



WeavAir

Proactive Air Insights

info@weavair.com | @weavair_team | http://weavair.com

9+ years developing & testing technologies





HVAC system malfunction

=

\$6.5B USD/year energy wasted

\$6,500 USD/person/year lost

\$45B USD/year contamination cost

25% systems failure

Need for more data

- Environmental regulations doubled
- 300+ new policies
- Insufficient data to monitor





WeavAir

Proactive Air Insights

Technology & IP



Deploy at scale
Energy harvesting
Wireless

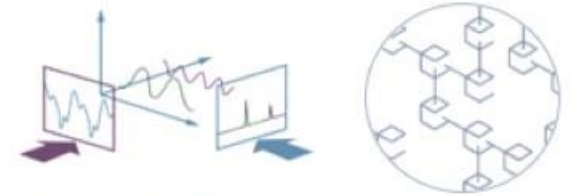


Comprehensive data



Bioaerosols Smoke PM_{1-2.5}
CO CO₂ NOx O₃ VOCs

Actionable insights
Improved accuracy
Cloud analytics



Predictive
AI

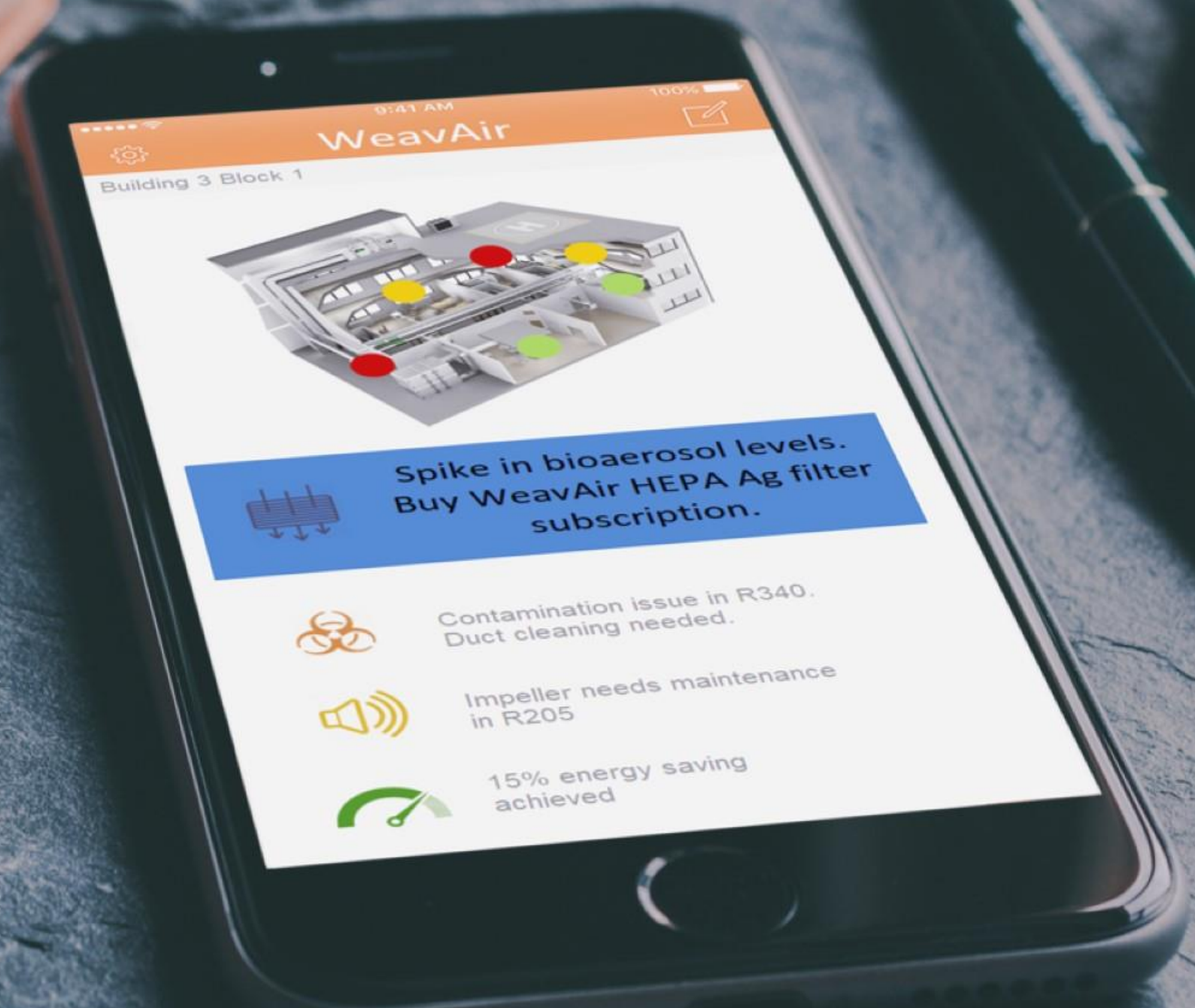
Maintenance
ledger



Secure IoT architecture



3 key patents (pending)



Building 3 Block 1



 Spike in bioaerosol levels.
Buy WeavAir HEPA Ag filter subscription.



Contamination issue in R340.
Duct cleaning needed.



Impeller needs maintenance
in R205










15% energy saving
achieved

Advantage

HVAC monitors

Air monitors & purifiers

	   	 	
Metrics tracked	Pressure, temperature, humidity	Gases, particles, dust	Pressure, temperature, humidity, occupancy, gases, particles, dust, bioaerosol, filter capacity
Accuracy	60%	30%	90%
Reduce energy use	5%	No	15-20%
Identify & control contamination sources	No	Source presence	Source type, source location
Cost	Medium initial investment	High initial investment	Low initial investment

* Competitive advantage = 9 years in data collection and algorithm development

Holistic approach



Reduce levels of pollution in cities
Construction and retrofitting of
sustainable, resilient and resource-
efficient buildings



Reduce health
effect of household
and ambient air
pollution

Adapt to the
adverse impacts of
climate change,
foster climate
resilience



Reduce CO₂ emission
per unit of value added

Development for
sustainable consumption
and production



Value proposition



Save energy

2,000+ MMBtu//building/month
>6 TCO₂/year

Save time

1,000+ hr/year

Reduce costs

\$400K+ labour costs per year

Decrease liability

Regulation compliance

Case study

- Total Floor Space: 332,664 ft²
- ROI > 80 kBtu/ft*yr reduced energy use intensity
- 2,000 MMBtu/month reduced energy consumption





10 awards + 3 patents pending



**The Lieutenant Governor's Visionaries Prize
Prix Visionnaire du Lieutenant-Gouverneur**
**SCIENTIFIC AND TECHNOLOGICAL INNOVATION /
INNOVATION SCIENTIFIQUE ET TECHNOLOGIQUE**





WeavAir

Proactive Air Insights

info@weavair.com | [@weavair_team](https://twitter.com/weavair_team) | <http://weavair.com>

Extra slides

Because we don't have sufficient remote insights...

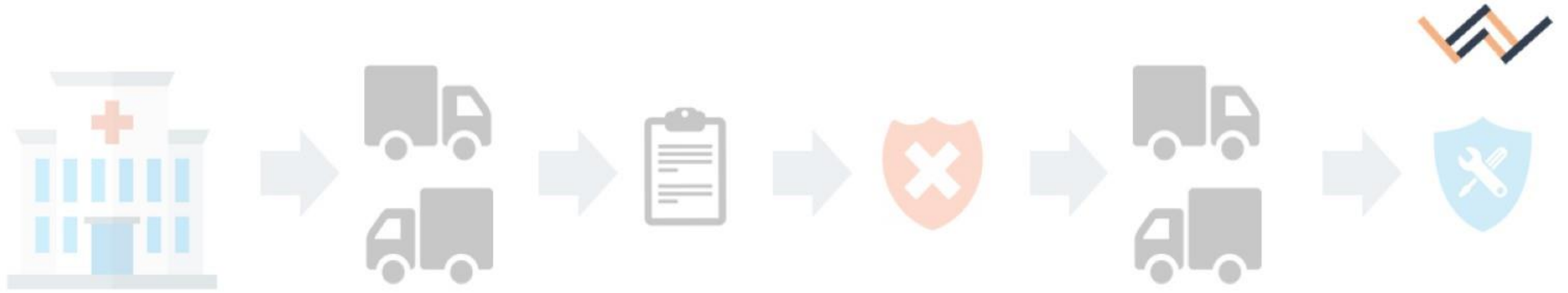


Contractors

Emissions (700+ hr/year on road)
1,000+ hr/year monitoring + reports
> \$400K per year in labour costs

Building managers

Energy wasted (>20%)
Contamination issues
Costly equipment failures



- Save energy (>2,000 MMBtu//building/month)
- Save fuel (>6 TCO₂/year)
- Save time & money
- Improved health & productivity