

# SKU Rationalization

## A Technique for Inventory Optimization in the Retail Sector

Inventory is one of the most significant investments in the retail sector. A \$4.0B arts and craft specialty retailer may hold up to \$0.9B of inventory while a \$45B pharmacy retailer may invest as much as \$8.5B in inventory.

Therefore, in order to maximize the Return on Investment (ROI), every retailer should ensure that extraneous inventory investments are kept to the minimum.

Facts confirm that up to 35-40% of the total inventory is stuck in the non-performing, slow moving Stock-keeping units (SKUs), whose cumulative contribution to sales is less than 5%. This phenomenon is known as the long tail of the supply chain.

One of the ways to reduce these unnecessary inventory investments is to optimize the assortments.

**“SKU Rationalization is an important technique in inventory management that helps retailers optimize their assortments by decommissioning some of the non-productive merchandise.”**

Based on one or more parameters such as sales, gross margins, space productivity and so on, the non-performing SKUs may be selected and subsequently

phased out. As a best practice, the Category Management teams should be deeply involved in the buy-in process.

Change Management is an important component of this exercise and both a top-down approach and a bottom-up approach must be followed to make the SKU Rationalization initiative successful.

---

A \$4.0B arts and craft specialty retailer may hold up to \$0.9B of inventory while a \$45B pharmacy retailer may invest as much as \$8.5B in inventory.

Facts confirm that up to 35-40% of the total inventory is stuck in the non-performing, slow moving SKUs, whose cumulative contribution to sales is less than 5%.

---

## About the Authors

### Rahul Mittal

Rahul Mittal is a senior member of TCS' Retail Supply Chain Practice, and focuses on the Retail Inventory Management domain. He specializes in managing retail inventory reduction initiatives to help large retail organization realize quick working capital improvements by pulling the relevant inventory levers that results in significant inventory savings. He has a comprehensive US-based management consulting profile with strong experience in retail supply chain. He can be contacted at rahul7.m@tcs.com

### Navneet Sharma

Navneet Sharma is a Supply Chain Consultant with TCS' Retail ISU and has 15 years of cross-functional, cross-industry experience ranging from Business & IT Consulting to Programme Management spanning Business Process Improvements, Supply Chain Management, Demand & Supply Chain Transformations and ERP & SCM products implementations. He has a Post Graduate Diploma in Finance, B.E and is certified in Production and Inventory Management from APICS. He is also a PMI Certified Project Management Professional. He can be contacted at navneet.s@tcs.com

### Tarun Batra

Tarun Batra is a member of TCS' Retail Supply Chain Consulting practice. He has worked across diverse geographies, with some of the world's established organizations in their supply chain initiatives such as Inventory Optimization, Demand Forecasting and Logistics Process Optimization. He specializes in helping large specialty retailers identify and implement ways to improve their financial and operational performance by optimizing their supply chains. He holds a Masters degree in Supply Chain Management and has work experience primarily in the areas of Business Consulting, Business Analysis and Project Management. He can be contacted at tarun.batra@tcs.com

### **Udit Maheshwari**

Udit Maheshwari is a PMP, ITIL, OCA certified associate with an Engineering Degree in Computer Science. In his eight years of industry experience he has worked closely with Business & IT as a Functional Consultant, Business Analyst, Project Manager and Process Consultant across various domains and geographies. Currently he is involved as a Functional Consultant in the supply chain domain, where he has assisted several international clients to realize reductions in inventory related costs by implementing various inventory optimization solutions. He can be contacted at [udit.m@tcs.com](mailto:udit.m@tcs.com)

## Table of Contents

Life Cycle of SKU Rationalization	6
Stage1: Inception	6
Stage2: Planning	7
Stage3: Execution	8
Stage4: Realization	9
Challenges and Limitations of SKU Rationalization Projects	11
Other Inventory Levers	12
TCS' Value Proposition	15

## Life Cycle of SKU Rationalization

SKU Rationalization begins with scoping and benefit quantification and ends with the realization of the identified benefits. The life cycle of a SKU Rationalization initiative involves the following steps:



### Stage1: Inception

#### ■ First Level Scoping and Benefit Quantification

Scoping refers to the identification of non-performing SKUs, and involves defining a criterion for identifying and sorting underperforming (or non-performing) SKUs on the basis of a set of parameters such as the annual sales (units and/or dollar amount), gross margins, space productivity, inventory turnover ratio, sales to inventory ratio, shelf life and so on.

---

One of the largest specialty retailers of Northern America scopes its SKUs on the basis of a performance index computed from annual sales dollars (33.3% weightage), gross margins (33.3% weightage) and space productivity (33.3% weightage).

---

Sensitivity analysis is performed on the sorted SKU list to determine the bottom “x%” SKUs as the potential scope for rationalization. This scoping analysis can be performed at any level (corporate, department, category, sub-category, or store-SKU).

A high level view of the potential benefits of SKU Rationalization can then be derived from the first level analysis by summing up the reduction in inventory from discontinuing the identified SKUs and

subtracting from it the potential loss of sales computed using the demand transferability factor.

#### ■ Business Case Development

A business case lends weight to the implementation of an initiative or an exercise. It cites the business problem or opportunity and includes a list of various available solutions, their associated costs and benefits and the recommended solution. While creating a business case, a feasibility study of each solution may be undertaken to calculate how best the solution addresses the business problem or opportunity.

Usually, a number of opportunities emerge from an analysis of the potential drivers of inventory, but it is vital to prioritize and identify the key inventory opportunities on the basis of ease of implementation, success of change management and value quantification in order to maximize the benefits from the exercise.

The business case for a SKU Rationalization initiative defines the assortment optimization opportunity at different levels of organization, summarizes various approaches/point of views to scoping, mentions the associated scope, risks and potential benefits and presents the summary of the recommended approach.

After presenting the business case to the sponsor or the customer, an organization-wide roadmap for the initiative must be drafted, taking into account the retailer's strategic and inventory management objectives. A roadmap must outline:

- Project Timelines
- Sequence of project-/division-/department-wise rolling out plan
- Key milestones

## **Stage2: Planning**

### ■ Preparation of Detailed Implementation Plan for SKU Rationalization

Once the retailer has signed off on the business case and roadmap for the SKU Rationalization initiative, a detailed implementation plan should be developed.

Key components that should be considered in the development of a comprehensive implementation plan include:

- Scope of Implementation: Detailed Work Breakdown Structure (WBS) plan with Responsibility Assignment (RACI) matrix
- Staffing Plan: Staffing requirements and organization structure
- Governance Model: What to communicate, when to communicate, and whom to communicate to
- Benefit Measurement Approach: Identification and selection of benefit measurement methodology. The document should cover detailed methodology, definition of the data points to be captured, and the schedule/timelines of benefit measurement along with the communication plan.

Now, most of these components are usually present in any implementation plan; the success of an initiative such as SKU Rationalization however greatly depends on how robust the Benefit Measurement approach is - that is, how well the benefit measures or KPIs have been defined and how frequently they are monitored.

A well-defined Governance model, too, is an indispensable component of the detailed implementation plan of a successful SKU Rationalization initiative.

### Stage3: Execution

- Buy-in from Stakeholders

Once the SKUs have been identified for delisting, a buy-in should be sought from the respective category managers and buyers. This is the stage where consensus should be reached at all levels of management (not just the senior management).

Buy-in typically addresses the exceptional SKUs that provide a competitive edge to the retailer and are therefore the “must-haves,” irrespective of their margins and sales.

Generally, category managers take into consideration forecasts, promotional events and their own market intelligence about the SKUs (in addition to the sales and inventory figures at various channels), to either accept or reject the SKUs within the scope for delisting or at times even suggest the ones outside the scope to be considered for rationalization.

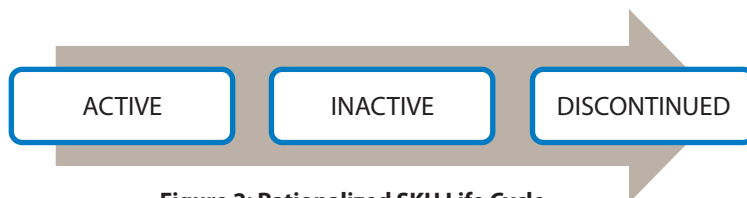
At times, there is a lot of push back from the category managers, opposing the delisting of several SKUs. In such cases, a threshold should be defined, and the category managers should retain the right to alter the list of “to-be-delisted SKUs” within the defined threshold.

Change management plays an important role in the buy-in process of SKU Rationalization, especially because most SKU Rationalization projects are not successful. SKU Rationalization does not solve the problem of SKU proliferation because buyers and suppliers have a tendency to build up/introduce new SKUs from time to time. It is therefore extremely important to regularly monitor the number of SKUs in each category to ensure they are within the defined thresholds, in order to make the initiative successful.

- Execution of the SKU Rationalization Programme

The execution of an SKU Rationalization programme involves the systematic discontinuation of rationalized SKUs and the depletion of the associated inventory.

Rationalized SKUs end their life cycle in the following manner:



**Figure 2: Rationalized SKU Life Cycle**

The reason for having the intermediate status “Inactive” is to buy some time to deplete the inventory incrementally, preferably through mark-down sales. The replenishment should however be stopped immediately.

There may still be some movement of inventory from warehouse to store. Once the retailer depletes its inventory completely from all its warehouses and stores, it may mark the SKUs as “Discontinued” in the system (as the entire inventory, by then, has been flushed out of the organization’s supply chain).

The key to success for any SKU Rationalization programme is the continuous and rigorous monitoring of the performance metrics (detailed in Stage 4: Realization). Incremental progress made in terms of the



benefits realized during the programme should be clearly visible and acknowledged by the key stakeholders before the programme can be called a success.

Implementation of the SKU Rationalization program triggers a number of subsidiary tasks that also need to be well managed to guarantee the end-to-end support for the programme. One example of these subsidiary tasks is the redrawing of planograms, since SKU Rationalization results in a number of holes in the planogram that need to be filled.

Another example is the need to develop a markdown strategy for the rationalized SKUs, since these may carry enormous inventory that may go beyond the reasonable timeframe to deplete at the regular sales rate. In such circumstances, an additional push is required to flush out the excess inventory. One such catalyst could be a markdown on pricing. This may provide that additional push to improve the sales (at the cost of some loss in gross margins). This phenomenon is very common in the specialty retail business.

One of the specialty retailers of Northern America makes use of the following reports to monitor and control its SKU Rationalization programme:

---

The key ingredients of a successful SKU Rationalization programme are the transactional and operational level inventory positioning reports, the decision support mechanism for the planogram adjustments and markdown strategy.

---

- Weeks of Supply (WOS) Analysis
- Exit Strategy for the Rationalized
- SKUs at Store-SKU level POG wise
- Decision Support System
- Planogram Redraw
- Markdown Planning
- Facing Optimization

#### Stage 4: Realization

##### ■ Benefit Measurement of the SKU Rationalization Programme

One of the key success factors for a SKU Rationalization programme is the development and monitoring of inventory reduction metrics. The inventory reduction measurement mechanism should be simple and easy to quantify so that the key stakeholders are able to measure the success of the programme on an incremental basis.

Although the benefit measurement mechanism is customized for each retailer depending on its line of business and dynamics, some of the more commonly used benefit measurement mechanisms include:

##### 1) Inventory Depletion Measurement for Rationalized SKUs Only

This approach tracks inventory depletion of the rationalized SKUs. This provides a quick understanding of the direct impact on the inventory of the rationalized SKUs and thus helps to incrementally implement and realize the business case on a week-to-week basis.

---

<sup>3</sup> 2010 Digital Year in Review, comScore

This approach is widely used for weekly meetings to monitor and control the SKU Rationalization Programmes. The buyers/planners and the category managers are the key stakeholders in the programme. This approach also helps the mid management team develop and implement an exit strategy for the rationalized SKUs. However, this limitation of this approach is that it does not provide a holistic view of inventory at the organization level. This drawback can be mitigated by some additional metrics that are explained in approaches 2 and 3.

## 2) Holistic View of SKU Rationalization Impact at the Organization Level

This measurement provides a holistic view of the inventory and is used for tracking and decision making purposes at the organization level. This view helps drive the overall inventory strategy at the organization level. It purposely avoids providing a silo view of only those SKUs that are rationalized, just to make sure that the bigger picture view of the impact is not sidelined.

Part of SKU Rat Scope	SKU Count	Retail Sales \$ for trailing 52 Weeks	COGS for trailing 52 Weeks	Store Avg Inventory \$ for trailing 52 Weeks	DC Avg Inventory \$ for trailing 52 Weeks	Supply Chain Avg Inventory \$ for trailing 52 Weeks	Store Current Inventory \$	DC Current Inventory \$	Supply Chain Current Inventory \$
(All Figures are in Millions \$)									
<b>Baseline as on Kick-Off Date</b>									
Yes	4,000	\$450	\$235	\$100	\$80	\$180	\$95	\$78	\$173
No	36,000	\$4,050	\$2,000	\$900	\$700	\$1,600	\$950	\$720	\$1,670
<b>Measurement as on End of Qtr 1</b>									
Yes	3,200	\$380	\$190	\$85	\$75	\$160	\$75	\$70	\$145
No	36,050	\$4,100	\$2,050	\$920	\$695	\$1,615	\$900	\$710	\$1,610
<b>Measurement as on End of Qtr 2</b>									
Yes	2,100	\$240	\$125	\$50	\$55	\$105	\$55	\$40	\$95
No	36,150	\$4,400	\$2,150	\$980	\$720	\$1,700	\$980	\$650	\$1,630
<b>Measurement as on End of Qtr 3</b>									
Yes	1,000	\$110	\$560	\$30	\$15	\$45	\$26	\$18	\$44
No	37,150	\$4,800	\$2,300	\$1,020	\$740	\$1,760	\$1,010	\$740	\$1,750
<b>Measurement as on End of Qtr 4</b>									
Yes	100	\$10	\$7	\$4	\$2	\$6	\$3	\$2	\$5
No	38,000	\$5,000	\$2,400	\$1,040	\$750	\$1,790	\$1,020	\$750	\$1,770

This holistic view provides the net impact view, taking into account not only the inventory reduction of the rationalized SKUs but also the potential inventory build up of the non-rationalized SKUs and the newly introduced ones.

The difference between the two consecutive measurements of the inventory snapshots is quantified as net inventory reduction or addition. Consecutive measurements are taken at mutually agreed upon intervals.

The SKU Counts, Sales data points along with the Cost of Goods Sold should also be captured to facilitate a fair appraisal of inventory with respect to the retailer's growth.

### 3) Holistic View Assessment Based on the Review of Inventory Turns Improvement from the SKU Rationalization Programme

In this approach a baseline snapshot of inventory data points is taken at the Kick-Off stage of the SKU Rationalization programme. In this baseline, the inventory turns are calculated and a range is established. After the baseline is set up and mutually agreed upon, the new data points are refreshed on a quarterly basis and compared against the baseline to identify the delta between the two consecutive readings.

SKU Inventory Turns Band	Part of SKU Rat Scope	SKU Count	COGS for trailing 52 Weeks	Retail Sales \$ for trailing 52 Weeks	Store Avg Inventory \$ for trailing 52 Weeks	Supply Chain Avg Inventory \$ for trailing 52 Weeks
0 to 1	No	6,000	\$80	\$160	\$50	\$60
	Yes	95	\$2	\$4	\$1	\$1
0 to 1 Total		6,095	\$82	\$164	\$51	\$61
1 to 2	No	10,000	\$250	\$480	\$150	\$165
	Yes	5	\$1	\$2	\$1	\$1
1 to 2 Total		10,005	\$251	\$482	\$151	\$166
2 to 3	No	5,500	\$220	\$400	\$70	\$80
	Yes	0	\$0	\$0	\$0	\$1
2 to 3 Total		5,500	\$220	\$400	\$70	\$81
3 to 4	No	2,000	\$120	\$200	\$70	\$80
	Yes	0	\$0	\$0	\$0	\$1
3 to 4 Total		2,000	\$120	\$200	\$70	\$81
4 to 5	No	1,000	\$65	\$110	\$30	\$35
	Yes	0	\$1	\$2	\$1	\$2
4 to 5 Total		1000	\$66	\$112	\$31	\$37
> total 5	No	1,500	\$90	\$150	\$50	\$55
	Yes	0	\$1	\$1.0	\$1	\$2
> than 5 Total		1,500	\$91	\$151	\$51	\$57
Grand Total		26,100	\$830	\$1,509	\$423	\$483

This provides a holistic view of how the SKU Rationalization programme is impacting the overall inventory turns for the organization. This view also incorporates demand transferability and the new item introduction factors to make it truly comprehensive.

Retailers may choose one or a combination of the above approaches for the benefit measurement of a SKU Rationalization programme. The combination of all the three approaches provides a holistic view of inventory at the strategic, operational and transactional level.

## Challenges and Limitations of SKU Rationalization Projects

### 1) Over-Rationalization

Many retailers, in their quest to rationalise slow-moving/under-performing SKUs, end up over-rationalizing their products, which may become counter-productive. What most retailers ignore in SKU

Rationalization is the “market basket” effect. Customers easily switch their loyalties elsewhere if they are not able to find a certain item or a wider selection, irrespective of the fact that the particular item is a slow-moving SKU. Wal-Mart is a classic example where, as part of an SKU Rationalization initiative, it over-rationalized and ignored the “market basket” effect, resulting in loss of sales.

**TCS’ Role:** Our expert panel performs advanced analytics on data and customer behaviour, using standardized techniques and rich industry experience, to determine the right number and mix of products to carry.

### **2)Credibility Gap**

It has been observed that there is a natural distrust amongst different departments on the number and type of SKUs to be rationalized. Stakeholders feel misrepresented. This creates friction across the teams and ends up in half-hearted efforts which are generally unproductive or at times even counter-productive.

**TCS’ Role:** Right from the inception phase to the execution phase, TCS engages all concerned stakeholders and brings them to one common platform by sharing the same information from time to time. Outcomes are discussed and impacts are made known to all in order to get unprompted buy-ins at each stage.

### **3)Improper Execution**

It is one thing to have a perfect plan on paper and another to execute it in the right manner. It is common to see projects failing due to improper execution caused by lack of experience/expertise and monitoring. This results in colossal losses and can be demoralizing for the organization.

**TCS’ Role:** TCS’ reputation in carrying out such implementations is well-earned. We have a rich resource pool in terms of experience and expertise to carry out end-to-end implementations and achieve the desired results.

### **4)Resistance to Change**

Any change in the system faces opposition from internal and external stakeholders. Organizations, more often than not, ignore the details and/or problems before implementation and are unprepared for the roadblocks which threaten to dampen their past efforts and lead to unpleasant situations, and which may end up in a no-win compromise.

**TCS’ Role:** TCS has a strong and effective Change Management process in place which ensures smooth transition and takes into account the organization’s and the employees’ sensitivities towards change. We follow a collaborative approach to Change Management.

## **Other Inventory Levers**

An organization needs an end-to-end view of the entire supply chain to improve processes and control inventory. Only if the retailer knows its supply chain at the root level, can it reduce inventory costs while maintaining/improving its service level. Hence, it is imperative to ensure that any attempt to reduce

inventory is in harmony with the organization's vision and strategy. It is important to note that such initiatives are unending and iterative in nature.

Other inventory levers that we have used to carry out successful inventory management initiatives for our retailers are:

### **1) Reduction of Replenishment Lead Times**

Any reduction in lead time, for either manufactured or purchased products, between one's internal or external tiers of distribution, helps to reduce the quantity of safety stock.

Therefore, it is important to score the performance of suppliers in terms of replenishment lead times, to evaluate the impact each supplier has on the cost of holding safety inventory.

### **2) Reduction of Replenishment Lead Time Variance**

As the variability of lead time grows, the amount of safety stock, required to maintain the availability of the SKU for the customer, grows very rapidly.

Therefore, it is not just the lead time value promised by the suppliers that should be taken into account while evaluating the suppliers but also their on-time performance, in terms of lead time variability.

### **3) Improvement in Forecasting Accuracy**

In the quest to optimize inventory, an important and effective enabler is the improvement of forecasting accuracy.

A good forecast not only ensures that the retailer does not carry excess or obsolete stock, thereby reducing the holding cost of inventory, but also helps the retailer minimize stock outs, thus reducing the loss of sale instances and improving the customer service levels.

Typically, fine-tuning of forecasting accuracy can lead to:

- 10%-15% less inventory
- 2%-12% sales improvement
- 20%-30% shorter cash-to-cash cycle times
- 1/10th chance of stock-out

### **4) Optimization of the Level of Product Availability**

A high level of product availability certainly guarantees increased revenues for the retailer. However, it also leads to an increase in the inventory holding costs. Therefore, we conduct an intensive study of the impact of the trade-off between the cost of overstocking and the cost of under-stocking the product to determine the optimal level of product availability.

### **5) Optimization of Order Cycles/Quantities**

One can reduce the cycle stock and subsequently reduce the inventory carrying cost by ordering stocks frequently and in smaller quantities. However, this may lead to an increase in the cost of administration

overhead (transportation, labour and so on). Therefore, we study intensively the impact of the trade-off between the cost of carrying the inventory (excess stock) and the cost of administration overhead before implementing this strategy for our retailers.

### **6) Improvement in Information Coordination**

It is beneficial to maintain good coordination with supply chain partners, because the transparency of information (current stock position, demand forecast and so on) can result in better replenishment planning, thus decreasing both the inventory carried as well as the sales lost due to lack of availability. Information sharing decreases the bullwhip effect while improving responsiveness to the customer, thus improving the reliability of the supply chain, reducing demand variability and avoiding stock-outs or over stocking situations.

### **7) Decreasing Store Case Pack Sizes**

Case pack is the smallest product pack in which a product can be delivered to a store. Vendors want large case-pack quantities to lower their packaging costs and to increase the shelf space for their product. However, a larger case pack size can potentially mean excess inventory at the retailer's store. For example, a retailer with 1,000 stores and an average monthly sale of 7 units of a product per store, needing in all 7,000 units of the product to fulfil the demand at its 1,000 stores has to hold an extra inventory of 1,000 units if the vendor delivers the product only in the packs of 8. This leads to a 14.28% (i.e.  $1,000 \times 100 / 7,000$ ) increase in total inventory at the retailer due to a larger case pack size. A careful study of the case pack size can help reduce the inventory investments considerably.

### **8) Decreasing Store Display Quantities**

Visual presentation of the products (often using planograms) that define the minimum presentation (facing) quantities on the shelves for each SKU, can lead to excess inventory pile ups. For example, if the minimum presentation quantity defined for a product over a shelf space is 25 Units (five facing and five deep) and the economic order quantity is 7, then the retailer must order 28 units (multiple of 7) to support the defined minimum presentation quantity. But in doing so he ends up with the excess inventory of 3 units. Therefore, it is imperative to conduct a thorough study while defining the minimum presentation quantities to ensure they are aligned with the economic order quantities.

### **9) Decreasing Vendor Batch Sizes**

Vendor batch order size is the minimum order quantity (MOQ) of a product that can be purchased from a particular vendor/supplier. Suppliers keep large minimum order quantities to lower their packaging costs and to increase the shelf space for their product. For example, a retailer with 1,500 stores and an average monthly sale of 6 units of a product per store, needing in all 9,000 units of the product to fulfil the demand at its 1,500 stores, has to hold an extra inventory of 1,000 units if the vendor has set the minimum order quantity of 10,000 units for the product purchase. This leads to an 11.11% (i.e.  $1,000 \times 100 / 9,000$ ) increase in total inventory at the retailer due to the larger vendor batch size. A careful study of the vendor batch size can help reduce the inventory investments considerably.

## 10) Defining and regularly monitoring appropriate Inventory KPIs

Understanding what drives excess/shortage inventory depends on the availability and accuracy of inventory information across the supply chain. KPIs or Key Performance Indicators are quantifiable measures of performance. They help organizations understand and focus on key areas and reflect critical success factors. Some most commonly used Inventory KPIs are: Inventory turnover ratio, Inventory days of supply, Fill Rate, Target Inventory.

## TCS Value Proposition

TCS, through its panel of hand-picked experts, offers best-in-class solutions to the market leaders of the retail industry.

Based on our extensive experience with leading retailers, we provide end-to-end solutions in the following areas:

---

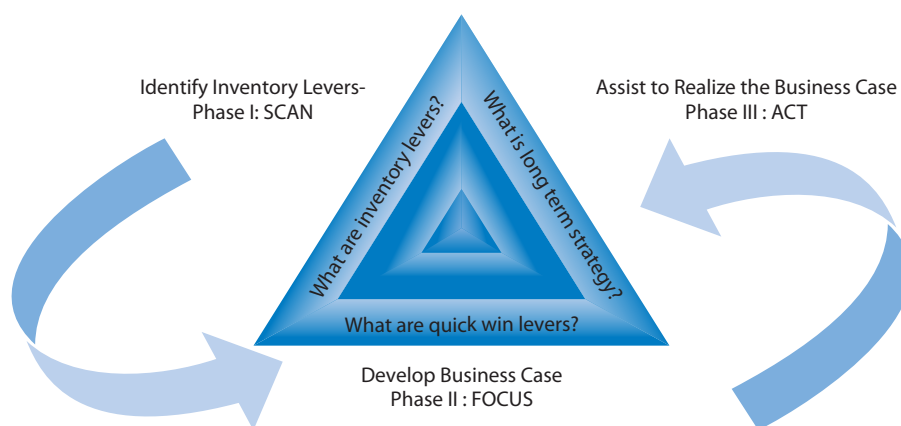
We have helped our clients realize as much as 25% reduction in overall inventory.

In terms of dollar value, we have helped them achieve up to \$80M of savings and an additional business case of \$100M has been proposed.

---

We have designed and developed a unique modelling methodology to identify key inventory drivers, understand the optimal inventory levels for each possible product/SKU and identify the steps needed to reach those levels.

We use the following framework for our Inventory Management Consulting engagements:



**Figure 3: Inventory Management Consulting Framework**

We have helped our clients realize as much as 25% reduction in overall inventory. In terms of dollar value, we have helped them achieve up to \$80M of savings and proposed an additional business case of \$100M. We have played defining roles in many such success stories across the globe.

## ▪ **Supply Chain Solutions**

TCS combines its expertise and experience to turn the modelling recommendations into quantifiable business benefits. Our Supply Chain Management (SCM) solutions help you stay connected with your suppliers, partners and customers. We help transform your supply chain by using LEAN and Six Sigma principles to establish cost leadership, drive away 'muda' in terms of inventories and lead times, and enhance competitiveness through agility and flexibility. We can help you build superior multi-channel distribution networks and enhance your global inventory visibility and order promising capability.

## ▪ **Application Development and Integration**

Our collaborative methods, efficient development techniques, and alliances with top technology companies allow us to develop high-quality software solutions quickly and cost effectively.

Our systems integration teams help clients move in an incremental, pragmatic way—away from the ad-hoc integration patterns of the past - towards a well-planned future.

## ▪ **Business Process and Change Management**

As global organizations strive to align business and IT strategies and derive maximum value from their IT investments, they need optimal programme management frameworks and skills to meet their investment goals.

TCS' Business Process Management (BPM) solutions help enterprises realize their vision of a process-managed organization by defining agile business processes, making a fast and positive impact, while enabling result-focused technology integration.

TCS' Change Management focuses on people to ensure that change is brought about smoothly, effectively and with minimum resistance. Our Change Management activities are directed towards the identification and mitigation of people-oriented risks associated with accomplishing the change objectives.

## ▪ **Retail Transformation**

Equipped with extensive industry, technology and delivery capabilities, we work with you to provide solutions and services that address strategic and operational challenges, optimize business performance, align technology with business priorities, reduce cost, improve margins and constantly sharpen competitive advantage. We have invested in a rich set of solution offerings, assets and accelerators to increase ROI and decrease the time-to-value of your business and IT programmes.

Today's winners have adjusted to today's market realities. TCS' structured approach will assess the readiness of your organization, technology infrastructure and process to develop a comprehensive plan to take your organization to that next level. We feel proud to protect our clients' hard-won reputation and continue to strive towards making them bigger and better.



#### Contact

For more information, contact [retail.solutions@tcs.com](mailto:retail.solutions@tcs.com)

#### Subscribe to TCS White Papers

TCS.com RSS: [http://www.tcs.com/rss\\_feeds/Pages/feed.aspx?f=w](http://www.tcs.com/rss_feeds/Pages/feed.aspx?f=w)

Feedburner: <http://feeds2.feedburner.com/tcswhitepapers>

#### About Tata Consultancy Services (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match.

TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at [www.tcs.com](http://www.tcs.com)

IT Services  
Business Solutions  
Outsourcing