

Key Benefits of Service Level Stratification

by Carl Herlitz

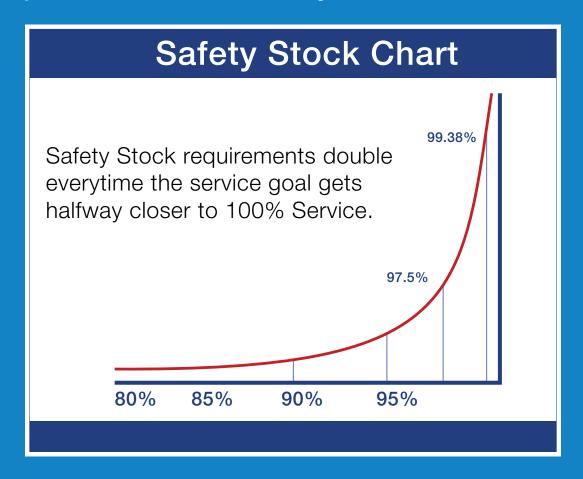


There are three primary benefits to stratifying Service Level Targets (Fill Rate):

Improved Profitability

Improved Customer Service Improved
Buying
Signals to
Buyer

Improved Profitability



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Improved Profitability

IMPACT uses a proprietary, yet self-evident, approach to setting service level targets.

While no company can profitably achieve 100% service, the goal is to set service level targets in a way that maximizes profits and yet allows for Marketing and/or Sales to provide input. The last step in configuring a vendor in HIMPACT is to run Service Level Analysis, or SLA. This powerful simulator calculates the carrying cost of the safety stock required for each SKU at each warehouse for every service target between 80-99.9%.

It then calculates the cost vs the top line revenue at each of those Service targets. Keeping in mind that for a typical item, every time one gets halfway closer to 100% Service, e.g. changing from 95% to 97.5%, the safety stock required to meet that new goal will double. We then calculate a carrying cost on that difference in safety stock. On the other hand, the move from 95 to 97.5 should result in an increase in top line sales of 2.5%. Taking into account the gross margin of each item, we see when profit is maximized. SLA recommends its target.

This can lead to significant increases in profitability, especially when you compare this strategy of setting all SKUs to their most profitable target versus that of having all SKUs at the same target.

Calculate the SERVICE STOCK for each SKU between 80-99.9%

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Improved Customer Service

The more typical technique for doing this type of ABC analysis is usually done without taking profitability into account. Some companies, which don't have access to a simulator like SLA, use velocity alone to set their safety stocks. For example, items that sell more than 2,000 cases per month are considered A items and they will be assigned 3 weeks' safety stock as opposed to items that sell 1,000-1,999 per month (B items) which will get assigned 2 week's safety stock, (C Items get 1 week). When you consider that the higher the volume the more smoothly items tend to sell, which item group actually needs more safety stock? The slower moving C items do. So velocity based ABC analysis is not only bad for profitability but it is also ineffective for achieving the desired result. You would be overstocked on you're A items and understocked on your C items. Since most companies have many more C than A items, that is a lot of items that show up on the Daily Outs Report.

With regard to the C items, HIMPACT's SLA will find the diamonds in the rough. Any slow selling item that has a stable demand pattern, and may even have a healthy gross margin, will see a service target recommendation closer to 100% than one would normally expect. The reason is that a "Cost of Lost Sale" for this type of item is higher than the carrying cost of adding another case. Remember these are typically slow movers so a case could be 15-60-100 days of supply. Therefore, it is more profitable to run such an item at a higher service than a lower service.

"A" items, on the other hand, get the right safety stock assigned to them. Again, since they tend to be more stable movers, their demand deviation is small thus the safety stock required to achieve a higher service target is also quite small. Sometimes, however, these A items face the tough price competition and so even though they are smooth sellers, they have very small margins. Items with small margins have a lower "cost of lost sales." In some cases SLA may recommend that an A item be managed at a lower service target than Sales or Marketing would like. To this end, SLA allows the user to simulate the profit of any service target.

ABC analysis is not only bad for profitability but it is also bad for achieving the desired result.





Improved Buying Signals

IMPACT looks at every item on every vendor each night and determines if the overall service level objective of the vendor line is about to be in jeopardy. When HIMPACT projects that ordering today will have the service level attainment meet the service level goal, that is the perfect order point and that is when HIMPACT will classify the order as "Due." If it were that simple, you wouldn't need buyers.

When a company stratifies its service goals by SKU, then the buyer can get a more colorful set of buying signals. For instance, the vendor line may still have 4 days before the overall service objective is in jeopardy but 7 "A" items have already passed their Order Points and these items will be the ones which will, most likely, run out before the next delivery comes in

even if you ordered today. The buyer may choose to place this order "Early." Compare that to a buying signal of a 4 day delay at the order level but there are zero A items in jeopardy, zero B items in jeopardy but 3 C items are running low. At a glance the buyer is already more informed.

Only manufacturers will order when any single item "runs away." They need every component in order to make a widget. Conversely, distributors have to meet vendor minimums as well as save money on freight. As a result, they can almost never buy when just one item "runs away" from the rest. The guiding principle behind HIMPACT's "Due order logic" is called Service Point Theory and was invented by IBM and Arthur D. Little in the early 60's.

Service Level	SKUs	Service Level
99.90%	7	99.90%
99.80%	9	99.80%
99.70%	17	99.70%
99.60%	22	99.60%
99.50%	135	99.50%
99.40%	30	99.40%
99.30%	35	99.30%
99.20%	32	
99.10%	25	
99.00%	74	
98.90%	1	
98.50%	81	
98.00%	98	
97.00%	92	
96.50%	1	
96.00%	3,715	
95.50%	1	
95.00%	627	

Service Level	SKUs
99.90%	386
99.70%	1
99.60%	3
99.50%	525
99.40%	63
99.30%	84
99.20%	113
99.10%	110
99.00%	383
98.50%	575
98.00%	640
97.00%	513
96.00%	588
95.00%	7,234
94.00%	26
93.00%	13
92.00%	15
91.00%	1
90.00%	22

SKUs

433

5,568

16,287

351

4,392

654

SKUs	Service Level	SKUs
386	99.9%	23
1	99.8%	37
3	99.7%	8
525	99.6%	4
63	99.5%	28
84	99.4%	40
113	99.3%	47
110	99.2%	68
383	99.1%	59
575	98.5%	153
640	98.0%	101
513	97.0%	95,227
588	96.0%	38
7,234	95.0%	28
26	94.0%	34
13	93.0%	19
15	92.0%	10
1	91.0%	10
22	90.0%	5

Here are a few examples of how extensively some HIMPACT customers are stratifying their service goals. This is a company that has just started to stratify!



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About Herlitz Inventory Management

Delivering Innovative Solutions

The primary goal at Herlitz Inventory Management is to deliver a Supply Chain solution to better serves our customers and build financially stronger companies; delivering the optimal financial results. This is not limited to optimizing inventory and profits, but to also provide insights into your business that help you become more purchasing savvy, improving your competitive position.

We have leveraged our decades of customer experience, understanding of buyer's informational needs, and scientific knowledge of forecasting and replenishment to create a system that is easy to execute so productivity greatly increases. We provide the most user-friendly, effective purchasing application, expertly delivered professional training, and superior services to support our long term partnership.

A client's success is a product of superior customer engagement. At Herlitz IM, we are customer obsessed! We are adaptable, relevant, and appreciate the opportunity to work with our customers for their insight to continue to develop our best of breed solutions.

Growth is born from innovation—we work with our customers to co-develop new ideas and methods, incorporating them into the base product. Customer insights reveal what people want and need. Your insights are essential to the continued improvement of HIMPACT for all customers. We know that we succeed only when our customers succeed.

Along with our customized training and the best support possible, we want to enhance your business by making it more profitable, supporting you to provide your customers what they want, when they want it.

Our Vision

Optimize & Deliver the right products to the right place at the lowest possible cost, allowing your team to meet or exceed customer expectations.

HIMPACT, a best-of-breed solution for Wholesale and Retail, provides additional insight and value beyond your legacy or ERP system. Our company's decades of experience with hundreds of customers, provides us the knowledge, insight, and experience to lower inventory, while improving sales and profitability.

- Improve Supply Chain Execution
- Optimize Inventory and Costs
- Increase Buyer Productivity
- Improve Customer Service

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