WeSense - Baby's Lives Matter

Investors Presentation

Guy Ori Michaeli - CEO

Guy is visionary entrepreneur, bringing a creative mind and an entrepreneurial spirit, with more than 15 years of experience in the world of sales, marketing and tailoring customized solutions both for B2C and B2B customers.

Over the past eight years, he has been investing in technology and real estate.

Originally childhood friends, Guy and Miki have known each other since they were 14.
In 2021, Guy has joined Miki to InnoWave as an EMEA Business Development Manager supporting InnoWave partners ecosystem such as NXP, VeriSilicon, ADI, Microchip, ST and many more.

When the idea for Wesense first came up, Guy stood out as the logical choice to lead the company into the future by combining the best human capital in the field with the most advanced technology.

Miki Peer - **CTO**

Miki is a CEO and entrepreneurial visionary with over 12 years' experience in business leadership. Miki established BelRin in 2009 and InnoWave in 2018 with magnificent success.

Both InnoWave and BelRin focused on design, research and development, product specializing in software development, AI and ML, algorithms, image processing, optics, robotics & aerodynamics. In addition, the two focus on design for manufacturability across a widely diversified range of high-mix, high-value, and complex products with an unparalleled experience in transforming innovative ideas into a full-fledged product.

InnoWave group which is led by Miki is a global software and hardware design center collaborating with the leading semiconductors vendors such as NXP, Nvidia, VerSilicon, Analog Devices, Microchip, and more supporting customers across the world.

As of today, Miki also empowering and nurturing startup founders, while helping them grow and scale up their venture by mentoring, investing, and supporting them with InnoWave capabilities.

More about Miki - Pages 10-17

Madoc El Mali - Board Member

Madoc is Entrepreneur, Co-founder at WeSense.

Madoc had his military service at the French navy and holds Bachelor of Science degree, physics, and software at the Campus de France.

After a family SIDS death tragedy in 2010, Madoc immigrated to Israel and since then he put his time and energy into the research of SIDS and SUIDS in order to predict this syndrome.

Madoc register his patent in Israel in 2017- Smart Anti SIDS Infant Crib / Patent #255340. This patent filed out and submitted to USPTO as well.

Prof. Asher Tal - **Chief Scientist**

Asher Tal, MD, is a Professor (Emeritus) of Pediatrics, and Founder of the Pediatric Pulmonary Unit and sleep laboratory at Soroka Medical Center, Ben-Gurion University of the Negev, Beer-Sheva, Israel.

During his 25 years as head of the Department of Pediatrics at Soroka, Professor Tal authored or co-authored over 110 publications. His research interests include pediatric pulmonary diseases such as childhood asthma, bronchiolitis, as well as wheezing in infancy, Cystic fibrosis, sleep-disordered breathing, pediatric and adult obstructive sleep apnea syndrome & insomnia, and.

Currently, Prof Tal is VP of clinical research of Beyond Air, involved in novel treatment of bronchiolitis, viral LRTI and CF-related lung disease.

Prof. Tal is also the Medical Director of Millennium Sleep Laboratory, and Sleep Medicine Clinic in Beer-Sheva, Israel.

The Problem.

• There are three commonly reported types of **SUID** (sudden unexpected infant deaths) - Sudden infant death syndrome (**SIDS)**, accidental suffocation and strangulation in bed **(ASSB)** and unknown causes. Sudden Infant Death Syndrome (SIDS) is an unexplained silent death of a child younger than one year.

Existing solutions which are in the market create too many false alerts, lack of individual metrics, have limited coverage of potential risks, they are not lifesaving, doesn't have predictive AI and not talking into account the personal infant medical references, past diagnosis, diseases, genetic Diseases and many more.

In addition many of them lack regulators' approval and most important they all not preventing the SIDS/SUID.

The Need.

- Lifesaving)Technology protected by patent, NDA required)

- Reduce the real concern of parents for the safety of their babies by supplying reliable, 1st class technological solutions, not available in this specific market

- Machine Learning, Predictive AI solution and screening of false indications, forecast the level of individual dangers and providing 'First aid' when a real danger to the baby is being detected.

- Monitoring, alerting and control of HR (Heart Rate), HRV (Heart Rate Variability) & Stress, SpO2 (Oxygen Saturation), Skin Temperature, Respiration Rate, Motion, Sleep Position, and SQ (Sleep Quality).

- Cloud based solutions (Protected by patent, NDA required)

- Solution that predicts extreme situations by predictive AI algorithm and will prevent the SUIDs/SIDSs.

- Monitoring, alerting and control of related exogenic factors of smoke in the baby's environment, Room temperature, humidity variations, Next feeding, changing diapers, Forgotten Baby Syndrome (FBS) alert and call for action, Child abuse, violence, and abduction by 3rd parties.

- Monitoring and alerting of symptoms of RSV at people infected (Runny nose, decrease in appetite, coughing, sneezing, fever, wheezing) within 4 to 6 days after getting infected, symptoms that usually appear in stages and not all at once. In young infants with RSV, the only symptoms may be irritability, decreased activity, and breathing difficulties.

- An increasing need of ever-growing size of reliable databases that will researchers of all kinds to analyze huge databases and come with better and better insight and understanding of related illnesses and their causes.

Monitoring, alerting and control of HR (Heart Rate), HRV (Heart Rate Variability) & Stress, SpO2 (Oxygen Saturation), Skin Temperature, Respiration Rate, Motion, Sleep Position, and SQ (Sleep Quality).

Machine Learning and Predictive AI Solution

Cloud Based Solutions

The Vision

- Become a global brand.

- Save babies' life worldwide from death while sleeping.

- Create a smart technological babies' shield.

- Relieve stress of parents while putting their child to sleep.

- Extend the usage of our solutions to various age groups, especially elderly people.

- To create a better everyday life for many people.

- To have our product in every home.

- To be the best device in the market, bringing healthcare by innovation, integration, algorithms, and modern technology

The Best Way to Predict The Future is to Create it!

The Solution - Product Highlights

High-Level: WeSense is planning to integrate various high-end existing technological solution together with newly developed sophisticated algorithms using AI and bringing together an end-to-end solution for babies within the 1-12 months range and reducing the danger of sudden infant death syndrome (SIDS) as well as tracking, controlling, and alerting of various numerous risks surrounding the infant.

We developing adjustable wearable smart sleeve, Individually tailored to infant, defines the level of risk, and initiates immediate mitigation actions.

Life Saving	**Predictive AI**	**Machine Learning (ML)**	**Respiration Rate PPG/ECG**	**Motion and Movement**	**HRV (Heart Rate Variability) & Stress**
Preventing an infant's deep sleep in extreme situations (Protected by patent, NDA required)	Algorithm is based on human signals analysis to measure vital signs and prevent extreme situation	Gather and analyze the monitoring data, identify personal trends, learn, and compare to available relevant external databases	Track, alert and call for action if breathing rate is abnormal	Track movements while being asleep and ensure the infant always lying on its back	PPG/ECG/GSR signals in noon motion
HRM (Heart Rate Monitor)	**Sp02 PPG Transmissivity**	**Skin Temperature**	**Room Temperature**	**First Aid**	**Mobility**
Continuous PPG signal.	Track blood oxygen level and alert when problems arise.	Track body and skin temperature and alert of their deviation from normal average	Track room temperature and alert about irregularities	Alert and call for immediate response or intervention in a deep sleep preventing (Technology protected by patent, NDA required)	The ability to move product anywhere, indoors, and outdoors maintaining the same protection and alerts
Air quality	**Forgotten Baby Syndrome**	**3rd Party Violence**	**Wi-Fi / 4G Connection**	**Feeding Reminder**	**Changing Diaper Reminder**
Track air quality and alert when problems arise.	Identify, alert, and call for action for forgotten babies in cars or at any outdoor location	Identify, alert, and call for action for forgotten babies in cars or at any outdoor location	Using advance wireless connection anywhere.	Alert, remind and call for action to parents about next mealtime several minutes beforehand.	Alert, remind and call for action to parents about the need of changing diapers.

Product **Highlights**

High-Level: WeSense is planning to integrate various high-end existing technological solution together with newly developed sophisticated algorithms using AI and bringing together an end-to-end solution for babies within the 1-12 months range and reducing the danger of sudden infant death syndrome (SIDS) as well as tracking, controlling, and alerting of various numerous risks surrounding the infant.

Our solution can easily be implemented and used, with small alteration for other age groups such as the elderly population and track and alert of other risks such as child abduct

Multiple (3) Hotspots Alerts

To prevent from the risk of not receiving an alert due to faulty device

Mobile App

Control, track, and record all alerts generated, interface with users and external sources

Room Humidity Level

Track, alert and call for action

System Frequency Control

Allow parents to decide the frequency of inspecting system operation - Normal or Eco.

Sleep Monitoring

Identify track and alert about the baby's sleeping pattern

Preventing Abduction

Identify, track location and alert of a sudden distancing of the child or of an abduction.

Tailor Made Solution

Individually tailored to infants, defines the level of risk, and initiates immediate mitigation actions.

Prevent 3rd Party Hacking

Identify, Alert and Protect against 3rd party interference with system's operation and household privacy.

Respiratory Syncytial Virus (RSV)

Monitoring and alerting of symptoms of RSV at people infected (Runny nose, decrease in appetite, coughing, sneezing, fever, wheezing)

Medical classification - FDA

Confirmed reliability, differentiation from existing products, potentially will increase the sales.

US Patent application number 17/195,705 filed at the beginning of March 2021 - This patent covers all mentioned aspects in this business plan.

Technologies

Based on the below measurements we developing a unique predictive AI algorithm that is intervene the infant deep sleep (N3) and REM sleep stages in extreme situations. The algorithm based of human signal analysis to measure vital signs and human body condition for deep sleep intervention and motion control which insure the infant always lying on its back.

- **HRM (Heart Rate Monitor) -** PPG signal continually
- **HRV (Heart Rate Variability) & Stress -** PPG/ECG/GSR signals in noon motion
- **SpO2 (Oxygen Saturation) -** PPG Transmissive
- **Body Temperature -** Skin Temperature Sensor
- **Respiration Rate** - PPG/ECG
- **Motion -** Activity levels
- **Sleep Quality Monitoring**
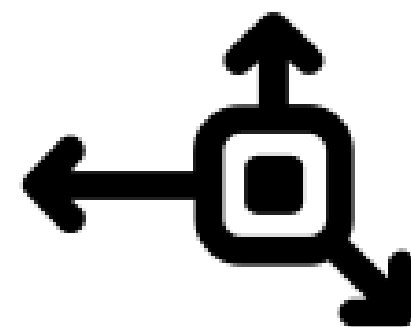- **Sleep Position**
- **Microphone**

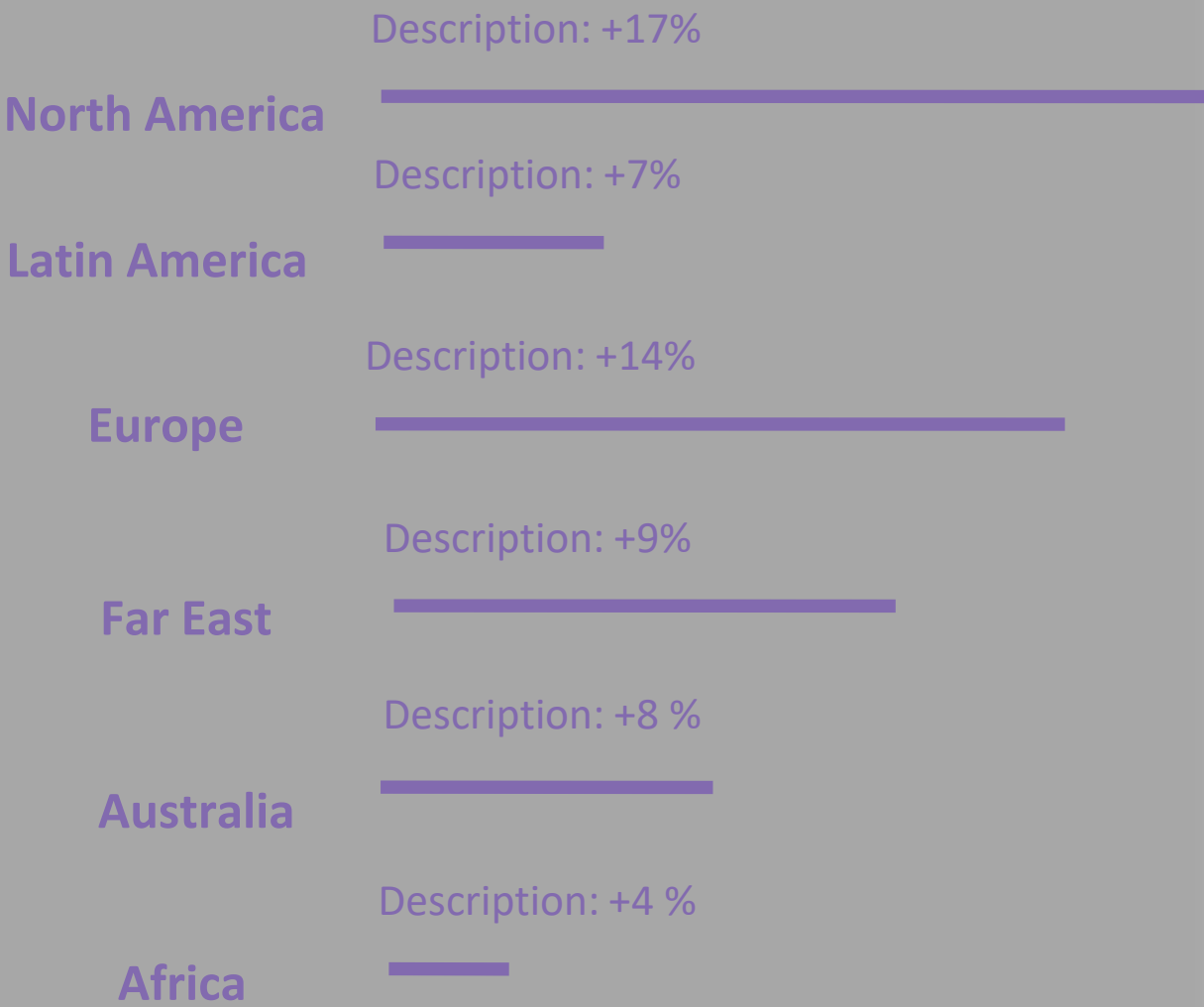| Heart Rate | Oxygen Saturation | Breathing Rate | Sleep Position | Sleep Monitoring | Motion | Body Temp. | Microphone |

Market / Business Potential **Insights**

SALE

Global Baby Monitor Market by Region

Description: +17%

North America

Description: +7%

Latin America

Description: +14%

Europe

Description: +9%

Far East

Description: +8 %

Australia

Description: +4 %

Africa

+13%

Compound Annual Growth Rate (CAGR)

Worldwide Unexpected Sudden Infant Deaths (SUID) Cases +4,119,000

$2.5 Billion Interactive Baby Monitor Market / Global Outlook Forecast 2022-2027

Business Model

The marketing policy is a mix of **B2B** (Business to Business) for the retail and wholesale distribution channels and **B2C** (**B**usiness to **C**onsumer) for the digital distribution channel.

Price per unit: The price per unit of our products at the different distribution channels is derived from the following factors:

1. Differentiation of our product compared to competitors.

2. Different prices for different distribution channels.

3. Competitive prices compared to our competitors.

4. Projected sales mix.

5. Projected sales quantities per type of distribution channel.

6. Engage leading retail distributors in the field or strategic alliances with complementary products.

7. Additional modules through SaaS model.

Research & Development
Road Map

Q1/2024——> Q1/2025

Design and Development:

- The wearable device
- The Gateway
- The Cloud and the Mobile Application

Q2/2025

Commence Production and

Alfa Customers.

Q3/2025

Commence Mass Production

*Initial functional POC is ready.

What we are looking for?

Collaboration with 1st class hospitals and research institutions.

• Definition of statistically reliable sample test groups.

• Conducting of tests to prove the safety, the quality, the advantage, and the acceptance of our solution.

• Get additional access to reliable professional studies and research.

• Active participation in the conceptual design of the solution.

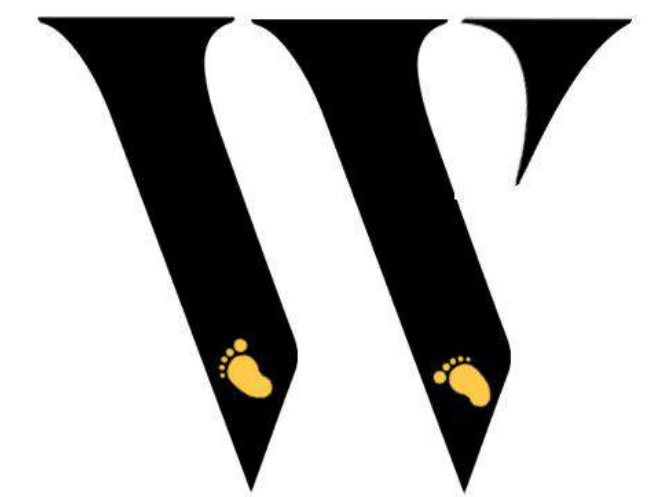**Raising seed money of $ 3.6 Mio in 2024 to enable the company to:**

• Pursuing technological edge and further develop breakthrough technology.

• List of additional patents.

• Pursue marketing strategy and marketing plan.

Raising additional $ 15.0 Mio in 2025/26 to enable the company to:

• Further develop their technology.

• Preparation of their production and supply chain.

• Pursue their marketing strategy and marketing plan.

*Business plan, Investments plan, profit & loss and more will be shared by demand.

Thank you.

WeSense - Baby's Live Matters