

## Sentiments Analysis of The Medical or Pharmacy Shops Business To Develop in Terms of Communication, Productivity & Efficiency in Their Retails Business

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### Abstract:

*Blog Survey data collected from the internet sources over the World Wide Web, blogs refer to record individual's opinions, feelings, stories, and different works. The researcher has selected 222 blogs to study different views and opinions of experts, researcher, and pharmacy retailers, patients, customers, doctors, and pharmaceutical company, Food & drugs administration (FDA) regarding the on pharmacy shop business performance concerning communication, productivity and efficiency blogs discussed personal feeling, thoughts, opinion and different works like the photo, videos. To analyze blogs survey text- mining tool is used. Text mining is a logical field which derived high-quality information from text. Text mining is widely used in the industries when data is unstructured. Derived information can provide in the form of numbers (indices) categories or clusters, summary of the text. In this blog will focus on the application of text mining workflow and examples.*

**Purpose:** This research paper expresses the view of blog expert and sharing their opinions about medical shops business-related positive or negative comments for business improvement.

**Methodology:** The research paper study based on secondary data like blogs, articles & view about pharmacy retail business experts.

**Results:** In this information, it really about that medical or pharmacy shops business-related facts and how business can be handled & get better with the help of new technology concept and now its requirements.

**Originality:** This research paper sharing sentiment analysis of medical or pharmacy shops. Business-related comments. And that comments necessitate applying in the medical shops business to enhance the communication, productivity & efficiency in their place.

**Keyword:** Sentiment analysis, communication, productivity & efficiency, medical shops & retail business, FDA.

## 1. The Workflow of text Analysis:

**Data collection:** Unstructured information from blogs, social media, websites, and user comments,

**Process Documents and filtering:** this step involves the extraction of a word, parts of speech tagging, word filtering (removing preposition, numbers, and punctuation) synonyms, tokenization, and stemming. Removing irrelevant terms, building stop word dictionary and removing stop words.

**Text Analysis:** text analyzer offers different text analysis possibilities. The count of words tokens, clauses and syllabus

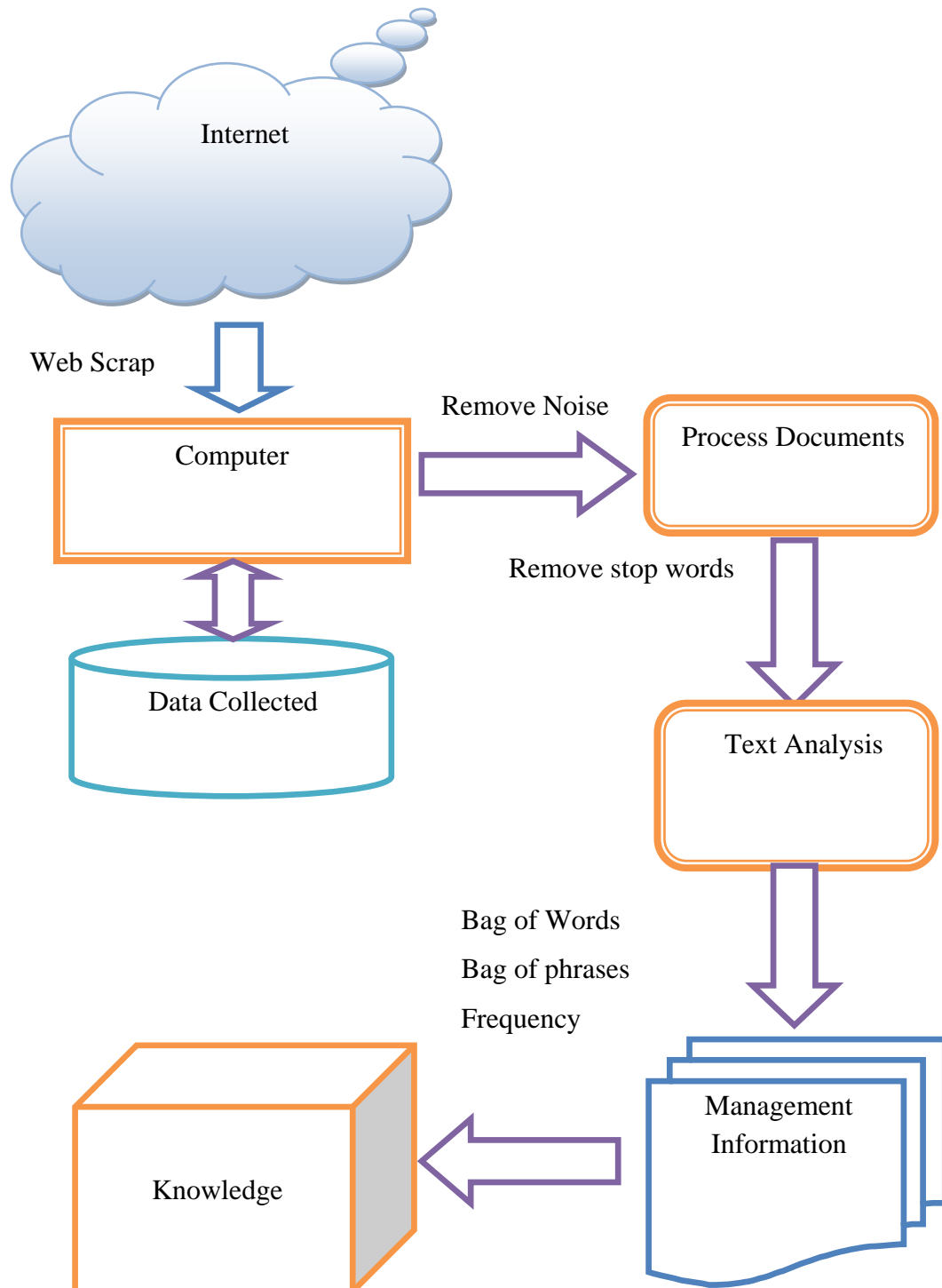
For this analysis researcher has:

Total word count :	(34,947) 19,858
Number of different words :	4585
Complexity factor (Lexical Density) :	23.1%
Readability (Gunning-Fog Index) : (6-easy 20-hard)	10.1
Total number of characters :	176364
Number of characters without spaces :	144608
Average Syllables per Word :	2.42
Sentence count :	2596
Average sentence length (words) :	9.08
Max sentence length (words) :	105
Min sentence length (words) :	1
Readability (Alternative) beta : (100-easy 20-hard, optimal 60-70)	69

Table no. 1: The count of words tokens, clauses and syllabus

We see the result of the analysis using textalyser default option (Minimum characters per word =3, Number of words to be analyzed =20, apply stop list = English). The output gives us immediately the lexicometric measurements<sup>5, 6, 7, 8</sup>.

## 2. Block Diagram of Text Mining:



Source: Researcher Contributions.

Fig. no. 1 Block Diagram of Text Mining

### 3. Frequency and Top Word:

Word	Occurrences	Frequency	Rank
Pharmacy	1228	6.3%	1
Drugs	905	4.6%	2
Patients	483	2.4%	3
Health	358	1.8%	4
Technology	277	1.5%	5
Retail	220	1.2%	6
Data	219	1.2%	6
Generic	216	1.2%	6
Online	169	0.9%	7
Doctor	165	0.9%	7
Productivity	157	0.9%	7
Profits	115	0.6%	8
Staff	86	0.4%	9
Performance	82	0.4%	9
Insights	79	0.4%	9
Analysis	76	0.4%	9
Research	75	0.4%	9
Communication	64	0.3%	10

Table no. 2: Frequency and top word.

The above table indicated frequency and top words. Top words are those who used frequently. From the above words, can say that technology application used in pharmacy retail business to manage all business activity like drugs inventory status, Drug consumer status, doctor's

recommendation fact, patient's details, and data analysis to check patient's health and also retail business performance can be enhanced through measure the productivity in sales, staff, inventory, cost-effective generic drugs, and technology application tool used to maintain healthcare. Effective communication by pharmacists is essential to improve the use of medications by patients, and ensure optimal therapeutic outcomes—moreover, communication, appropriately written recommendations to the physician to determine drug analysis and treatment<sup>9, 10, 11, 12</sup>.

#### 4. 2-Word phrase Frequency:

Expression	Prominence
Digital healthcare	80.7
Service offering	80.9
Customer service	80.9
Largest consumer	81.8
Consumer antibiotics	81.8
Opportunities generic	82.2
Healthcare data	84.2
Pharmacy supplies	85.6
Pharmacy value	86.6
Technology solutions	86.7
Drug data	87.4
Clinical data	87.4
Improve patients	87.5
Pharmacy news	87.9
Pharmacy performance	88.1

Improving efficiency	88.3
Real data	88.5
Data available	88.9
Health data	89.0
Technology improve	89.3
Drugs sales	89.5
Analyze data	90.0
Government agencies	90.8
Digital tools	91.3
Digital pharmacy	91.7
Digital prescription	91.9
Data standardized	92.1
Pharmaceutical service	95.0
Pharmaceutical healthcare	96.0
Supply pharmacy	96.2
Research pharmaceutical	96.3
Improve sales	96.7
Improve productivity	96.8
Data driven	96.8
Drug discovery	98.0
Latest trends	98.2
Pharmacy times	98.4

Table no.3: 2-Word phrase Frequency

From the above 2-word phrases frequency table, the prominence of expressions is more for the expression like pharmacy business times taking the help of latest trend technology for business improvement concerning productivity measurement in the sale, Drug monitoring, patients data, analysis data of patients, customer consumption, medicine service, medicine supply details, measure pharmacy retail sales also improve the pharmacy business productivity and efficiency in their business with the help of new analysis, Digital tools, Digital prescription and continues to develop new business<sup>13, 14, 15, 16.</sup>

### 5. 3-Word phrase Frequency:

Expression	Prominence
Pharmacy retail system	81.1
Fastest growing segment	82.3
Retail pharmacy India	82.5
Improve patient care	82.6
Technology improves patient	82.7
Changing patients needs	83.9
Largest consumer antibiotics	84.2
Science based pharmacy	85.5
Generic pharmacy pills	86.9
Large number Drugs	87.1
Online affordable pharmacy	88.2
Cost effective Drugs	88.3
The pharmacy data	89.6
Medicine pharmacy planet	89.8
Related apps available	89.2
Healthcare related apps	89.2

Electronic healthcare records	90.4
Digital medicines pharmacy	91.7
Drugs data databases	91.8
Technology can be	92.1
Improve pharmacy efficiency	92.7
Improve efficiency sales	92.8
Analytics key operating	92.9
Data analytics key	93.1
Medicines development services	93.5
Research pharmaceutical services	96.2
Supply pharmaceutical manufacturing	96.2
Daily news pharmaceutical	96.3

Table no.4: 3-Word phrase Frequency

From above the 3-word phrases frequency table, the prominence of expressions is more for the expressions for pharmacy management system application are using by pharmacy retailer in business to control all daily activity of pharmacy business Technology can improve efficiency sales and Improve pharmacy efficiency. Drug data database maintained that data analytics key operating, Data analytics key-based pharmacy business and it will find related the business statistics and sale situations<sup>17, 18, 19, 20</sup>.

#### 6. 4-Word phrase Frequency:

Expression	Prominence
Speed up the pharmacy	80.1
Speed pharmacy retail store	80.4
Online pharmacy retail store	80.6
Average profit medical stores	80.9



Needs top latest technology	82.8
Pharmacy needs top latest	82.9
Technology can be used	83.6
Technology improves patient care	84.9
Growing alarm surrounding antibiotic	85.7
High quality generic medicines	86.3
Data analytics key operating	90.2
Ways improve pharmacy efficiency	90.5
Digital prescription pharmacy companies	91.9
Contract research pharmaceutical services	96.4
Hospital healthcare pharmacy system	96.4

Table no. 5: 4-Word phrase Frequency

From the above 4-word phrase frequency table, the prominence of a word like Speed up the pharmacy needs top latest technology. & technology improves patient care, Affordable best medicine retail, Pharmacists push generic drugs, Improve productivity community pharmacy, Improve efficiency sales team; technology can be used for Data analytics key operating, Implement programs increase the percentage. Moreover, it will help the medical shops retail business to increase productivity and efficiency <sup>21, 22 23, 24</sup>.

## 7. 5-Word phrase Frequency:

Expression	Prominence
Push generic drugs max profit	80.9
Pharmaceuticals market expert forecasts analysis	81.1
Growing pharmaceuticals market expert forecasts	81.2
Analytics key operating successful pharmacy	82.6
Affordable best medicine retail stores	85.9

Speed up the pharmacy retail	86.8
Store India retail provides prescription	86.9
Online pharmacy retail store India	87.8
Needs top latest technology competitive	90.2
Pharmacy needs top latest technology	90.2
Market pharmacy needs top latest	90.3
Improve patient care with healthcare	90.3

Table no. 6: 5-Word phrase Frequency

From these above frequency statistics, we can see that technology improve patient care with, Pharmacy needs top latest technology, Affordable best medicine retail stores. Tips improve productivity community pharmacy; Best medicine retail stores sell, Push generic drugs max profit, Analytics key operating successful pharmacy, Data analytics key operating successful, Pharmaceuticals market expert forecasts analysis, Tips improve productivity community pharmacy, Ways boost med reps productivity<sup>25, 26, 27, 28</sup>.

### 8. Sentiment Analysis:

Studies the personal information in an expression, that is, the opinions, appraisals, emotions, or attitudes towards a topic, person or entity. Expressions can classify as positive & negative.

Catch line	Positive or Negative
Drugs sales	Positive
Analyze data	Positive
Data driven	Positive
Improve sales	Positive
Improve productivity	Positive
Improving efficiency	Positive
Opportunities generic	Positive

Healthcare data	Positive
Electronic healthcare records	Positive
Data analytic key	Positive
Fastest growing segment	Positive
Technology improve patient care	Positive
Improve productivity community pharmacy	Positive
Analytics key operating successful pharmacy	Positive
Pharmacy needs top latest technology	Positive

Table no. 7: Sentiment Analysis

The researcher has used text mining analysis to understand the thought, opinions and suggestions from the expert related to the impact of pharmacy business management system with concerning of their performance in term of productivity, efficiency and communication, by selecting some blogs from an internet source. The blog considered as opinions. Thought or suggestions of experts which can be feeling. So based on text analysis researcher concludes that pharmacy shop and its business application is useful for the retailer as well as wholesaler. Also, it can see from the text analysis that pharmacy management system plays a significant role in the pharmacy business. So pharmacy business and its impact of various software applications in medical shop business have a positive impact on pharmacy business<sup>28 to 43</sup>.

Also, blog expert strongly suggested to the retail business they can adopt the latest technology and need to analyze business data which is helping to an organization to understand what will need to take actions for business improvement, business tracking, business monitoring and control, & business sustainability plan for future growth.

## 9. Objective:

To study of the blog expert's opinion about retails medical or pharmacy business shops associated implication for growth.

## 10. Finding:

It observed from text analysis expert powerfully recommended to the retail business they can implement new equipment, and analyze business data, or use data analytics key to understand business tracking and necessities for business developments.

## 11. Conclusion:

The researcher has used text mining analysis to understand the thought, opinions and suggestions from the expert related to the impact of pharmacy business management system with concerning of their performance in term of productivity, efficiency and communication, by selecting some blogs from an internet source. The blog considered as opinions. Thought or suggestions of experts which can be feeling. So based on text analysis researcher concludes that pharmacy shop and its business application is useful for the retailer as well as wholesaler. Also, it can see from the text analysis that pharmacy management system plays a significant role in the pharmacy business & found a significant result. So pharmacy business and its impact of various software applications in medical shops business have a positive impact on medical or pharmacy shops business.

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