

Value Vs Volume: Prioritizing Technology Investments

Context

Over the past several years international donors and ministries of health in low- and middle-income countries (LMICs) have been investing in supply chain information system (SCIS) improvements. Investments have focused on digitalizing operational capabilities such as warehousing, inventory management and order fulfillment.

SCIS investments should ideally enable capabilities such as,

- System driven processes resulting in operational efficiency
- Access to real-time data
- Ability to pro-act on supply chain exceptions based on real-time data
- Improved planning and decision making

SCIS investments often prioritize enabling these capabilities at central level more than at lower supply chain (SC) levels such as health facilities. The reason could be higher volume of commodities and transactions handled at central or national level compared to sub-national level. This prioritization leads to manual processes at lower SC levels resulting in,

- Inefficient operations
- Poor data quality
- Lack of visibility of true consumption

which ultimately contribute to poor planning & decision making

Alternate Perspective

This article puts forward an alternate perspective to SCIS and technology investments in LMICs. The following figure depicts the flow of physical commodities in-country from central level to lower SC levels. The volume of commodities, as they move down the SC, reduce from pallet all the way to dispensing unit or item.

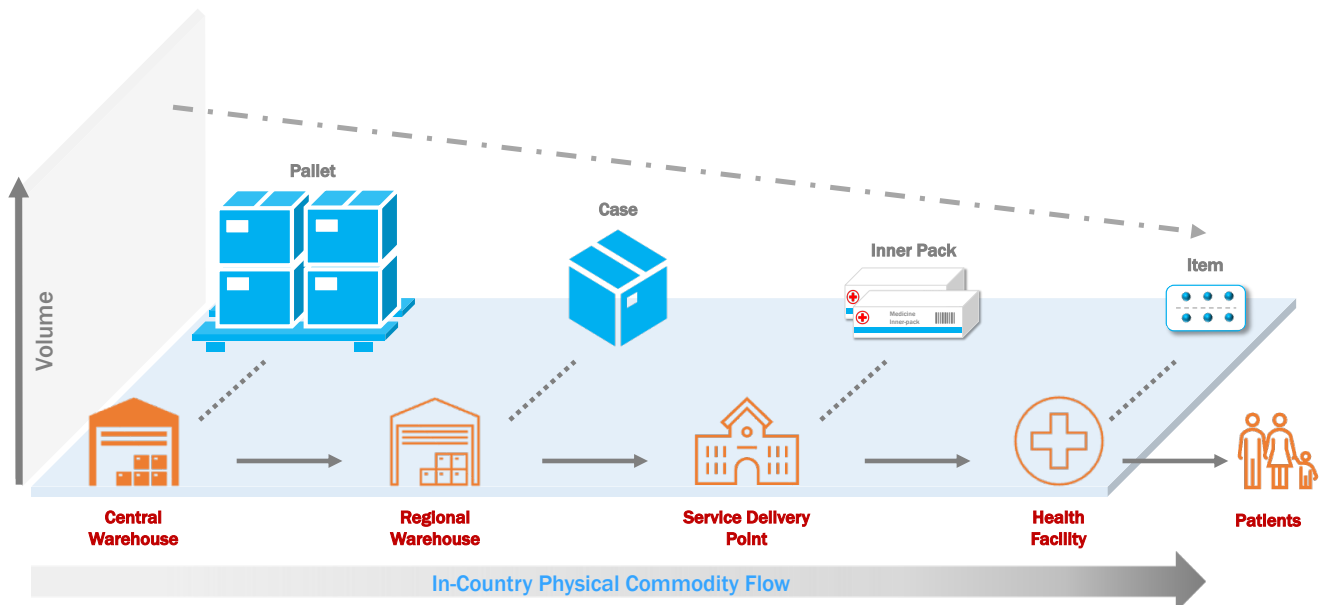


Figure 1 – Volume of Physical Commodity Flow In-Country

Commodities that get received at central warehouses in pallets get broken down to cases as they get distributed down to regional warehouses. Service delivery points further break cases into inner packs to distribute down to health posts, clinics or community health workers, who distribute items in the lowest dispensing unit. As a result, the volume of operations also reduces proportionately as we go down the SC level from central to health facilities or clinics.

While the “volume” of commodities and operations reduces from central to lower level, the benefits that can be derived from real-time or digitized data from lower SC levels increase. This is because,

- Digitized real-time data, which is a result of system driven processes, eliminates the need for manual process or data entry, thus improving efficiency, data integrity, quality and accuracy
- Data such as consumption and inventory, being closer to the point of dispensing, provide accurate picture of real demand, which significantly improves planning and exception management
- Combining this digitized real-time SC data with health and demographic data provide powerful and timely insights to act on

In Summary...

The benefits highlight the “value” of data as a result of enhanced SCIS capabilities and digitization. The following figure represents the correlation between “volume” and “value”. We believe that prioritizing SCIS investments based on “value” rather than “volume” will enhance planning, decision making and deliver better health outcomes.

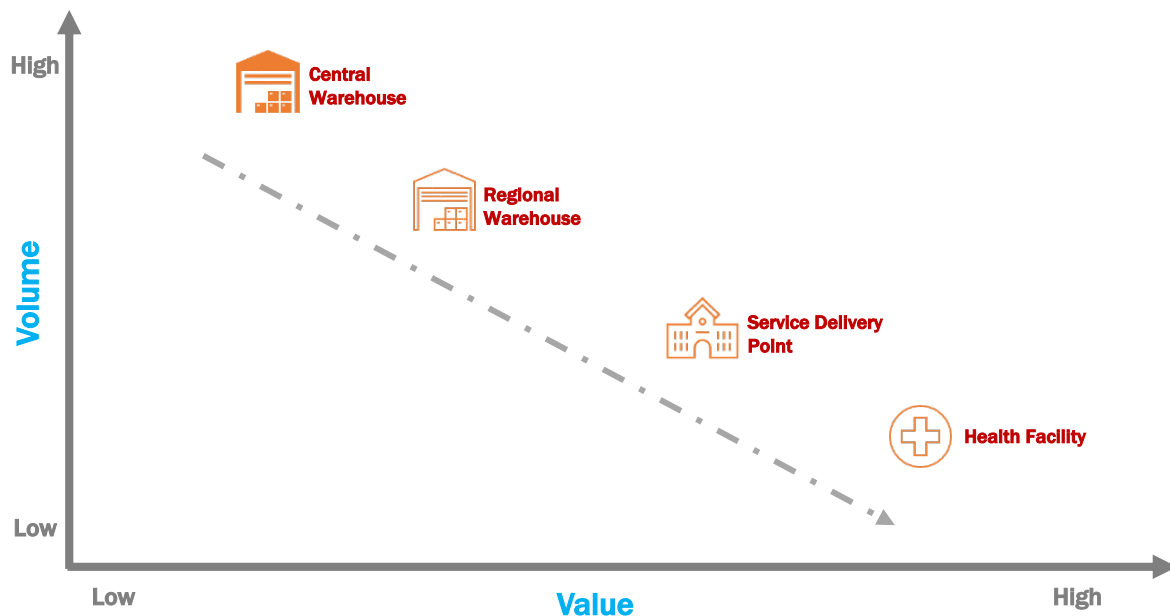


Figure 2 – Volume of commodity vs Value of real-time data