	0	0	0	0	0	0	0	0	0
PROLIFIC USERS	123	456	0	0	0	0	0	0	0	0	0	0

Stage 3: Projected value calculation

To calculate the projected value of a brand we consider the prescriber status and prescription price of that particular brand

Stage 4: Comparison of projected vs actual

Comparison of projected value with actual sales value.

From this we can analyse

- The potentiality of a particular brand in market
- The revenue generation prospectus can be known individually for mentioned parameters (division, brand, region, territory, year& month wise)
- The status of the organisation can also be known.

Stage 5: Brand exposure

Brand exposure is a key factor in the promotion of a business.

It is done by building a relationship between a TBE and a doctor.

In this stage we record the number of visits a TBE does to a particular doctor for a brand.

We can get the projected exposures. We compare this with the actual brand exposures of KrisTab and interpret the performance of a TBE for a particular brand.

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BRAND NAME	COUNTRY /REGION	TBE&ABE	SEGMENT	DOCTORS COUNT	VISITS	SEGMENT WISE TOTAL VISITS
DOLONEURO	ALL INDIA	84	NEUROLOGIST	10	3	30
			ORTHOPEDIC	20	3	60
			CONSULTANT PHYSCIAN	35	2	70
			ENDOCRIINOLOGIST	5	2	10
			PSYCHIATRIST	5	2	10
			GENERAL PHYSCIAN	5	2	10
						190

BRAND EXPOSURE OF DOLONEURON

	CONSULTANT PHYSICIAN		ENDOCRINOLOGIST		GENERAL PRACTITIONER	
MONTH	ACTUAL	PROJECTED	ACTUAL	PROJECTED	ACTUAL	PROJECTED
DEC	3070	5880	77	840	2051	840
JAN	3184	5880	76	840	2110	840
FEB	3054	5880	88	840	2065	840
MAR	3011	5880	89	840	1957	840
APR	3162	5880	90	840	1970	840
MAY	3378	5880	82	840	2006	840

Merits:

1. MS Excel is a widely accepted and inexpensive application software
2. Performance management of TBE=ABE, ABM, ZBM can be done easily
3. To check the Sales forecast and sales comparison
4. Prescriber status of a doctor can be known
5. Brand exposure and brand value calculations can be determined
6. Graphical representation provides ease of understanding

Demerits

1. Application based reporting errors
2. Privacy issues
3. Fluctuations in the market leads to deviations in the forecasted datasets
4. Biased reporting

Conclusion

Prescription data analysis helps in better understanding the arena around us and make experience of the limitless datasets with which we're continuously bombarded. In the business world, Prescription evaluation can be used throughout the enterprises that help managers and others to make better decisions and optimize the profitability and effectiveness of the organization

Recommendations

1. Optimization of sales profit and sales amount
2. Helps in Right Sizing the organisation by understanding the Efficiency and Effectiveness of Employees
3. Organization must pick predictive and analytical device which precisely fits to their corporation profile can earn extra than it spends on BI tools. By predicting the dangers and frauds corporations can reduce the bad clients and useless production of merchandise. Organizations can analyse the trends and income by way of easy queries without the involvement of the IT department

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