

## CEO INSIGHTS

## MODERN TECHNOLOGY ADVANCING AGRI-WAREHOUSING IN THE COUNTRY

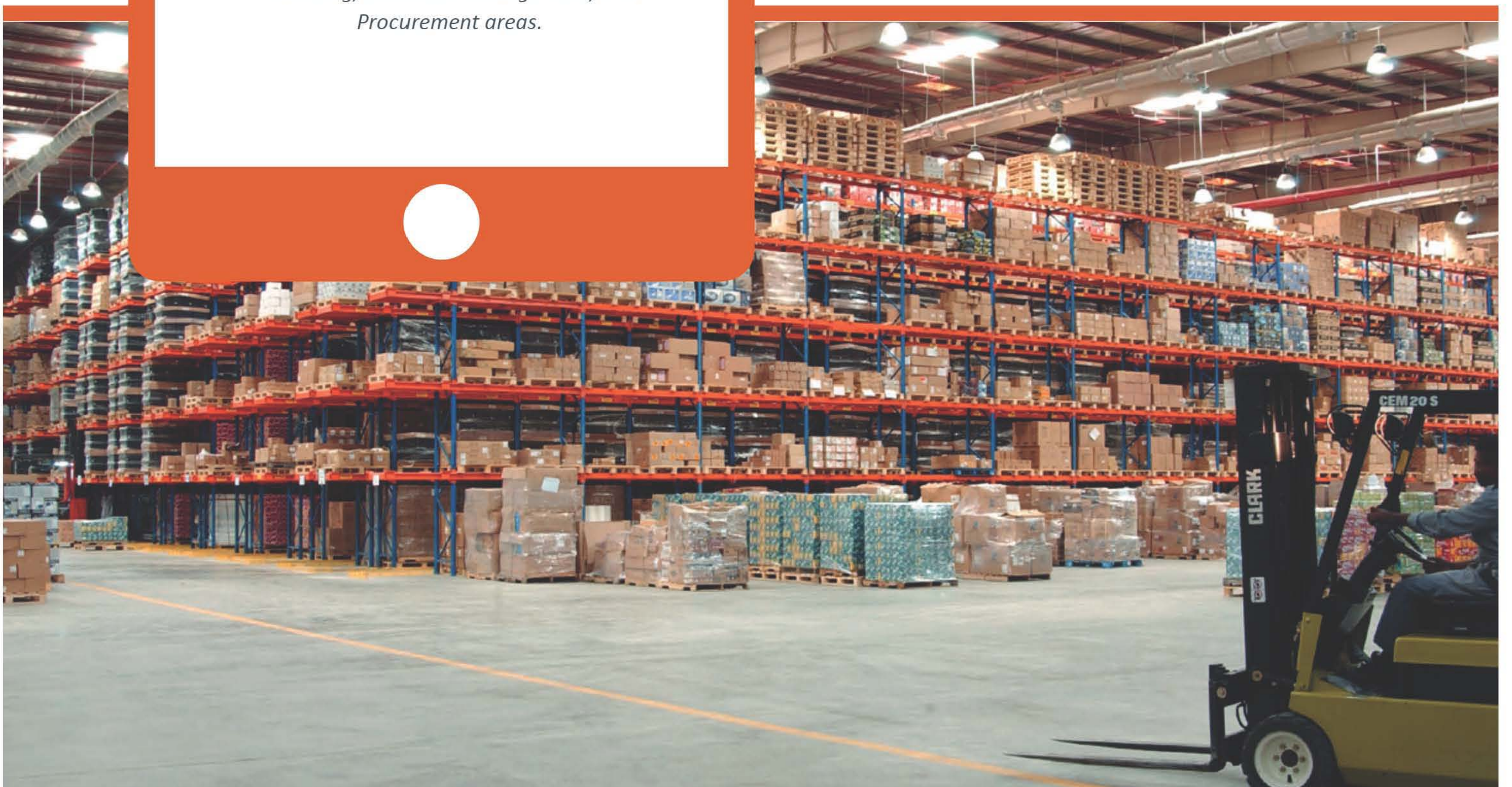
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*Headquartered in New Delhi, Sohan Lal Commodity Management (SLCM) is an ISO certified global warehousing solutions company offering an array of services across Warehouse Management, Agriculture Financing, Collateral Management, and Procurement areas.*

**S**torage and warehousing practices today are leap years ahead compared to the ancient granaries and basic structures that served as storages. While the need for and the basic function of storage remains the same, technology and scientific methodology in storages have re-defined the practice and improved efficiency in more ways than one. From a fill-it and leave-it traditional stone structure to the environment controlled and real-time monitored warehouses today, the evolution of warehousing is indeed remarkable.

From designs and infrastructure set ups to the various processes and storage methods followed, every aspect of warehousing has been transformed by the integration of scientific and technological know-how. New and existing warehousing infrastructures are prepped with innovative solutions in space management, logistical efficiency and the safety of stored goods. A highly dynamic infrastructure set-up offering maximum efficiency and protection to stored goods are a reality today and any advancement in science and technology in the future can only add to making it better.

Any modern warehousing operation today would be incomplete without employing a minimum basic level of technology to enhance capacity or efficacy. Here is a look at some of the must have technologies and their use in today's modern warehouses, the adoption of any or all of which has a direct bearing on operational efficiency,





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space utilization and also significant cost savings.

- **Warehouse Management Systems (WMS):** WMS is a software application designed to support warehouse management activities. A WMS can be tailor made and tweaked for maximum efficiency in managing the supply and demand of individual warehouses and are an effective instrument of planning daily activities, loading/unloading sequence, staffing requirements and dispatch.

- **Bar Coding:** The use of bar-coding in warehousing operations enhances inventory management. Bar-coded receipts have several benefits including reduction on the need for manual intervention, quick and accurate data collection and labor costs. Bar codes also nullify the risk of fake manual storage receipts and enables faster and accurate access to information. This is critical in warehousing operations as it allows informed decision making and better management.

- **Radio Frequency Identification (RFID):** Today's warehouses can be gigantic making manual stock management a time consuming, cumbersome process that is also prone to errors. An RFID enabled warehouse uses radio waves to identify, tag and monitor stored items. An RFID system provides complete visibility of stocks and helps in securing the warehouse against pilferage or theft.

- **GPS & GEO Tagging:** Real-Time technology such as GPS & Geo Tagging in conjunction with digital technologies such as satellite imagery, mobile telephony, and handheld devices like tablets when used in warehousing operations to collect and analyse data and information are capable of:

1. Enhancing data management in warehouses and real time capturing of data with real time reporting and controls

2. Facilitating digital signature and improving turnaround time

3. Communicating with MIS database kept at a remote location

4. Sending automated SMS to the client upon validation of the data by the main database

- **Operations & Environment Controls:** Warehouse management tools and techniques enable optimal energy efficiency, air-quality control, etc. Temperature and humidity management are key in warehousing operation especially for agri-warehouses where stored commodities are highly susceptible to temperature and humidity related damages.

### Amalgamation of Technology & Innovations

In a developing economy like ours where the market is dominated by unorganized players, the focus has been on building warehouses and increasing footprints rather than managing quantity & quality of the stocks stored in their warehouses. In such a scenarios adoption of technology has taken a back seat at the cost of efficiency.

However, things are changing and technology has been rightly identified as the key enabler of growth for this sector. India has just awakened to the tremendous potential of technology-driven innovation in the burgeoning sector. Today most of the integrated service providers operating in the country are receptive to the fact that

technology can help them reduce costs and improve efficiency in their businesses and overall market.

Scientific methodology and technology assisted management of warehouses can help in mitigating the risks involved with crop damage and prevent storage losses. A study conducted by FICCI has demonstrated this, with the findings crediting scientific processes in supply chain management with lowering post harvest losses to merely 0.5 percent from the present 10%. Moreover, with constant monitoring on real time basis, preventive and pre-emptive action can be carried out timely as and when required. Moreover, technological innovations in warehousing management are agnostic of climate, infrastructure, location and crop type.

### Future Horizons

India's farm output is precious and the efforts should be aimed at ensuring that not even a morsel is wasted. There is a need for a sustained campaign to introduce scientific warehousing processes to make entire supply chain smooth, transparent and mobile to ensure quality, timely delivery, right price and minimal losses.

India has been and continues to be a major producer of food-grains and other agri-produce in the world. The challenge is in ensuring equitable distribution and availability of food item all across the country for which an increase in investment through public private partnerships in research and technology transfer needs to be promoted. This will help the sector ensure better accountability towards delivery, improved value chain including storage, transport, processing and market facilities. Constant innovation can help to improve productivity and competitiveness whereas enabling policies that are necessary to bring knowledge, technologies and service to farmers are much required. **si**