

SMART & HEALTHY BUILDING SUMMIT

USING DATA TO ENHANCE THE
VALUE PROPOSITION FOR
YOUR BUILDING



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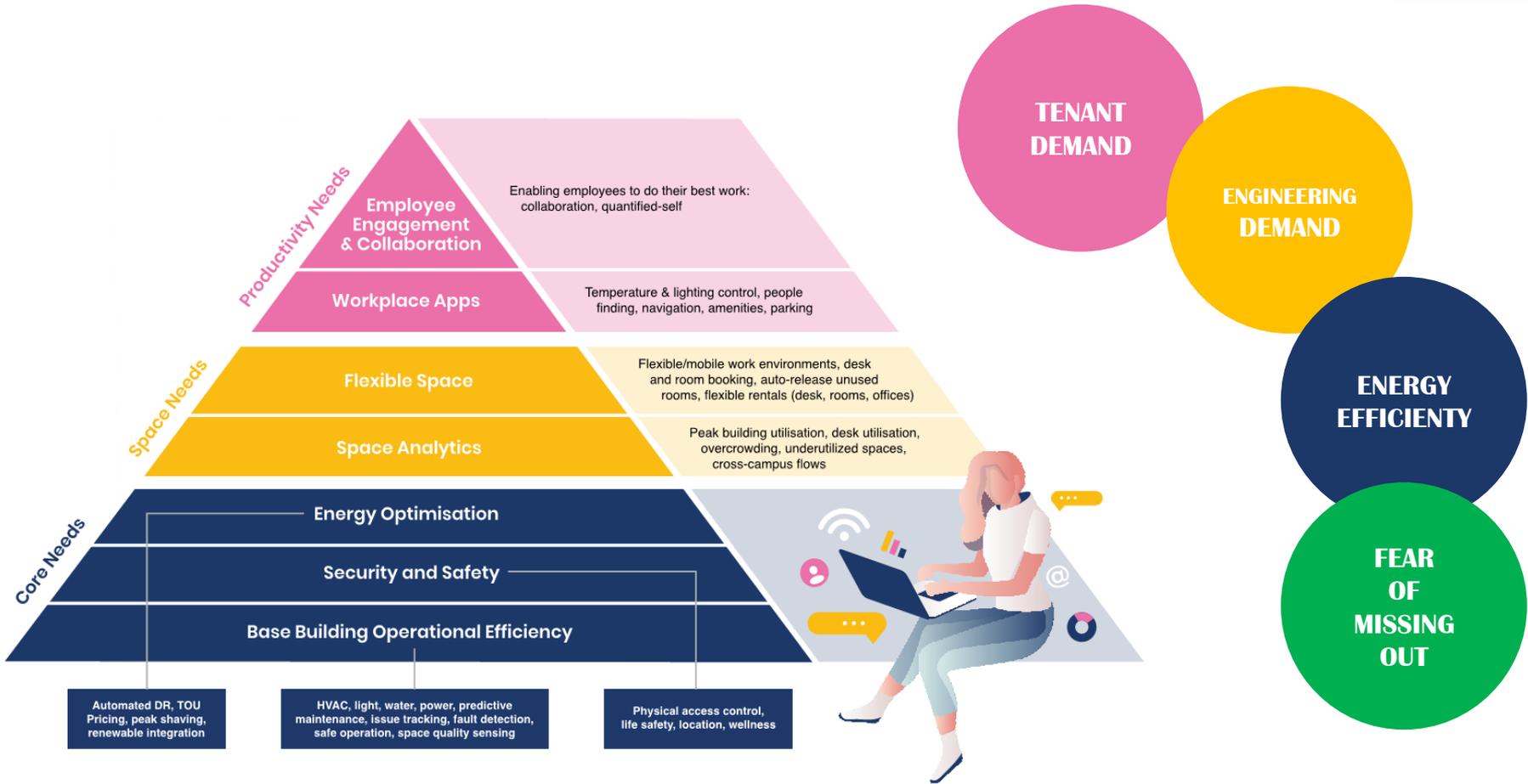
WHAT IS A SMART & HEALTHY BUILDING?



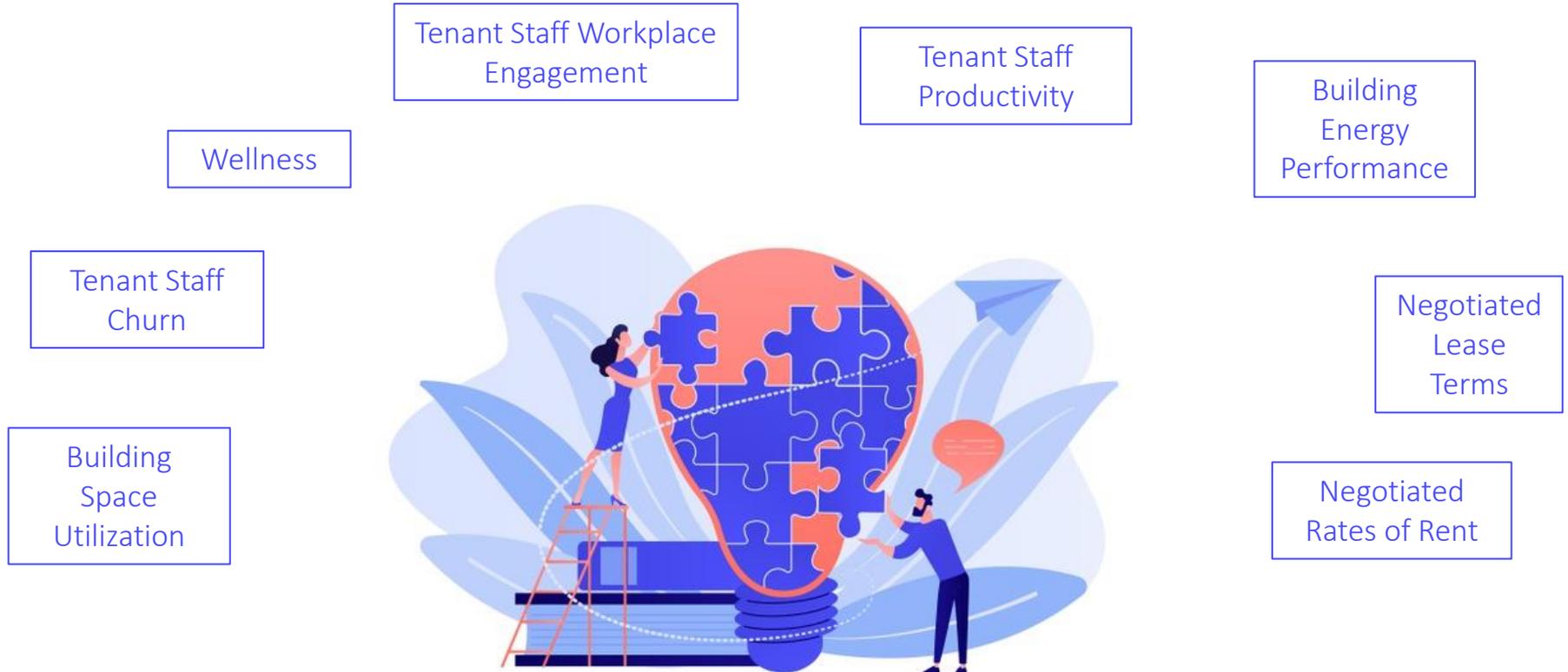
Smart buildings are **the digital extension of architectural and engineering progress**. As society now lives through the lens of technology, buildings are beginning to adapt to that framework to better serve their occupants

A Smart Building is any structure that uses automated processes to automatically control the building's operations including heating, ventilation, air conditioning, lighting, security and other systems, maximizing user comfort while minimizing energy consumption.

CURRENT MARKET DRIVERS



HOW WE DEFINE THE VALUE?



Value is defined by users, not by engineers or products

WHO ARE OUR STAKEHOLDERS?



TENANTS

- Admin staff
- Accountancy
- Sales and marketing teams
- Legal teams
- HR

RETAILERS

- Goods and services
- Food and Beverage
- Pop ups

FM'S

- building management
- building engineering
- Maintenance
- Contractors

ASSET OWNER

- leasing teams, portfolio managers
- Sales teams

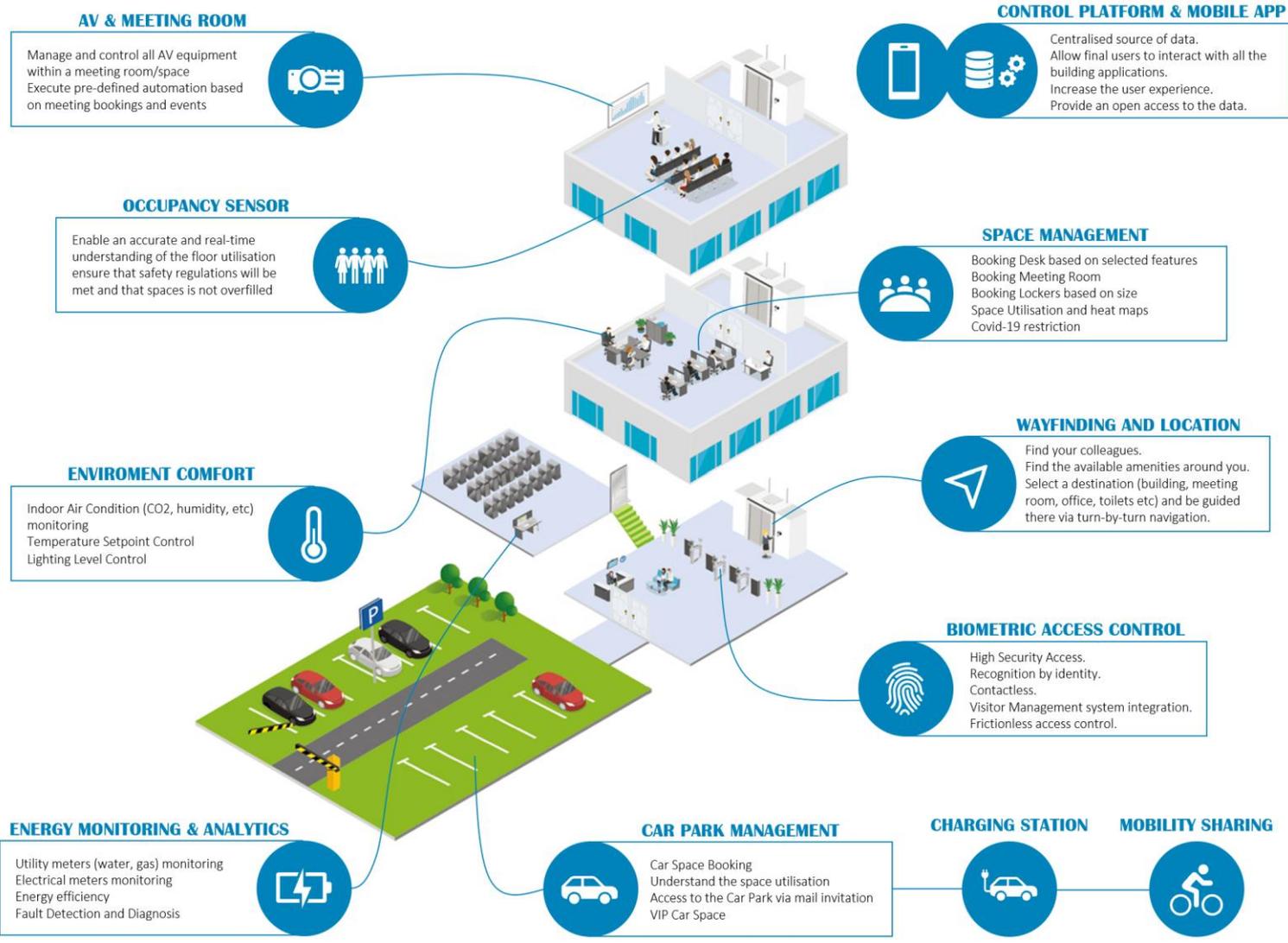
VISITORS

- Tenant clients
- Collaboration partners
- Corporate Partner
- Public visitors

STAKEHOLDERS VALUE

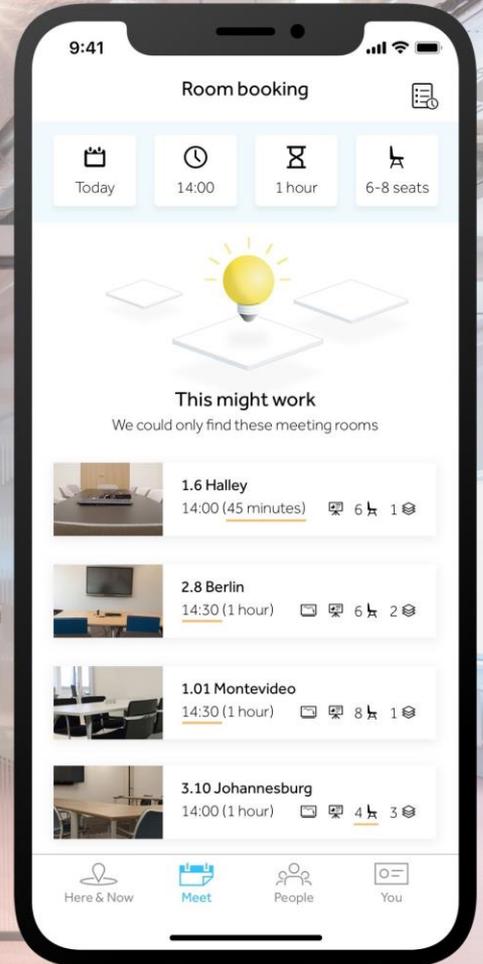
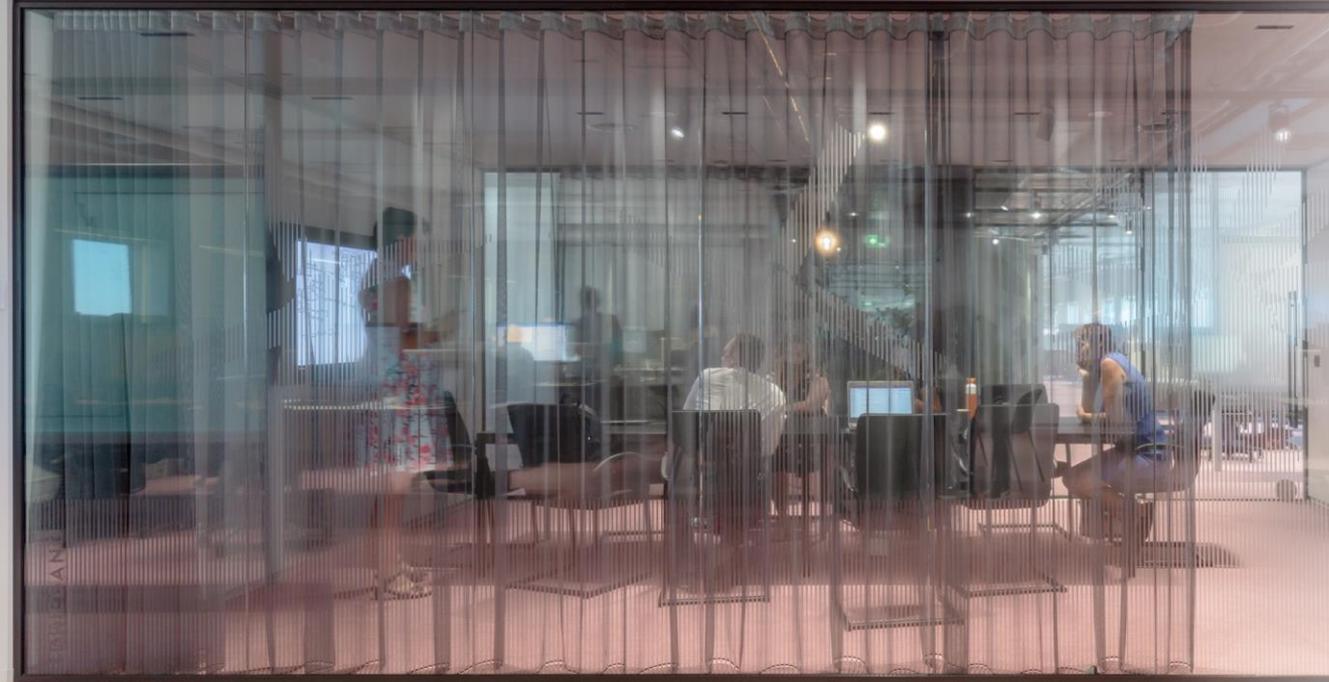
SOME EXAMPLES





STAKEHOLDERS VALUE

SPACE BOOKING

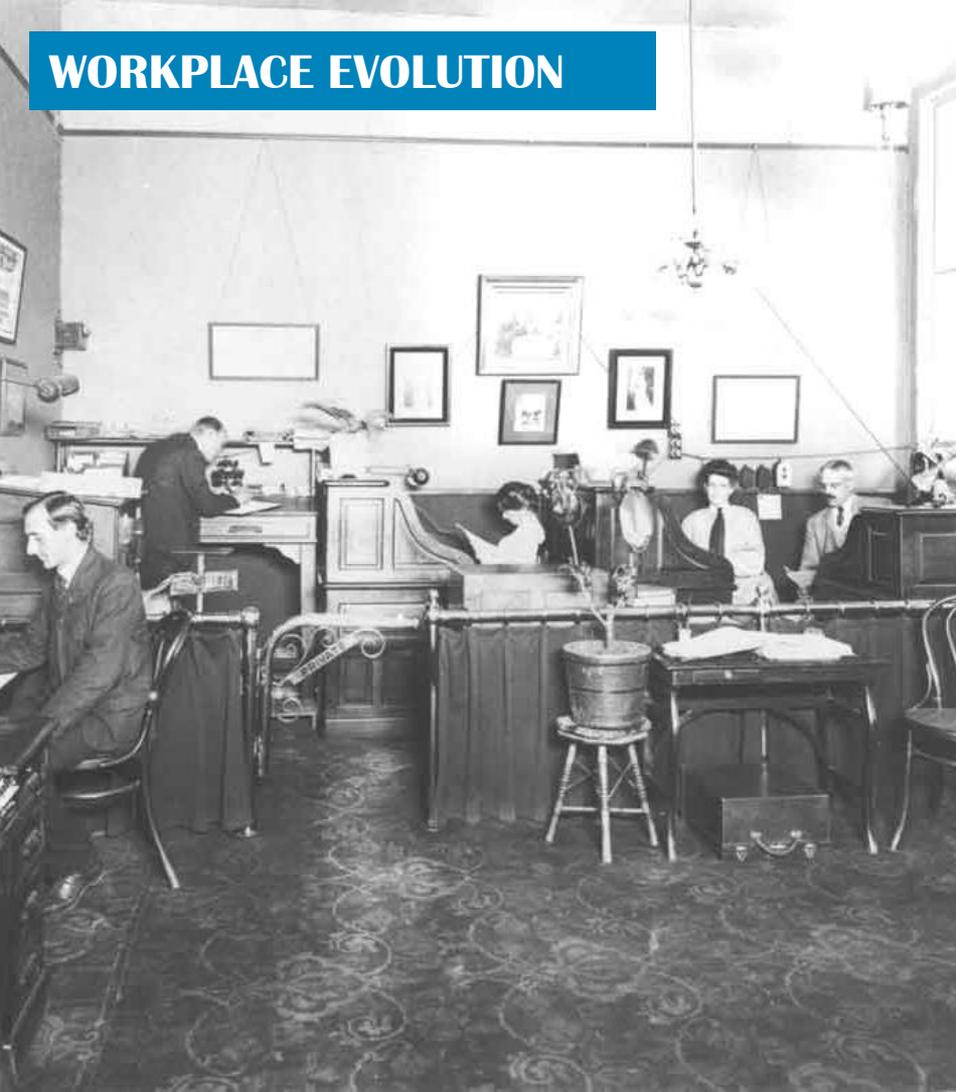


TECHNOLOGY EVOLUTION



Evolution or revolution, technology advances are impacting all element of modern life

WORKPLACE EVOLUTION



SMART & HEALTHY BUILDING

WHERE TO START?



Do the user experiences require HR data (name, role, places of work, access requirements)?

Do user experiences require public information (traffic info, public transport, community events)?

Do the user experiences require other data (retailer info/specials, F&B Info)

Do the user experiences require engineered services data (Air con, lighting, elevators, energy)?



Do the user experiences require additional technologies (Wi-Fi, wayfinding, people counting)?

SMART & HEALTHY BUILDING

SOURCE OF DATA

Key to symbols

- Technology/Service Type
- Data Exchange
- Smart Home Data Interchange
- Smart City Data Interchange

Key to lines

- The Business Enterprise
- User Experience
- Security
- Energy
- Lighting & Signage
- Facilities

How Data is Connected

- TCP / IP
- Wi-Fi
- Bluetooth
- BacNET
- ModBUS
- ONVIF
- LonWorks
- KNX
- DALI
- EnOcean
- Z-Wave
- Zigbee
- OpenADR
- RFID
- LPWAN
- 5G
- Li-Fi



Where will the data come from?
BMS, Metering,
WEB, Internet of
things, Corporate
Enterprise Systems,
procurement
systems, AV
systems, etc.

APPROACH TO THE MARKET

CONSIDERATIONS

Will the data deployment need to operate on an app or can it operate on responsive Webpages?

Is there a requirement for multi vendor support post completion ?

Where will the data be stored and accessed (on prem, Cloud, hybrid)?



Are there competent vendors available in the local market (some options may not be traditional building services vendors) ?

What physical infrastructure will best serve the desired outcomes (converged network, siloed/segreated networks)?

Integration of data sets is a relatively new deliverable in the market and as such is often translated back to familiar methodologies.

- Master systems integrator: responsible for data integration from subsystems hardware but is not responsible for hardware deployment.
- Master systems integrator should be engaged early to help with subsystem vendor product selection to ensure ease of integration.
- Master systems integrator should assist with elements such as naming conventions, data storage, engineering software hosting
- Master systems integrator should be independent of any subsystem vendors
- Master Systems integrator should be responsible for apps and webpages using aggregated data.

FUTURE?



HOLOGRAM

AUGMENTED REALITY

IOT MQTT

POST COVID TECHNOLOGIES

Thanks and questions