Digital Services
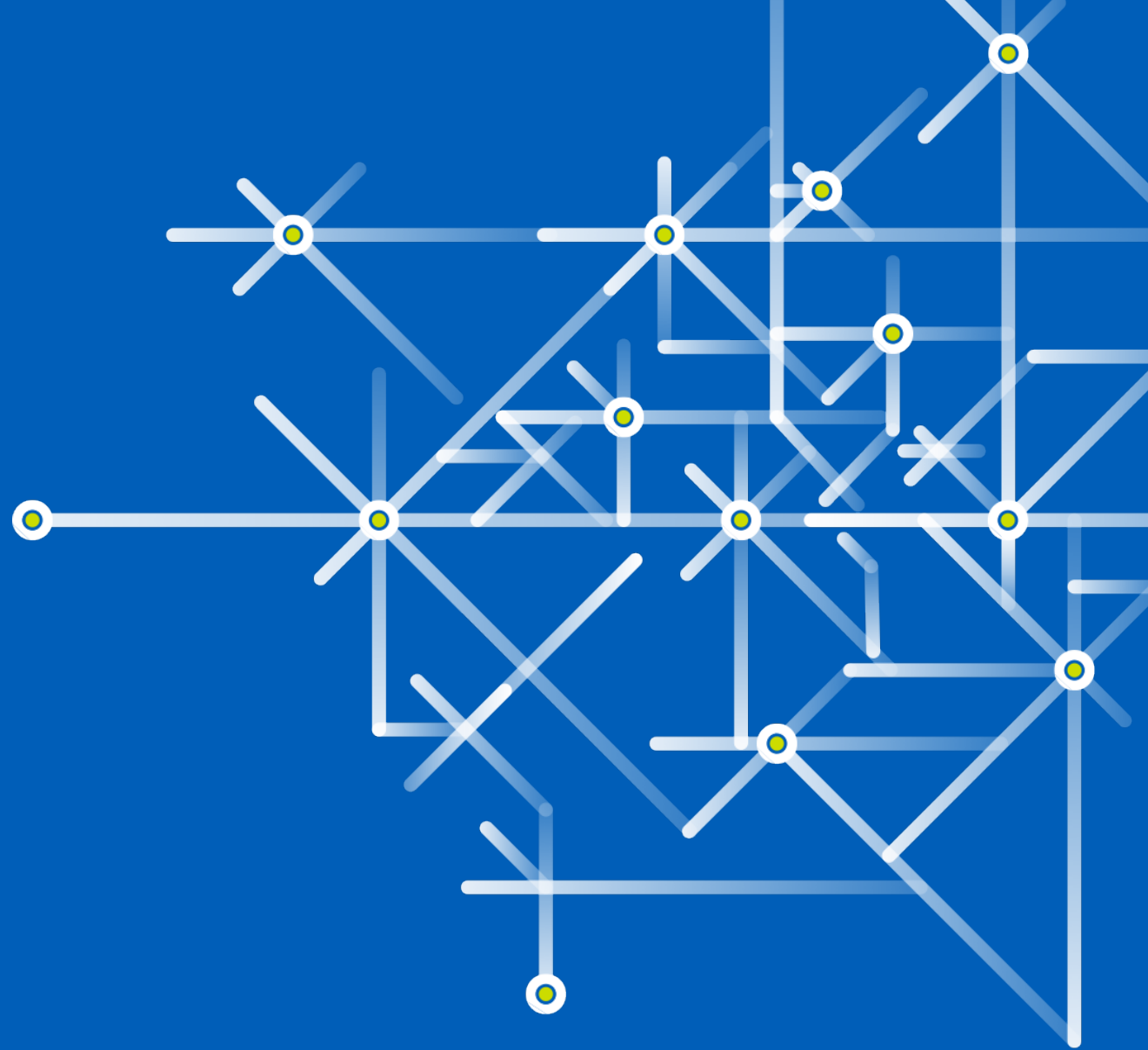
Faster Digitization Through Lighting Infrastructure

Dr. Tomasz Zareba
Director Digital Services
tomasz.zareba@zumtobelgroup.com

zgs zumtobel group services

Zumtobel USP: leveraging lighting infrastructure for IoT use cases due to its exposed room location and power availability

Lighting

Everywhere
Powered
Connected
Ceiling mounted

+

Sensors
Short range networks
Lighting Management

+

Cloud Services

=

Digital Services

Lighting infrastructure as the ideal basis for new services

Example: Indoor Asset Tracking bears huge business potential

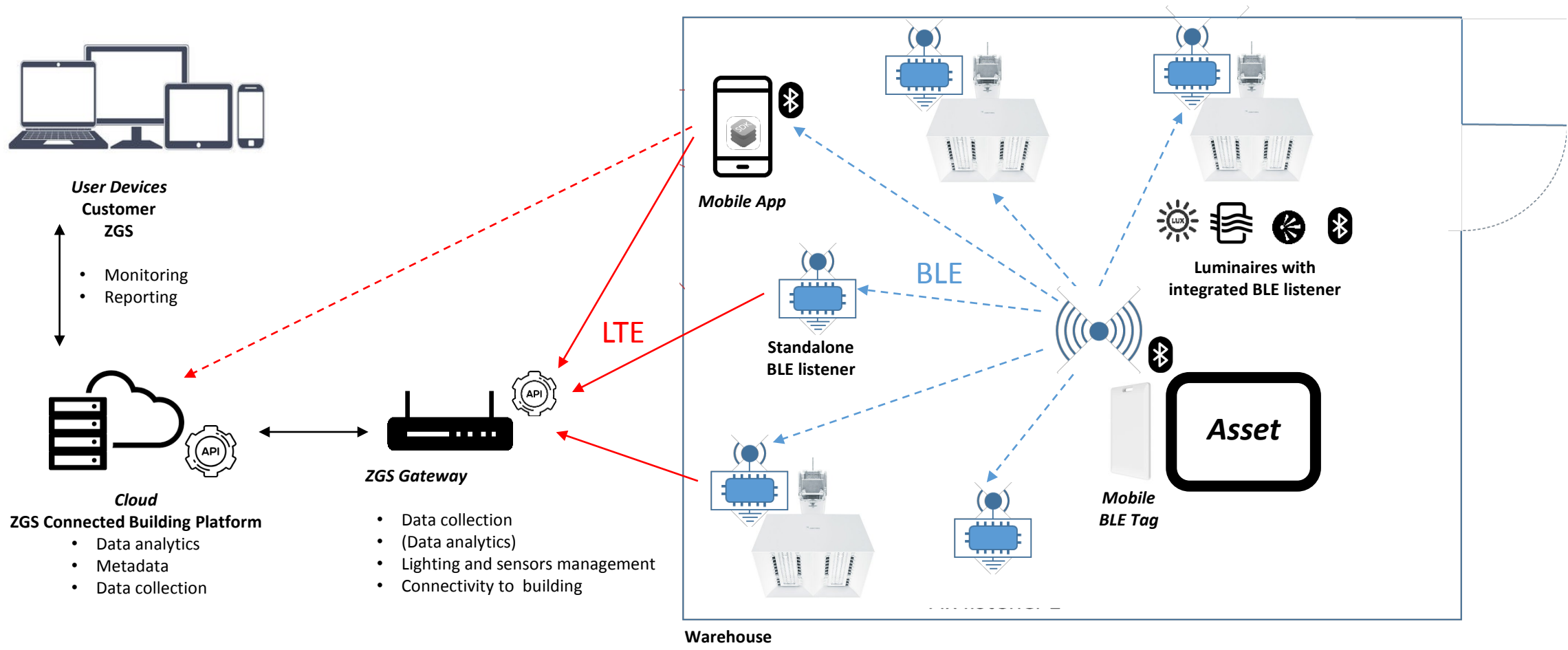| Logistics optimization	Materials tracking	Employee safety & lone worker protection	Autonomous vehicle tracking
Problem A large logistics company knows the location of goods in a warehouse but wants to check if this location is optimal and improve route efficiency of forklifts	**Problem** Company processing sheet metal, steel and aluminum by custom order. Process includes punching, welding, surface finish, powder coating, assembly. As every part is custom, storage becomes complex	**Problem** Individuals working by themselves without supervision, undertaking risky tasks in plants or warehouses. Individuals entering dangerous areas without proper authorization or safety equipment.	**Problem** Autonomous vehicles follow magnetic strips in the floor or preset routes using cameras, however operation managers do not know the exact location of vehicles as they move throughout the facility.
Solution Bluetooth tags are mounted on all forklifts with BLE listeners installed in the facility to provide real-time location data that the organization can analyze in order to optimize and streamline their operations.	**Solution** Processed metal are tagged with Bluetooth beacons and tracked using BLE listeners, with location data integrated into the manufacturing process system to speed up production process and eliminate mistakes	**Solution** Individuals carry Bluetooth tags that are scanned by BLE listeners located in critical areas, enabling alerts to be sent to plant managers in order to identify the person, direction of travel and their dwell time.	**Solution** UWB trackers mounted on the vehicles are tracked with UWB nodes installed along their routes with real-time location data derived on edge cloud and integrated via an API into the process management system

We enable Indoor Asset Tracking with a dense lighting grid

User Devices
Customer
ZGS

- Monitoring
- Reporting

Cloud
ZGS Connected Building Platform
- Data analytics
- Metadata
- Data collection

ZGS Gateway

- Data collection
- (Data analytics)
- Lighting and sensors management
- Connectivity to building

LTE

BLE

Mobile App

Standalone BLE listener

Luminaires with integrated BLE listener

Mobile BLE Tag

Asset

Warehouse

zumtobel group services

Zumtobel Group Servies offers a comprehensive portfolio

EXPECT | MEET

Less complexity
Turnkey Services
Automation & security
Connectivity & Emergency Systems
Return on investment
Finance Services
Transperancy
Digital Services

zgs zumtobel group services
The value of connected lighting. No hassle

Turnkey Services
With our "Light-as-a-service" offer, you get state-of-the-art lighting, without hassle and from one single source. We take care of the management and delivery of the whole project – from planning to project management, to commissioning, even maintenance if desired.

Connectivity Systems.
Use our intelligent connected lighting management systems to take control of your lighting infrastructure – from individual buildings to complete towns and cities. These systems enable you to save energy, increase light quality and enjoy best lighting comfort.

Emergency Lighting Systems
We take care of your safety, managing everything from planning to the annual maintenance of your emergency lighting system.

Finance Services
Our service contracts enable you to acquire "light as a service". Instead of buying, you obtain your new lighting for a fixed monthly rate – without any investment hurdles.

Digital Services
We help you gain new insights into the opportunities opened up by connected lighting, including analysis of space and building utilisation. With Digital Services we offer you effective tools to optimise your daily business.

Technical & Maintenance Services
Our specialist maintenance services team offers efficient, reliable support – from extended warranties to complete life cycle management of your lighting system.

Thank you

zumtobel
group
services