

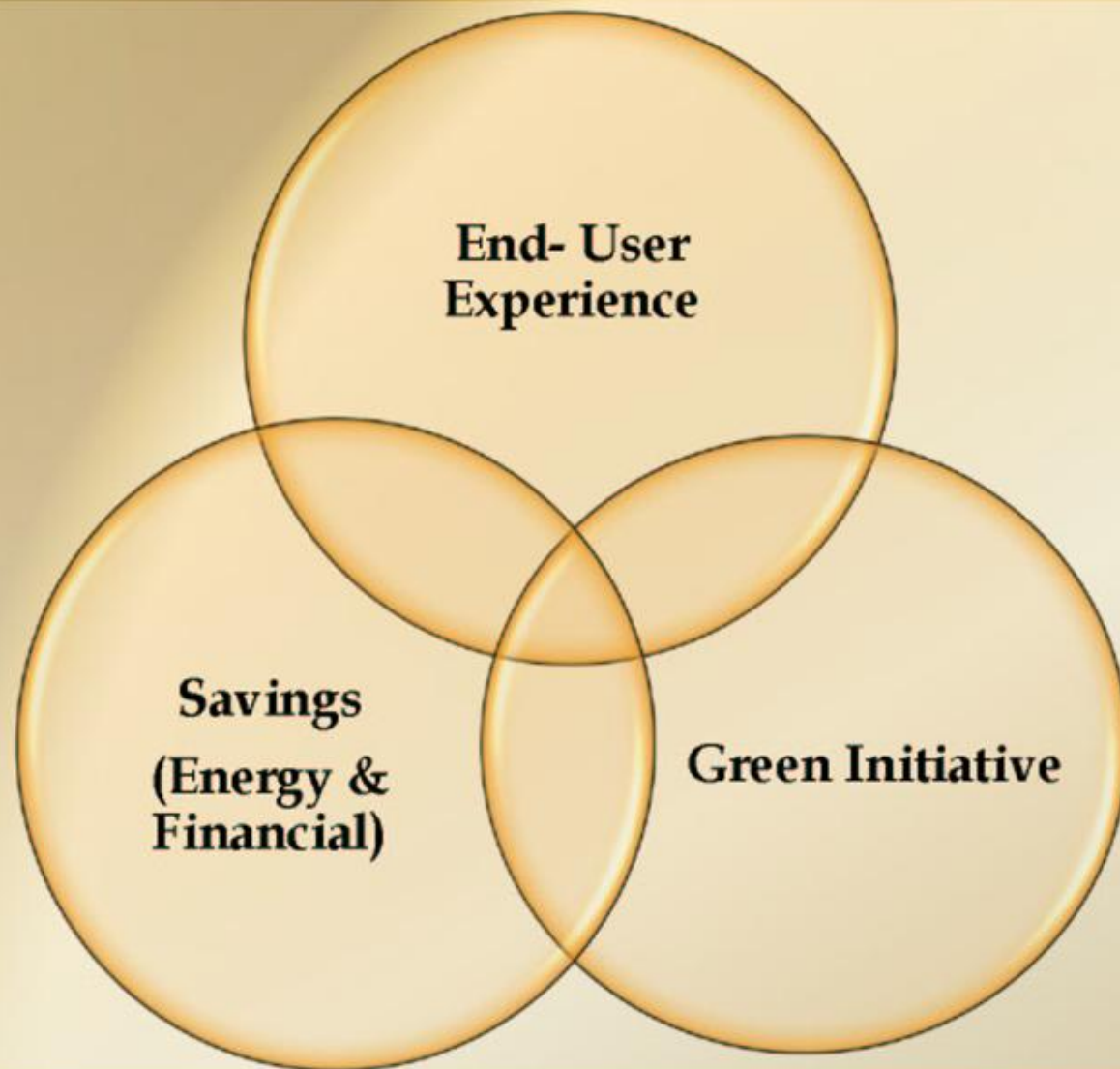
SMART TECHNOLOGY & BUILDINGS

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OUTLINE

- Automation in a nutshell
- Creating experiences
- Costs & Benefits
- Is it for everybody ?
- Challenges

INTEGRATED AUTOMATION SOLUTIONS



AUTOMATION IN A NUTSHELL

The essence of integrated automation solutions lies in the control technologies, which allow **integration**, **automation**, and **optimisation** of all the services and equipment that provide services and manages the environment of the building concerned.

The use of these technologies allows the optimisation of various site and building services, often yielding significant cost reductions and large energy savings.

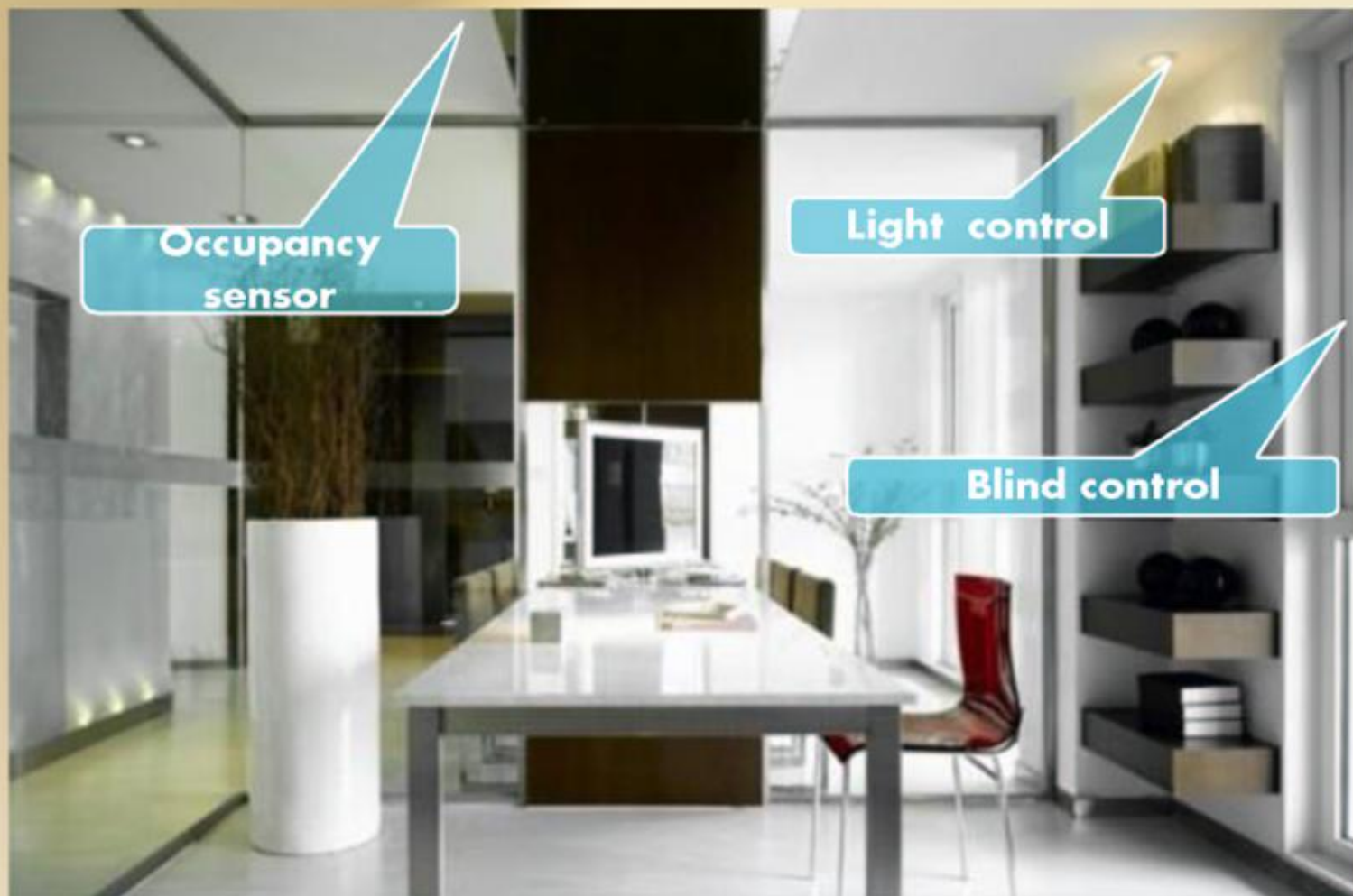
There are numerous methods by which building services within buildings can be controlled, falling broadly into two method types:

- Time based
- Optimiser Parameter based

DEFINING EXPERIENCE ...



DEFINING EXPERIENCE ... (IN THE OFFICE)



INTERFACES



HOME & OFFICE AUTOMATION

COSTS & BENEFITS

ANNUAL OPERATING COST SAVINGS OF INTEGRATED SYSTEMS

Svc Contracts, Additions, Remodeling	32% Less
Energy Cost Savings	\$0.16 per SF
Improved Load Factor, Coordinate Supply	10% Less
Maintenance, Repair and Replacement	\$0.20 per SF
Savings Related to "Productivity"	\$0.39 per SF
Staff Training, Efficiency, IT Support	82% Less
Cable and Cable Pathways, MAC	39% Less

Adapted from: National Institute of Standards and Technology, 2004



ENERGY SAVINGS OF INTEGRATED SYSTEMS

For lighting, energy savings can be up to 75% of the original circuit load, which represents 5% of the total energy consumption of the residential and commercial sectors.

Source: EU2 Analysis and Market Survey for European Building Technologies in Central & Eastern European Countries - GOPA

HOME & OFFICE AUTOMATION

IS IT FOR EVERYONE ?

HOME & OFFICE AUTOMATION

CHALLENGES

THE CHALLENGES

- Lack of Awareness
- Lack of straightforward guidelines on automation standards
- Misconception :
 - too expensive
 - too complicated
- Reliability of the technology
- Misguided 'expert' advise

OVERCOMING THE CHALLENGES

To translate theory into practice :

- Stakeholders buy-in (Government & Private Sector)
- Education of users
- improved systems-design user-friendliness
- Availability of clear guidelines for users and decision makers

THANK YOU