

Data Profits Inc.

Powerful SaaS Software Provides Retailers with Superior ROI via Unique Forecasting & Replenishment Business Intelligence Capability



Seasonal Indexes are a great tool that can be easily used to manage inventory and improve replenishment, allocations and new product releases. Seasonal Indexes used correctly result in sales growth and fewer out-of-stocks. Hello, Captain Obvious. The unfortunate truth is many of you fail to use seasonal indexes where you should today. The small group that does use seasonal indexes often fails to adjust the indexes when calendar events happen in different business fiscal weeks this year compared to the year the index was created. Last, Seasonal Indexes fail when you use the

wrong math formula to create the seasonal index or you or your software use the wrong demand sales data to build the seasonal index. The results from these issues are out-of-stocks, lost sales and mis-spent inventory dollars.

Build Your Seasonal Index with the Right Formula and Demand Data.

A seasonal index is in reality a multiplier used with the base demand forecast. The seasonal index is always based on a factor of time, a function of the calendar. Trend Indexes are the other multiplier used and sometime confused with seasonal indexes. There are two things to consider when building an index, the math and the type of demand sales used in the math. The math is simple: $(\text{Each Period Sales} / \text{Total sales}) * \text{Total Number of periods}$. If you need a weekly index, 52 periods, a monthly index 12 periods.



Be careful that the days within the period are equal or you will get some strange curves that may not 'look' correct. For example, if you have a 4-5-4 calendar and try to build a monthly index the results will be

wrong because one month has seven additional days. These seven 'extra' days of sales will weight the index in the '5' month and the results will be a disaster waiting to occur.

- 1- Sum the total sales for the 52(3) weeks (periods).Seasonal Index Formula
- 2- Divide each week sales by the sales total
- 3- Multiple the result in step 2 by the count of periods (52 for weekly).
- 4- Test Your Index, the sum of the indexes should round close to the count of periods

The example below is using quarters, there are 4 quarters in a year meaning 4 periods of sales.Period 1 index is (period 1 sales 25 / total sales 165) * number of periods 4 ==>> (25/165)*4 = .606

Seasonal Index formula is (period sales/ total year sales) * number of periods

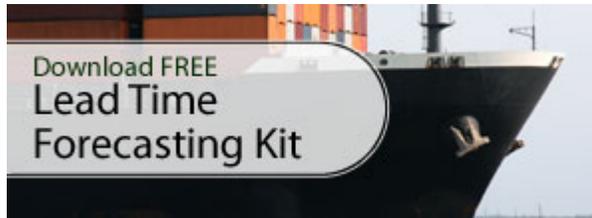
| Period Number | 1 | 2 | 3 | 4 | |
|---------------|-------|-------|-------|-------|------------------|
| Sales | 25 | 55 | 75 | 10 | 165 Total Sales |
| Index | 0.606 | 1.333 | 1.818 | 0.242 | 4 Sum of Indexes |

While the formula is simple, the issue is often what sales data to include. Many people that have sales forecast systems do not have the sales broken out by sales type: regular, lost, promotion, and closeout. If you lump all the sales types together to build the seasonal index, the index will be wrong. If you ran closeout pricing on a group of products and don't plan to repeat the sale every year in the same fiscal week, then the index will rise and suggest a higher forecast than what is accurate. You will look at the index and total sales last year and buy additional inventory at full price based on historical closeout sales. The key to creating an index is to group the products together by seasonal patterns and use only Regular and Lost Sales Demand data.

Yearly Holidays and Events Change Fiscal Weeks each Year

It is a fact that many holidays and seasonal events happen on different fiscal weeks. Our recent blog hits the details: Seasonal Index Lessons from History. Review the fiscal week numbers where Thanksgiving and Easter occurred last year and the year before – they are different. Reviewing next year, we see Easter makes a dramatic change in where it appears in most fiscal calendars. If the Easter peak is in fiscal week 15 and you want to land holiday goods 8 weeks before Easter, the seasonal index coupled with the right software can easily manage the task. The problem will be next year when the holiday is 8 or more weeks farther into the year, that means more inventory dollars and shelf space go misused for 8-12 weeks. The other issue is many related products that sell with Easter probably need a seasonal index but

are missing an index. Keep in mind that a seasonal index can have several peaks and valleys. Think about baseball gloves, there will be several peaks and valleys in the same year for spring, summer, and fall baseball. Many products have seasonal patterns that need to be identified without assumptions. Examples of surprise seasonal curves include: windshield washer fluid (winter), and white shoe polish (spring, fall). There are many examples of odd seasonal curves, a computer program is the best choice to solve the question for you. While the seasonal index curve will tell you when in the year the sales peak or drop; the base demand forecast will still account for the size of the sales.



Skip Seasonal Indexes and Pay a Price

Many people do not use seasonal indexes at all. You do this because you believe that this year/ last year sales is enough of a comparison to understand the business of inventory. Do you remove the impact of close out and promotion sales? Do you add back lost sales in your this year/ last year comparison? Do you know for certain the promotions will repeat from last year on the same fiscal week this year; otherwise you need to adjust those in your comparison also. How are you managing this for all your products at all your locations? This old school top down push management will continue to cost you more money and lost opportunity while your competition switches to modern software that can automate these processes using bottom up – pull methodology.



Are you ready to 'Tighten the Links in Your Supply Chain?™'

Seasonal Indexes are easy to understand and implement with low cost and high returns. Stop accepting poor forecasts, out-of-stocks and expensive inventory operations. Contact us for a free review of your seasonal index opportunities and issues. We have the experience and tools to help you improve your

business. Also, request a demo to learn how our iKIS software can reduce out-of-stocks and increase sales, installed in 30 days at a fraction of the cost of legacy systems.

Request Demo

