



EFFICIENCY GAINS

after

P-3

Implementation

The Generalization In The Efficiency Model.

- ◆ For the sake of representation, we have tried to generalize the efficiency based on our previous successful implementations in the last 6 years as well as our ongoing implementations. We have chosen most of the following assumptions to be true:
 - ◆ The business has a sales turnover is Rs 1 billion or more with 100% revenues coming from exports of home textiles or apparel products to western retailers.
 - ◆ There is no manufacturing Planning or control system at work except some stand alone accounting, inventory, payroll, time management and production MIS systems at work.
 - ◆ The product has been completely implemented over a period of 1.5 to 2 years of effort and all other legacy systems have been shut down.
 - ◆ That the system is neither bypassed nor ignored by the senior management and the managers who do, are relieved of their responsibilities and replaced by managers who adhere to the system.
 - ◆ That the organization structure has been modified where necessary to create an independent work force of merchandisers, apparel product engineers, competent planners, supply chain managers and production managers that are directly answerable to the executive management.

The Expected Improvements.

The table below provides the efficiency gained after implementation under the assumptions mentioned above:

S.No	Business Imperative	Relative Importance to business	Before Implementation	After Implementation
1.	Optimum sewing, finishing and packing layouts must be created for each new order.	Critical	Good factories invest between 0.25 to 0.5 million per month in the salaries of foreign staff that perform this activity. Most others lose up to 40% in sewing efficiency, higher costs and delayed shipments.	Results in at least 30% increase in productivity. Without requiring the services of expensive foreign garment engineers or purchase of additional fixed assets.



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2.	Each apparel product cost must be quickly and accurately calculated.	Critical	Up to 10% errors in initial costing despite using the most experienced and highly paid individuals.	Errors brought within 2%. The process is completely automatic and requires no experienced person.
3.	The order must be shipped in time.	Critical	Order shipments that get late due to unsound planning are eventually shipped by air at an additional annual cost of Rs 20 to 30 million.	By using modern planning techniques, the air shipment bill is eliminated saving Rs 20million annually.
4.	The procurement requirement of all fabrics needed in an order must be calculated accurately.	Critical	The industry practice uses average consumption method. The errors in this method result in up to 3% excess or shortages in fabric procurement.	With the software's new innovative method, fabric procurement errors are reduced to less than 1%. The procurement costs are reduced further by 2%. Over Rs 500 million annual fabric procurement costs, this saves at least Rs 10 million annually.
5.	All trims and accessories procurement requirement must be calculated accurately.	Very Important	Very conservatively, up to 2% errors, omissions and frauds are committed in procurement of trims and accessories. At Rs 100 Million of annual purchasing, that's 2.0 million in direct costs.	All procurement requirement calculations are done automatically. Human errors are completely eliminated. Results in time and effort on a factor of 1:100.
6.	To keep the costs low, the floor efficiency must be known in real time. The floor resources must be optimum neither high nor overloaded.	Very Important	There is no systematic and scientific method for setting floor targets against which efficiency can be measured. Most targets are generalized and depend on the discretion of managers rather than backed up by scientific time and motion studies.	For each new product, the product engineering determines expected lead-time for all processes, suggests the number of machines and human resources required to do the jobs. The shop floor control continuously measure results against the targets.
7.	There should be no misunderstanding or confusion regarding product specifications	Important	A failure almost every month that costs on the average 1% of annual revenues.	Completely eliminated. Improving the bottom line by 1% of revenues.
8.	There should neither be any shortages nor excess of sewing thread.	Important	Up to 40% thread goes wasted on a typical purchase value of 10 million a year. At least 10% unplanned stoppages of sewing are due to thread shortages.	The software eliminates unplanned stoppage of work as well as saves up to 4.0 million per year from thread procurement costs.
9.	Leftover items in the inventory should be reused wherever possible.	Important	This is done manually at very cost conscious factories only. For most others, an opportunity to recycle up to 1-2% of raw materials is ignored.	With MRP with its ability to recycle leftover materials, up to 1% savings in procurement costs that is usually around Rs 500-600 million per year.