

Key Benefits of Service Level Stratification

Three primary benefits to stratifying Service Level Targets (Fill Rate):

- Improved Profitability
- Improved Customer Service
- Improved Buying Signals to Buyers



A BFC Software Company

IMPROVED PROFITABILITY

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

While no company can profitably achieve 100% service, the goal is to set service level targets to maximize profits while enabling Marketing and 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 Service target. For a typical item, every time its service level moves halfway closer to 100% (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.

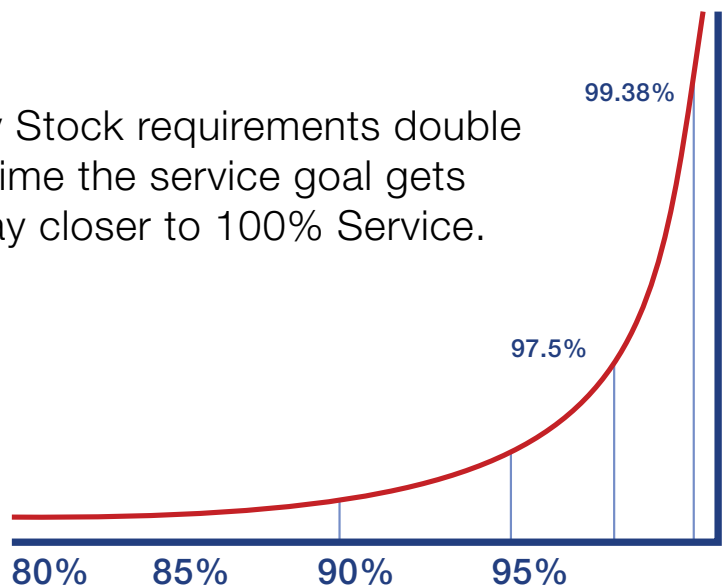
The move from 95% to 97.5% should increase top-line sales by 2.5%. Taking into account the gross margin of each item, we see when profit is maximized.

SLA recommends the most profitable target for each SKU individually. This can lead to significant increases in profitability, especially compared to the common strategy of having all SKUs at the same target.

Calculate the service stock for each SKU between 80–99.9%

Safety Stock Chart

Safety Stock requirements double everytime the service goal gets halfway closer to 100% Service.





IMPROVED CUSTOMER SERVICE

The more typical technique for doing this type of ABC analysis is usually done without taking profitability into account. Some companies, that 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 of safety stock. Items that sell 1,000–1,999 per month are termed *B items* and assigned 2 weeks of safety stock. The remaining *C items* get 1 week of safety stock.

The problem with this method is that higher-volume items sell more smoothly, whereas slower-moving *C items* would require more than 1 week of safety stock. Therefore, velocity-based ABC analysis is not only bad for profitability but is also ineffective for achieving the desired result. You would be overstocked on your *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.

SLA allows the user to simulate the profit of any service target.

HIMPACT's SLA will find the diamonds in the rough from the *C items* category. SLA will recommend that slow-selling items with stable demand patterns (especially the ones with a healthy gross margin) will see a service target recommendation closer to 100%.

The reason is that the cost of a 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, 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, these *A items* may face tough price competition. Even though they are smooth sellers, they have very small margins. Items with small margins have a lower cost of lost or missed sales. As a result, SLA may recommend that some *A items* be managed at a lower service target than Sales or Marketing would prefer. However, this is intentional and will result in greater profitability.

Velocity-based ABC analysis is not only bad for profitability but is also bad for achieving the desired result.

IMPROVED BUYING SIGNALS

HIMPACT checks every item for every vendor each night and determines if any of the overall service level objectives will be in jeopardy. HIMPACT then classifies an order as “due” when the service level attainment meets the service level goal. So, if ordering today will result in achieving a desired service level, the order for that item should be placed today. There are other factors at play though. If it were that simple to order inventory on time, you wouldn’t need a team of 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 optimal reorder points. These items will now most likely run out before the next replenishment delivery arrives, even if you order them today. In such scenarios, the buyer may choose to place these orders early.

Service Level	SKUs	Service Level	SKUs	Service Level	SKUs	Service Level	SKUs
99.90%	7	99.90%	433	99.90%	386	99.90%	171
99.80%	9	99.80%	5,568	99.70%	1	99.80%	69
99.70%	17	99.70%	16,287	99.60%	3	99.70%	60
99.60%	22	99.60%	351	99.50%	525	99.60%	48
99.50%	135	99.50%	4,392	99.40%	63	99.50%	50
99.40%	30	99.40%	654	99.30%	84	99.40%	528
99.30%	35	99.30%	39	99.20%	113	99.30%	237
99.20%	32			99.10%	110	99.20%	177
99.10%	25			99.00%	383	99.10%	195
99.00%	74			98.50%	575	99.00%	1196
98.90%	1			98.00%	640	98.50%	1334
98.50%	81			97.00%	513	98.00%	1279
98.00%	98			96.00%	588	97.00%	7752
97.00%	92			95.00%	7,234	96.00%	318
96.50%	1			94.00%	26	95.00%	162
96.00%	3,715			93.00%	13	94.00%	108
95.50%	1			92.00%	15	93.00%	101
95.00%	627			91.00%	1	92.00%	204
				90.00%	22	91.00%	11
						90.00%	4

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” because they need every component to make a widget. Conversely, distributors have to meet vendor minimums as well as save money on freight. As a result, they can seldom 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 60s.



ABOUT: HERLITZ INVENTORY MANAGEMENT

Delivering Innovative Solutions

Our mission is to remove the guesswork from purchasing and simplify the ordering process by making consumer demand more predictable. Our services not only optimize inventory and profits but also provide insight into retailers and distributors' businesses, which help improve their competitive positions.

By leveraging our decades of customer experience, understanding of buyer's information needs, and scientific knowledge of forecasting and inventory, we create tools that ease your execution and increase your productivity. We aim to provide the most user-friendly and effective purchasing applications, knowledgeable and professional training, and superior services to support our partnerships.

We know that we succeed only when our customers succeed. Success is also a product of customer engagement. At Herlitz IM, we are customer-obsessed! We look to our customers for their insight to continue developing new solutions. Customer feedback enables us to co-develop new ideas and methods and incorporate them into our solution.

Along with our customized training and highly responsive support, we want to enhance your business by making it more profitable. Let us show you how to better provide your customers with what they want when they want it.

Our Vision

Optimize and deliver the right products to the right place at the lowest possible cost, allowing you 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. Experience with hundreds of customers in a wide variety of industries provides us with 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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