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## SMART ACCOUNTING IN PHARMACY USING ERP SOFTWARE, TALLY.ERP 9

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### ABSTRACT

Health care industry which is considered as next trillion-dollar industry, have lots of scopes for the application of Lean Supply chain and Smart accounting. Lean management in Health service industry has become very common now days. Smart Accounting using software packages helps to reduce the lead time and storage costs. Software packages for Accounting helps to make the processes more lean compared to traditional methods or using Excel spreadsheet. Lean management helps in reducing the different non value added activities, increase the ease of use, reduce the lead time and other costs. The paper addresses an inventory management model for running a pharmacy where the demand rate of the customers increases with the volume of the initiatives of the Prescriber. In this model, the deterioration of the product varies depending on on-hand inventory. The volume of sales is a control variable. It is dependent on on-hand inventory and vice versa. The profit function of the pharm is formulated by the trading of inventory costs, purchasing costs, losses due to deterioration and sales team initiative costs, considering inflation and the time value of the monetary cost and profit parameters. In this paper we have taken a pharmacy in Kannur, a city of Kerala, and study how Tally software has impact on inventory management and Accounting. We also see how lean management techniques are integrated in this ERP software module of Tally.

### KEYWORDS

Lean supply chain, Cost management, Lean accounting, Tally.ERP and Inventory management.

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### INTRODUCTION

There are a growing number of studies on inventory control systems. The majority of these studies relate to production applications and backordering and shortages are allowed. Satir and Cengiz<sup>1</sup> presented a stochastic, periodic review model used to control pharmaceutical inventories in a university health centre. The objective of the inventory model formulated in that study has been taken to be the minimization of stock outs. It has been assumed that

the lead-time demand is normally distributed and the lead-time is taken to be constant. Pharmaceutical products are essential commodities in health care management. Many substitutable pharmaceutical products are present in the market. Generally, it is observed that medical representatives act as salesmen of pharmaceutical products. As a result, the sales team should be composed of qualified and knowledgeable pharmacists, doctors and marketing researchers. For this purpose, investment in the sales team and in sample medicines of a particular drug is necessary and constitutes important cost factors for the firms. On the other hand, pharmaceutical products undergo deterioration/decay over time and should not be neglected in the inventory system.

In the present article, we have made a case study analysing the impact of ERP software in pharmacy management. For this we have taken Kanavu Pharmacy which is located in Kannur District of Kerala. This is an Obstetric Clinic Side Room pharmacy where only drugs related for obstetrics and gynaecology is sold. Since some of the medicines are highly perishable and costly it is not advised to store these items in advance. It was very difficult to frequently check the stock. The clinic is best known for its quality treatment so it's not at all advisable to return the customer due to product stock out. Tally.ERP software is bought and customized in such a way that it considers sales revenue, inventory holding cost, purchasing/procurement cost, loss due to deterioration and other investments. The demand for the products has two parts: one part is fixed, which is the demand of fixed customers who have a good relationship with the firm and other part is an increasing function which can be seasonal. The profit function is maximized by customised software package of tally by trading off sales revenue, inventory holding cost, loss due to deterioration and cost of sales. Finally, optimal value of replenishment is calculated to maximize the profit function.

#### **Brief review of the literature**

In practice, it is observed that perishable pharmaceutical products under go deterioration overtime. Deterioration generally includes spoilage, obsolescence, evaporation and pilferage of the products and increases with time. Many researchers

have focused on this topic. Wu *et al*, (2009)<sup>2</sup> solved an inventory system with non-instantaneous deteriorating items and price-sensitive demands to determine the optimal sales price and length of the replenishment cycle such that the total profit per unit of time of the retailer was maximized. Chang *et al*, (2010) characterized the optimal solution and obtained the optimal results to determine the optimal order quantity and the optimal replenishment time under a discounted cash-flow (DCF) approach. Taleizadeh *et al*, (2015)<sup>3</sup> analysed a Vendor Managed Inventory (VMI) model for a two-level supply chain to obtain the optimal retail price, the replenishment frequency of raw material, the replenishment cycle of the product and the production rate, when both the raw material and the finished product have different deterioration rates. Sarkar (2012)<sup>4</sup> developed an economic order quantity model for time with a varying demand and deterioration rate of the items, including trade credit financing and different discount rates on the purchasing costs. Uthayakumar (2013)<sup>5</sup> investigated a two-echelon pharmaceutical supply chain inventory model for multiple products, considering permissible delays in

Payment and the inventory lead time under some limitations. Research in supply chain management of pharmaceutical products has been extensively applied in the field of healthcare management. In a pharmaceutical supply chain system, the integration of all performances involved with the flow of products from raw materials to the end customers improves the relationship with the channel members to achieve sustainable competitive opportunities. According to Apteland Pourjalali (2001)<sup>6</sup>, the management of pharmaceutical products is a vital managerial issue in health care industries.

#### **ERP Software: Tally.ERP 9**

The Tally.ERP 9 we selected has Complete Business Management Solution. We also have a hard-earned reputation for empowering businesses with stable, effective software products. Tally.ERP 9 has all the features required for high-performance business management. Some of the advantages of using Tally.ERP 9 are low cost of ownership via quick

implementation, Integration and Tally customer Support centre.

Tally.ERP 9 with its numerous built in capabilities and functionalities is flexible enough to adapt to rapidly evolving business processes. Features can be implemented as your business grows Solutions can be designed, developed, deployed and implemented within a short span of time. Solutions can be implemented incrementally Inter face with other business applications, easily maintainable with limited resources, trusted and value for money.

Technology behind Tally.ERP 9 is very advance done. Three-tier architecture provides immense flexibility. Native scripting language - Tally Definition Language (TDL) is used for developing the software. In built Object Oriented Database Management System (OODBMS) helps to properly manage the database. Some of the benefits are like robust and reliable engine, Very small foot print, No additional third party licenses are required, Low hard ware infrastructure requirement.

#### **Accounting Software vs. Excel Spread-sheets**

Some argue that off the shelf accounting packages aren't as good as Excel spread sheets to manage your finances. Although Excel can be customized to a way that could work for you, there are multiple reasons why soft ware ranks supreme over the Excel spread sheet method.

#### **Ease of use**

A Microsoft Excel spreadsheet is basically a blank slate on which you can store important financial figures. You can type in any numbers and use rudimentary calculations to create the figures you want to tally. However, if you aren't an Excel expert, then you won't know how to tabulate your finances. A safer option is to use accounting software, like Tally.ERP 9. This more powerful software is just as easy to use as an Excel spreadsheet, with an added benefit of built-in analysis and automating features. You don't need an accounting degree to keep your books when using Tally.ERP 9.

#### **Visibility in to your fiscal health**

Your financials may seem easy to track in Excel at start-up, but after years of experience, you begin to generate a much larger volume of figures. Tracking and analyzing important financial data becomes

harder and more time consuming. With Tally.ERP 9, you have built-in analysis and reporting features that can provide you with balance sheets, income statements, profit/loss statements, and reports on your products or services. A few clicks of the mouse and you can share reports with regulatory agencies or review the data that you need to make the quick business decisions that drive business.

#### **Improve productivity and profitability**

Tally.ERP 9 can offer visibility into business operations that can improve productivity and profitability. Monitor supply chain, manufacturing operations, project or services management, human resources and other business elements in this single software plat form. Learn what products or services are your most profitable, streamline operations and keep on track with your strategic goals. Excel simply can't provide this type of insight.

Excel is a great program for storing small amounts of simple data and it can provide basic levels of accounting functions. As your business grows and you have more data to track and monitor, you'll find greater productivity and profitability with a more comprehensive software solution like Tally.ERP 9.

#### **Different processes with Tally.ERP 9**

The pharmacy holds around 40 medicines which are very essential for pregnant ladies. Since it is a well-known clinic in the city the medicines gets sold very soon. So it was difficult to manually account these things. Keeping a separate staff became tough because of less availability and demand for skilled accountant in the city. Tally software once bought is very useful for getting the real time graphs and status and properly manages the stocks and accounts.

A new ledger is created for accounting pharmacy. All details of the medicines are added including the cost price, Selling price, Discount, Profit, MRP, DAP, Tax and expiry dates. The reordering limits for each medicine is set. During the billing process the balance stock will be visible. If the stock goes below the limit then some indication is shown to order stock. There is another option of negative stock also in Tally.ERP 9 when the purchase order is not entered in the stock and even then the item is billed at that time the stock goes negative. This will become positive soon after entering the stock. It is

also becomes more user friendly, when user opens tally its always guide the user to complete the work as much as faster. Always tally is the best accounting software to keep our accounts safely.

By using this ERP software many reports can be generated easily. From Figure No.1 You can see that Balance sheet, Profit and loss A/C, stock summary and other ratio analysis. We can also link this account with other accounts of the clinic and get the overall profit limits.

With the help of this software we can easily identify which medicine is moving faster and which one should be replaced to get maximum profit etc. Different other options for smart accounting are given is below Figure No.2.



Figure No.1: Gateway features of Tally.ERP 9

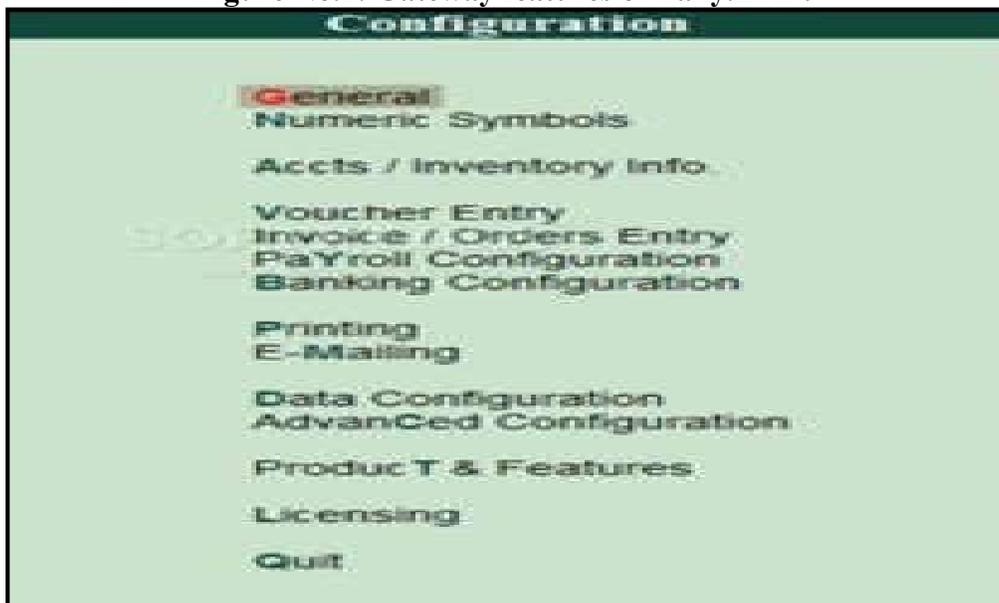


Figure No.2: Different options in Tally.ERP 9

## CONCLUSION

The Tally.ERP 9 software which is used in accounting is highly advanced. While the traditional method takes a longer time and effort to account and maintain the stock. In this paper we have also compared the use of MS Excel Spreadsheet to Tally.ERP 9 for accounting. Accounting vouchers and Inventory Vouchers can be easily created in a click. Other main advantages are generation of different reports such as balance sheets, Profit and Loss A/C, Stock summary and other ratio analysis. By using this software the Pharmacy can memadele an and time, effort and money can be saved.

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## CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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