

THE COSTS OF INACCURACY

One part of the case for RFID



The Benchmark - 95% minimum SL, 1 day LT

- The size of a blob shows the amount sold.
- A min 95% service level (green) achieved 97.6%
- Items understocked by one are shown red. These only achieved 85% SL, and thereby lost about 13% of sales.
- Items overstocked by one are shown amber. They achieved 99.6% SL, so increasing sales by 2% (and stock by 50%!) The extra item only sells once every 14 months.
- Inaccuracy is a prime cause of over- and under-stock, but not the only one.

Background

We can perfectly calculate the 3 way trade-off between Service Level, Inventory (in this case shop stock), and Replen Time.

In this example the calculation is based on 5.5m EPOS records, corrected for any sales lost through out-of-stock.

Original Use

To set the minimum target store stock (called a BTL) by balancing the twin risks of lost sales vs. markdowns, through too low or too high a BTL, respectively.

Further Use

If we can calculate the service level (at a particular rate of sale and lead time) when the stock is correctly set, we can also calculate it when the stock is incorrect.

This gives an insight into the downsides of stock inaccuracy.

SUPPLY CHAIN TOOLS' MISSION

Alarmed at the poor record of retail implementation, founder Bill Brockbank set out to bridge all the gaps between logisticians and their myriad customers.

With 'infinite bandwidth and free processing' pretty much upon us, the computer provided the power while Bill's mathematical bent and 30+ years in logistics provided the rest.



Developing a wide variety of engaging, interactive, graphic models, Supply Chain Tools has succeeded in ways we could not have imagined.

Buy-in, be that across functions or skill levels, has been beyond our wildest dreams.

Most tools are so fast that they can be run interactively with the client.

This example is just one of about 100 such tools covering every possible aspect of Logistics.