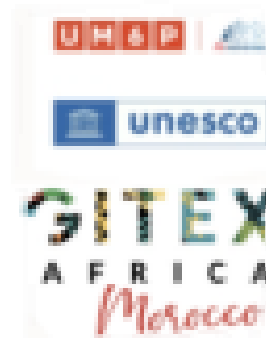




ECOLE MAROCAINE DES
SCIENCES DE L'INGENIEUR
Membre de
HONORIS UNITED-UNIVERSITÄT



ECHOLYTIX

The Urban Noise Crisis in Moroccan Cities



85–90+ dB



ECHOLYTIX: AI-Powered Urban Noise Monitoring in Morocco

ECHOLYTIX combats noise pollution in Morocco's urban centers. Our AI-driven solution addresses noise pollution's health impacts. Discover how smart monitoring technology transforms urban planning. We aim to improve the quality of life across Moroccan cities.



Health Consequences of Noise Pollution

- Elevated stress-related disorders (cortisol levels up 30%).
- Sleep disturbances affecting 45% of urban residents.
- Cognitive impairment, especially in children attending noisy schools.

Prolonged acoustic exposure poses severe and wide-ranging health consequences.



Understanding Urban Noise Pollution

Urban noise is a complex challenge with overlapping sound sources. Vehicular traffic accounts for 65% of ambient urban noise. Industrial activities and construction contribute to noise events exceeding 100 decibels. Entertainment venues disrupt sleep patterns late into the night.



Technology Solution: AI-Driven Noise Monitoring

ECHOLYTIX offers real-time sound level tracking across multiple city zones. Advanced acoustic sensors continuously measure and analyze sound patterns. Encrypted data transmits to secure cloud processing systems. Our AI algorithms identify noise sources using spectral analysis.



Acoustic sensor

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Sound Capture, Analysis, Visualization & Prediction

Advanced acoustic sensors capture continuous audio data. Encrypted sound data transmits to secure cloud systems. Machine learning algorithms identify noise sources. Dynamic noise maps show predictive sound conditions.



Health and Quality of Life Implications

Cognitive performance: Noise above 65 decibels increases cognitive decline risk by 40%. Cardiovascular health: Noise pollution increases hypertension risk by 20-30%. Sleep disruption: Nighttime noise reduces restorative sleep up to 35%.





Data-Driven Urban Planning

ECHOLYTIX provides comprehensive noise mapping for proactive urban planning. We pinpoint noise pollution hotspots. This allows resources to be directed effectively to high-impact areas. Our solution enables the integration of sound environment considerations.





Business Model and Target Clients

Subscription Model

Clients pay a recurring fee for access to ECHOLYTIX's noise monitoring platform and data.

Key Partners

- Local city authorities.
- Environmental agencies.
- Real estate developers.

Targeted Clients

- Urban planners and policymakers.
- Public health organizations.
- Educational institutions.

Key Partners

Local municipalities and urban planning authorities
Acoustic sensor manufacturers
AI and machine learning experts

Key Activities

Installing and maintaining acoustic sensors throughout urban areas
Developing and updating machine learning algorithms for noise analysis
Providing real-time monitoring and data analysis services

Key Resources

Acoustic sensors
AI technology
Data storage and processing infrastructure

Value Propositions

Comprehensive and real-time urban noise monitoring
Precise noise mapping and source attribution
Predictive modeling for proactive noise management
Improved public health and quality of life in urban areas

Customer Relationships

Regular updates and communication on noise levels
Technical support for sensor installation and maintenance
Collaboration on noise reduction initiatives

Channels

Direct sales to urban planning authorities
Partnerships with acoustic sensor manufacturers
Online platform for data access and analysis

Customer Segments

Urban municipalities and government agencies
Real estate developers and construction companies
Healthcare institutions and public health organizations

Cost Structure

Acoustic sensor procurement and installation costs
AI technology development and maintenance
Data storage and processing expenses

Revenue Streams

Subscription fees for real-time monitoring services
Consulting fees for noise reduction strategies
Data analysis and reporting services



How we will grow ?

1 Cost Savings

Effective noise mitigation can reduce healthcare costs and productivity losses.

2 Investment

Smart planning provides long-term value and economic returns for the community.

3 Funding

ECHOLYTIX qualifies for city incentives supporting sustainability initiatives.



Financial Study

Review of the financial metrics for ECHOLYTIX over the next 5 years.

\$2.5M

ARR

Projected annual recurring revenue by Year 3.

40%

Profit

Target profit margins through cost optimization.

300%

Growth

Expected growth by year five from expansion.





Impact and SDGs

ECHOLYTIX aligns with UN Sustainable Development Goals. We are reducing noise, and improving urban environments.



Health

Reduced noise pollution boosts public health.



Cities

Data-driven planning for sustainable cities.



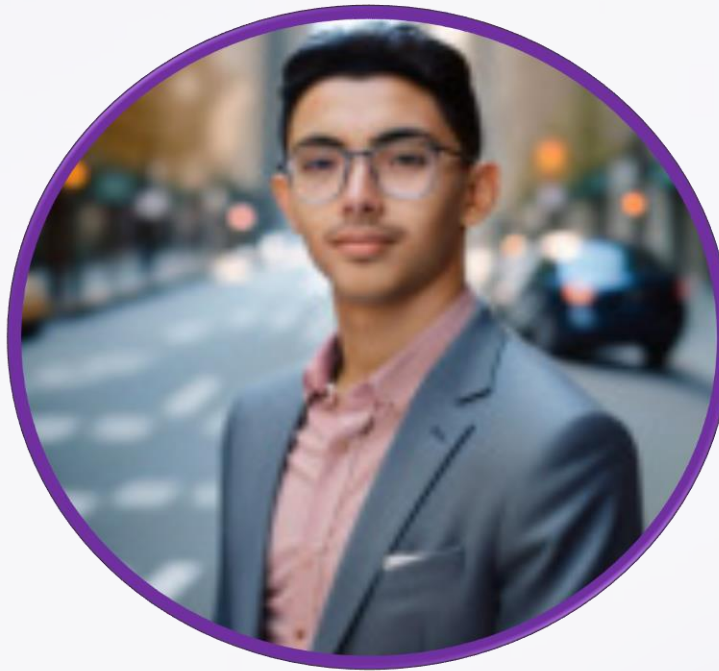
Environment

Monitoring helps protect urban ecosystems.

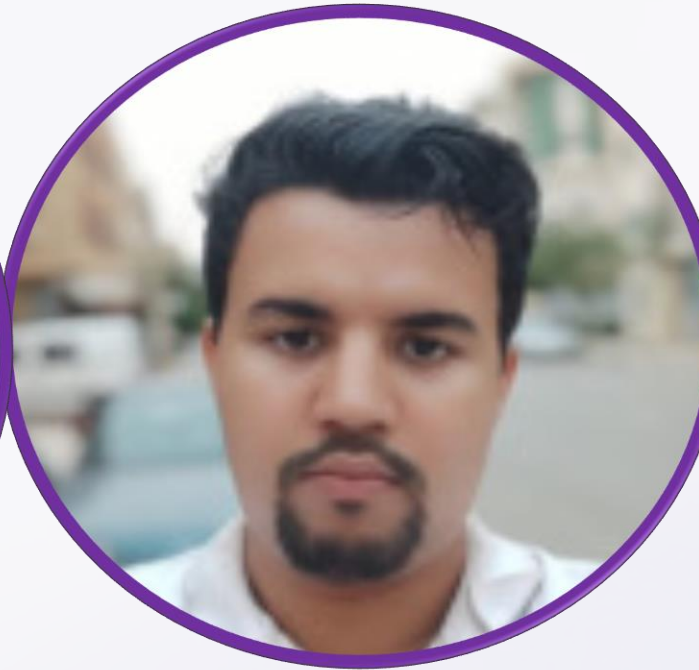


Our Team

The Calm Keepers



Mounsef
Litniti



Badr
Tadlaoui



Othman
Sadiki



ECHOLYTIX

Thank You

