

# [Erratic shifts](https://assignbuster.com/erratic-shifts/)

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Erratic shifts up and down the supply chain is known as the bullwhip effect, and is one of the major difficulties in properly setting inventory levels in various parts of the supply chain (Turban, Leidner, McLean, & Wetherbe, 2008). Economists call it a bullwhip because even small increases in demand can cause a big snap in the need for parts and materials further down the supply chain. It has the domino effect, because of the spontaneous demand along the supply chain. This may be an insignificant problem for any one customer, but for the supplier it is huge and costly. Some of the things that contribute to this are price fluctuation, poor demand forecast, order batching, and rationing within the supply chain (Turban, Leidner, McLean, & Wetherbe, p. 360). Actual demand for a product is influenced by several factors such as competition, prices, weather conditions, technological developments, and consumers' general confidence. These would be considered external and unmanageable factors. There are other uncertainties involved as well that can have an effect on the supply chain such as problems in delivery time due to production machine failures. Techniques to lessen or curtail the bullwhip effect would be to understand and recognize who or what is suggesting the variations in demand. Is it the retailer, manufacturer, the customer, or the distributor? The key element to eliminating this setback is being aware of where the demand changes are beginning. Techniques that can be used or put into place to reduce the bullwhip effect is sharing information along the supply chain, Vendor Managed Inventory (VMI), and managing e-business. The most obvious way to reduce the bullwhip effect is to improve communication and forecasting along the supply chain (ehow. com). Master Data Management (MDM) is can be looked at to integrate all data in an organization at the highest level, both internally and externally. One of the most notable examples of information sharing is between large manufacturers and retailers (Turban, Leidner, McLean, & Wetherbe, p. 307). Inventory if properly managed, it can increase profits and efficiency. The implementation of a Vendor-Managed Inventory (VMI) initiative would be a key factor in improving and controlling the bullwhip effect. VMI indicates that the vendor, usually a distributor, maintains the inventories for manufacturer or buyer and in turn will reduce warehouse costs for suppliers. VMI alleviates uncertainty of demand and replenishment decisions can be made according to operating needs, and also has heightened awareness of trends in demand. E-commerce brings about new opportunities to improve the performance of the supply chain. The primary advantages of internet utilization are speed, decreased costs, the potential to shorten the supply chain, and flexibility. Electronic marketplaces provide for more efficient resource allocation, better information flow and dissemination on products and services in the supply chain. Electronic data interchange (EDI) can be implemented to help supply chain mangers in reducing misleading signals sent from sales and marketing (distribution). Enterprise resource planning (ERP) is one of the most successful tools for managing supply chains. ERP is software that integrates the planning, management, and use of all sources in the entire enterprise (Turban, Leidner, McLean, & Wetherbe, p. 2008). The major objective is to integrate all departments and functional information flow across a company onto a single computer system that can serve all of the enterprise's needs. A plan created from an SCM system that allows companies to quickly assess the impact of their actions on the entire supply chain, including customer demand, can only be done with the integration of ERP software. ERP and SCM can help alleviate the bullwhip effect across the supply chain by having a shared understanding of what needs to get done, managing the variations in the organization, communication among all that's involved especially top management, and having single control of replenishment or VMI can overcome inflated demand forecasts. Long lead times should also be reduced where it is reasonably beneficial.

### References:

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