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WE UPGRADIS LIGHTING

WE
contribute to climate change prevention

Outdated manually designed outdoor lighting is part of the problem

The problem

CO_2 emissions
Climate change
Energy efficiency
Lighting pollution
Safety

We all are Affected!

Public budget
Big corporations
Municipalities
Governments

THE SOLUTION

Gradis software:

- Fast: 55k lighting points design done in 7 hours vs manual design of few months
- Gives Energy efficiency of 70% on average vs manual design efficiency 50% average
- Fully norm compliant based on calculations vs manual design based on assumptions

Optimization criteria include combination of: energy efficiency, OPEX and CAPEX.

In precise multicreteria, multiscenario calculations computers will always win with humans.

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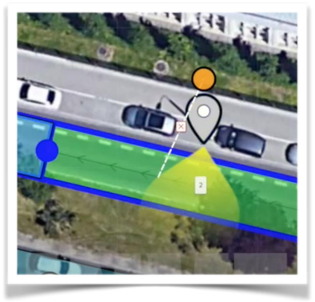
Gradis software

for design of energy efficient and IoT ready outdoor lighting

We want to be the key global player in large scale outdoor lighting digitalization, design and management.

AI calculations (g.design) aggregated in one software platform with **digital twin** (g.inventory) and **asset management** (g.booster).



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g. Design

(AI design)

GRADIS AI PLATFORM

g. Inventory

(digital twin)

g. Booster

(asset management)

Market traction verified by revenue

Over **100 street** lighting designs completed

Cooperation with **global vendors** (Schreder, Signify, GE) and Energy companies

Flagship project - Tblisi **91000** lighting points

Ongoing talks with global esco company focused on **north and south America**

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Target market: outdoor lighting

Expected market share in 5 years:
4% = 11,3m lighting points

- Global Smart Street Lighting market:
- 2017 valued at nearly USD 1,000m
- 2026 assessed to reach a valuation of nearly USD 4,300m
- Measured in lighting points: more than 300m
- Target Market:
- Cities with population above 300k (there are 1723 such cities globally)
- We are able to dominate the growth of the global market

SOM: 11.3m *

SAM: 50m

TAM: +300m

GLOBAL MARKET TRENDS

- Decarbonization
- Digitization
- Increasing energy prices
- Hardware and IOT prices decreasing
- Global climate change prevention goals
- UE green deal
- US trillion dollar Infrastructure Plan targeting grid modernization, energy efficiency, and renewable energy development

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GRADIS' COMPETITION

	INVENTORY	DESIGN	CMS	ASSET MANAGEMENT	AUTOMATIC IDENTIFICATION OF LIGHTING SITUATION	BIG DATA PROCESSING
Gradis	✓	✓	✓	✓	✓	✓
Dialux		✓				
Latarnie2000	✓					
Ulysse		✓				
Owlet (schreder)	✓		✓			
Citytouch (SIGNIFY)	✓		✓			
Siemens global				✓		
Ibm smarter city				✓		

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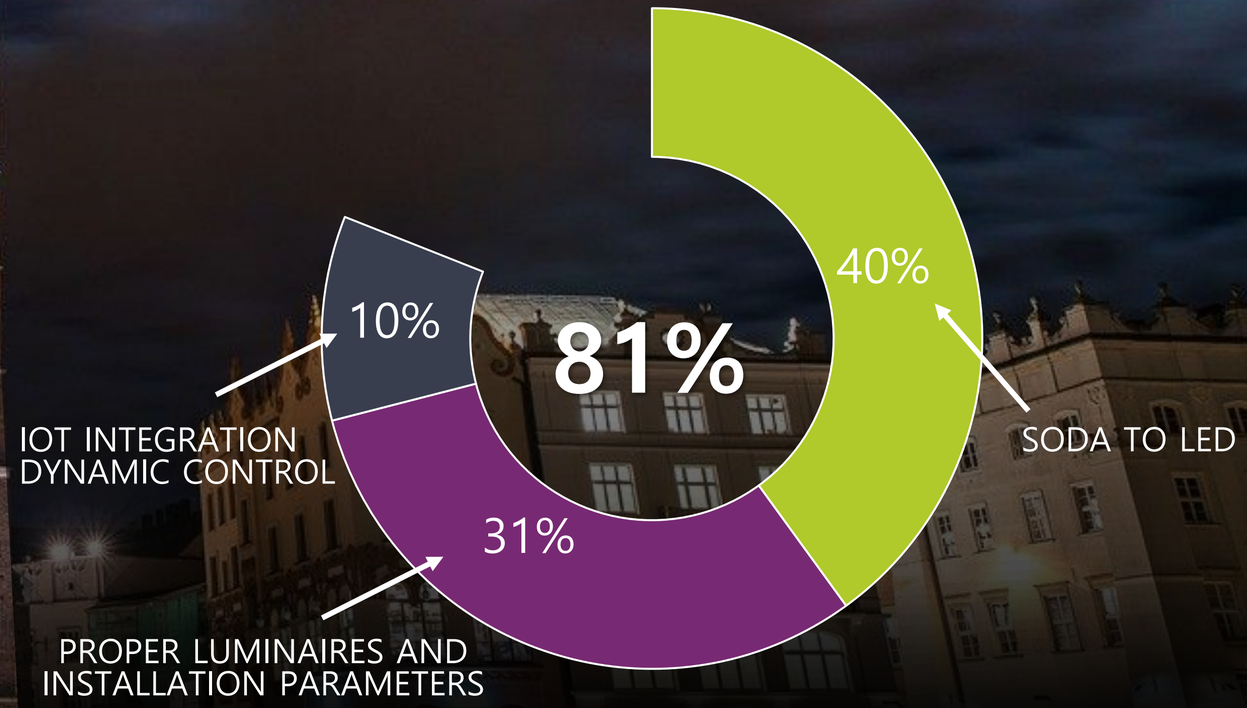
Our PoC Cracow

3768 lighting points

Integration with lighting (schreder owlet) and traffic CMS (Siemens)

efficiency **81%** design in **7h hours** instead od 5 weeks



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Our Customers:

ESCO/Utilities

Large Corporates

Municipalities

Vendors of outdoor lamps

Our Services – what we charge for:

1. Inventory, audits and photometric designs for municipalities
2. Inventory, audits and photometric designs for utilities
3. Master plan for Cities
4. Photometric designs for Vendors

New revenue streams:

1. ESCOs
2. Corporates owning significant lighting infrastructure

Pricing model:

Fixed:

Set-up fee per lighting point

Variable:

Monthly efficiency fee per lighting point paid for 5 years – quasi SaaS

Digital Twin: SaaS

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Master Plan Design is composed of:	ESCO/Corporate package covers:
Inventory	Master Plan Design
Audit	Digital Twin (customised if needed)
Design	Constant technical and analytical support
Tender Support	Constant optimisation based on new available technologies
Bidders Evaluation	
Digital Twin	
Physical Inventory on site is subject to extra fee	

Our Track record:

PoC Project Kraków:

3768 HPS lamps to LED retrofit, 81% efficiency, design optimization and dynamic control, Annual reduction of 1,463.12 MWh (~ 1,170,000 kg CO2), Circa 365,312 € saved on CAPEX and maintenance

Tbilisi:

MASTERPLAN project for the whole city (1,5m people): approx 100.000 light points

Bytom

AI Decision Support System 10.000 light points, 750k EUR (30%) to be saved over the period of 10 years on infrastructure replacement.

Polish cities

Several dozen inventory, audit and design project with Polish cities, average energy efficiency 70%

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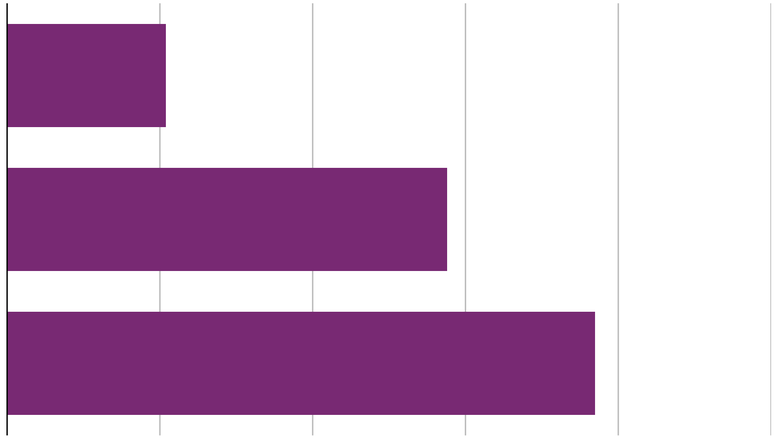
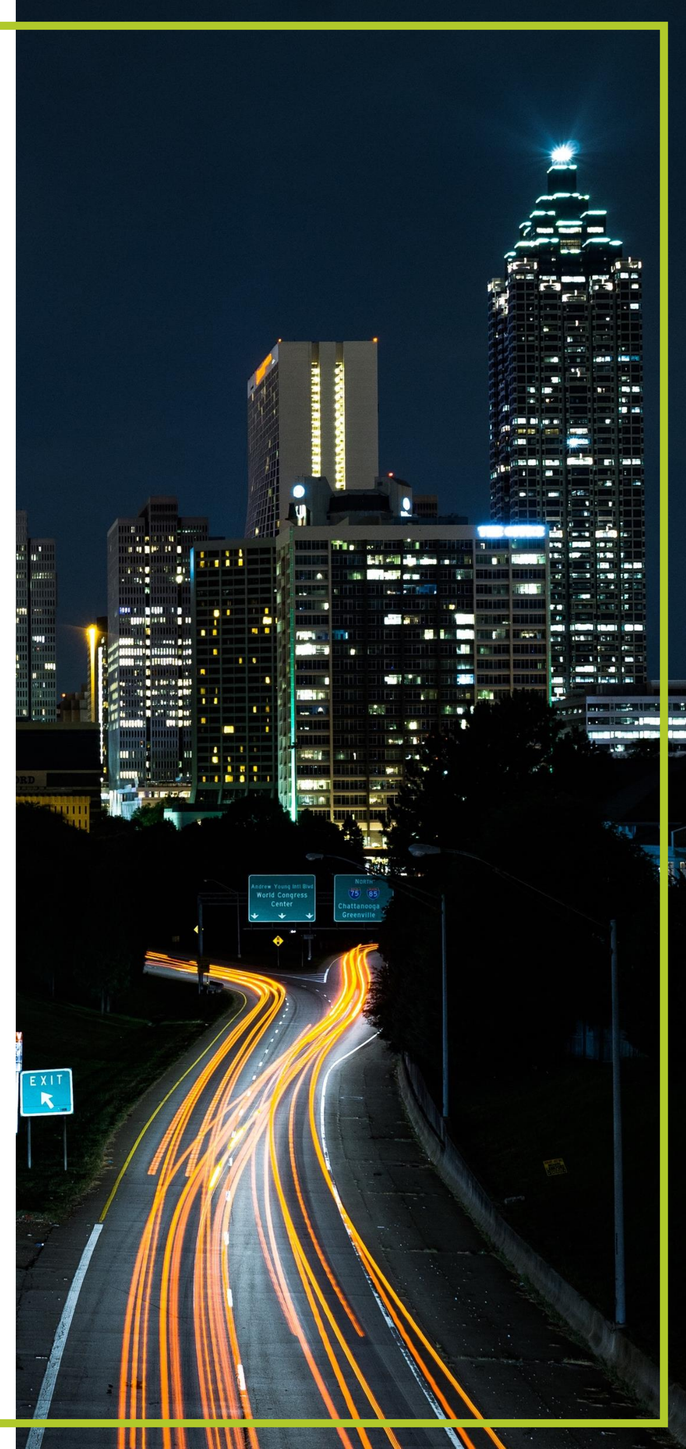
TRACTION:

2018 Revenue	**EUR**	**130k**
2019 Revenue	EUR	**360K**
2020 Revenue	EUR	**481K**



Exit option:

ESCO/Utility – COVID pandemic has stopped one of the global players in the M&A process, we are in touch with them regarding commercial co-operation



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THE TEAM

Entrepreneurs with track record of exits in FinTech (stock-listed), Social Media (Silicon Valley)

World-class street lighting, smart city, AI, IT R&D expertise.

Unique B2G relationship, business development, marketing and sales

Experience in investment and finance industry developed in international environment with focus on CEE.

MORE THAN 37 YEARS EXPERIENCE IN SOFTWARE AND LIGHTING SYSTEMS

CEO
Leszek Kotulski, Prof.

Founder and President of the Management Board of SAWAN GRUPA SOFTBANK S.A. Successful exit to Prokom S.A. (2004)

VP
Igor Wojnicki, Prof.

World-class expert in Connected Lighting, Smart City and AI systems

VP
Jaromir Działo, MSc

Successfully created a semantic text processing company, exit to one of the largest social networks in Silicon Valley (330m of users)

SALES DIRETOR
Kamila Kotulska, MSc

PR & Marketing Specialist in ISI Center; 5 years experience in TV IT Specialist

Adam Sędziwy, Prof.
Sebastian Ernst, PhD

Recognized experts in lighting and AI systems

Sebastian Siuchta, MBA

20 years of experience in investment and finance developed in international environment

Artur Basiura, PhD

PMP and MSF certified

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FACTS

- International Energy Agency forecasts growing global demand for street lighting
- 15%-19% of global energy is consumed by street lighting
- Street lighting costs can reach up to 20% of a municipality's budget, and up to 60% of electricity costs
- retrofit is the cheapest way on saving energy
- Global electricity consumption grows 3% per annum

KEY PROJECTS:

KRAKÓW 81%

WASHINGTON 76%

OVER 100 STREET

Lighting designs completed

THANK YOU!

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