

COMMERCIAL DESIGN

Innovations and trends
in office automation; The
evolving cleaning equipment
market; A peek into the
interiors of Globant India

The definitive guide to successful commercial spaces and facilities management

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BANKING ON GROWTH

Rahul Samuel, head of infrastructure and
facilities, CRES, IDFC Bank, on how he
streamlined the expansion process

Trends

Every office owner anticipates an optimised space which functions in accordance with its inhabitants' requirements and the facility's overall function. Office automation is an emerging add-on that serves this need efficiently. While it primarily started as a data processing tool, it now includes sophisticated and complex tasks like integrating front- and back-end office systems, controlling lighting, air-conditioning, etc. With transformations in the spatial organisation of offices, the evolution of ergonomic technology has also simplified design, reduced risks as well as increased engagement.

Office automation eases the day-to-day workflow of the office. Not only does it save time but also saves additional costs by optimising the use of resources such as electricity, transport, workforce, etc. A fully automated office can be achieved by incorporating both hardware and software solutions.

Mechanised operators are functional and customisable to suit every requirement; thereby making automated systems widely accepted in commercial spaces.

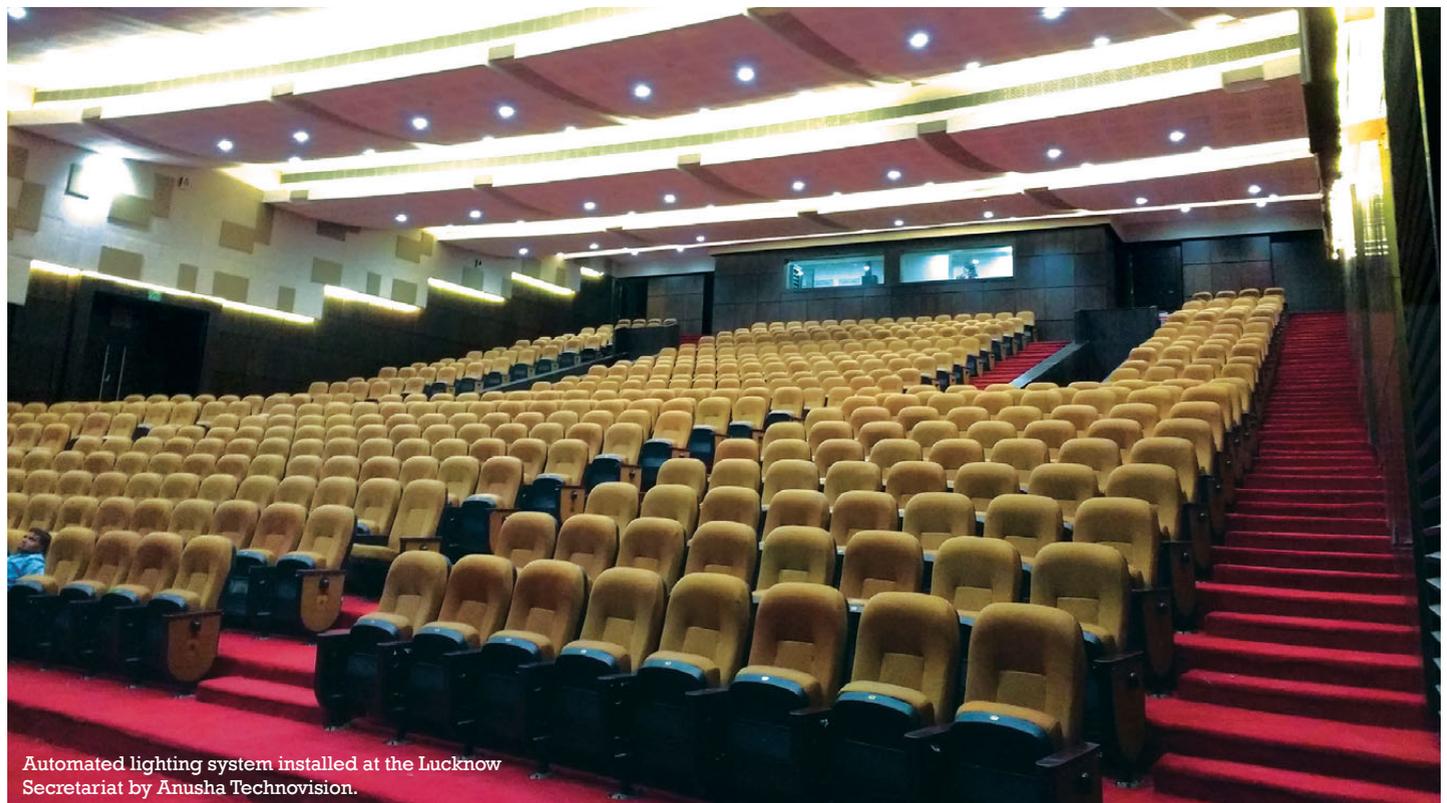
An expert in this field, architect Debashish Sanyal, associate professor, NIT Raipur, states, "Smart offices recognise and reflect the technological advancements and convergence of building systems – the common elements and the additional functionality that integrated systems provide. Major goals of smart offices constitute building, space, business and communication management."

The concept of a paperless office is making way to a clutter-free and sustainable solution with the help of softwares that feed tech-savvy managers and employees with every analytical data possible. Apart from creating an improved infrastructure, optimum thermal comfort, air quality, noise levels, lighting and cleanliness also have an impact on productivity. Starting with a comprehensive view of the functions, existing resources are

considered and an integrated Building Management System (BMS) is then prepared to effectively overlook energy management, HVAC, fire detection, CCTV systems, etc.

Shedding light on some of the prevalent systems that have enhanced workspace operations, HVAC, AV, lighting, security, etc, account for a huge part of energy consumption of any office building. Energy management is the key to saving costs and optimally using such resources. After monitoring the regular usage and repetitive schedules, facility managers analyse the basic energy needs of the commercial unit. Based on the occupancy and functional aspects, different automated controls are scheduled for different spaces. Further, the working is initiated with the help of sensors and tracks. The automated solution is flexible and error-free, which ensures a highly sensible and methodical office space.

Alok Hada, director, Anusha Technovision, explains, "Corporate offices want flexible spaces – an open-office space is transfigured



Automated lighting system installed at the Lucknow Secretariat by Anusha Technovision.



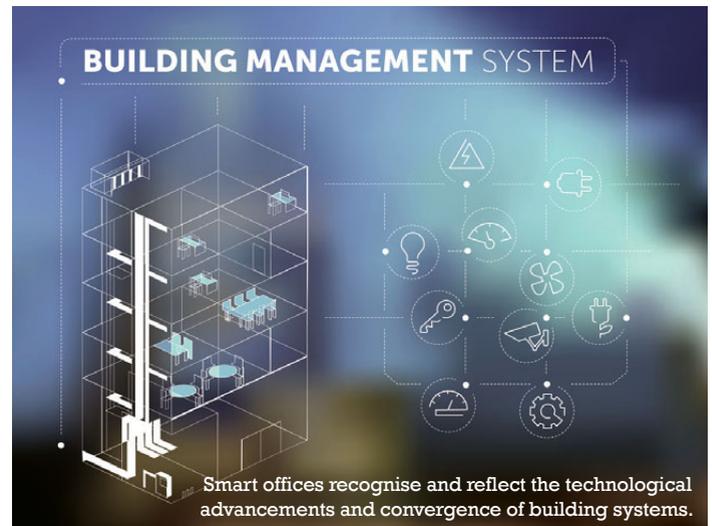
Grafik Eye QS Dimmer.



Digital door lock by Samsung.



(above) Range of automation systems by Anusha Technovision.



into meeting rooms, break-out zones, etc. In that respect, smart lighting and smart control of various devices equips managers with the flexibility to convert spaces as per their needs.” The company’s Quantum Lighting Management System can be adapted to all open-office spaces, meeting rooms, cafeterias, etc; while the Hyperion shading system is an evolved, intelligent sun-shading system that takes into account not only the solar movement but also the building’s orientation. To establish internal synthesis, the Crestron CP3 processor allows the integration of the equipment in boardrooms and meeting rooms through a seamless portal.

Sensors play an integral role in the management of commercial

facilities. Current sensors are used to detect the measure and flow of current to the system and monitor the equipment with a modulating output. This helps in preventing equipment damage and downtime. CO2 sensors are used for controlling ventilation and air-conditioning systems to maintain acceptable levels of CO2 in the interiors. Economiser sensors control the amount of fresh outdoor air supplied to any space (these are often coupled with CO2 sensors). Dew point sensors help in monitoring the cooling of water pipes and other cold surfaces. Temperature and pressure sensors help in maintaining a comfortable indoor environment. Occupancy sensors, as the name suggests, are used to sense occupancy and movement



in different areas. These sensors regulate the working of systems only when required to prevent wastage of resources.

Aji George, director, B Square, states, “Over the period of time, office automation software and products have become an indispensable part of commercial, financial and personnel spaces. As a result new innovations are keeping up with fast-changing scenarios. Document Management Solution, Enterprise Resource Planning, Customer Relationship Management, etc, are some major innovations in the automation sector. Smart technology has been rolled out as Internet of Things (IoT) over time. IoT is changing simple offices to smart offices. Almost everything