Embedding AI and technology for enhanced facility management

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The current fast-paced era of digital technology has brought about drastic changes in the way things are done across different spheres of human existence. With an expanding tech ecosystem driven by cities like Bangalore and Delhi-NCR and sipping through borders to other parts of the country, India's recognition as the world's second fastest growing tech innovation hubs is now clearly evident in its **facilities management industry** which has undergone unprecedented and disruptive transformations in recent years.

Facility management is a multi-faceted endeavor that deals with service provision, maintenance and monitoring for efficiency. As a professional service, it entails the proper and effective management of infrastructure and facilities including housing societies, corporate buildings, educational institutions, public places, hospitals, laboratories, and so on. From operations and **technical maintenance** to **business support services** and **soft services**, property owners often engage the services of integrated facility managers who can provide all-round maintenance.

Nowadays, buildings have become increasingly IoT compliant with digital controls. Facilities have become functionally smarter and it is the only reason that **facility managers** upgrade their skill set and service offerings to be more tilted towards technology and IoT. Whether it's the maintenance and operations of electrical, fire safety, HVAC, elevators and lifts, diesel generator operation and maintenance, CCTV installation, maintenance and repair, fire and water pumps, plumbing and sanitary system, **parking management**, and even backup power supply management, the need to integrate advanced technology is even more pressing today.

Cutting-edge innovations for operational efficiency

Beyond providing maintenance services like cleaning and waste management, gardening/horticulture, and electrical and HVAC maintenance, there are other specialized facilities that require top notch management services. Hospitals and pharmaceuticals require very sensitive supply chain management, especially in transporting temperature sensitive drugs and vaccines. Thankfully, there are high-tech cold chain monitoring technologies that can be deployed to boost efficiency.

Clean room and pharmaceutical warehouse solutions are important because medicines and vaccines are temperature sensitive. For shelf-life preservation and efficiency, **integrated facility management companies** invest in technologies like the Domestic Transport Temperature and Humidity Data Logger. This can help with accurate temperature monitoring, especially for reefer trucks with lp52 enclosure. The data logger is equipped to offer long-term stability throughout manufacturing, storage and during transit.

Just like in domestic transport, a temperature data logger is an effective tool for export transit cold chain applications. Export consignments containing critical pharmaceuticals can be conveniently transported in a manner that eliminates waste to cut down on the huge losses incurred by the sector, estimated at $35 billion in 2019. One report found that 20% of vaccines get degraded before reaching their destination, 30% of scrapped drugs are a result of logistic issues, and 20% of temperature-sensitive products get damaged during transport, all due to improperly managed transit facilities.

Another focus area is the perishable food industry. Facility managers can install intelligent systems in place for monitoring any instability or changes in the temperature and humidity of a food cold storage facility. These systems will be alerted immediately to adjust the parameters as required. One of the innovative tools is multi-channel logger. Web-based environmental monitoring programmes and softwares can be used to keep the perishable items in perfect condition. These help to ensure that the temperature remains stable.

Temperature sensitive products such as poultry, fish, chocolates, meat, fruits and vegetables, dairy products, etc., may get spoiled due to undetected slight changes in temperature, but with the multi-channel logger and web-based monitoring tool, the storage facilities will operate optimally. The technologies like Portable Data Logger and PDF-based Data Logger are of utmost importance in transit situations. It is assumed that this can help reduce losses incurred in India due to improper management of perishable food and fruits.

The future of facility management in India is innovation

The future of **facility management in India** lies in the adoption of modern IoT tools, remote control systems, Wi-Fi connectivity and even robot technology in the management of facilities, such as educational institutions, residential buildings, corporate buildings, and other infrastructural facilities. All these ensure that the right data is collected, recorded, and interpreted in a manner that supports efficiency in management. Less time, less humans, less cost, and a generally efficient facility should be the goal of every forward-thinking **integrated facility management company**.