



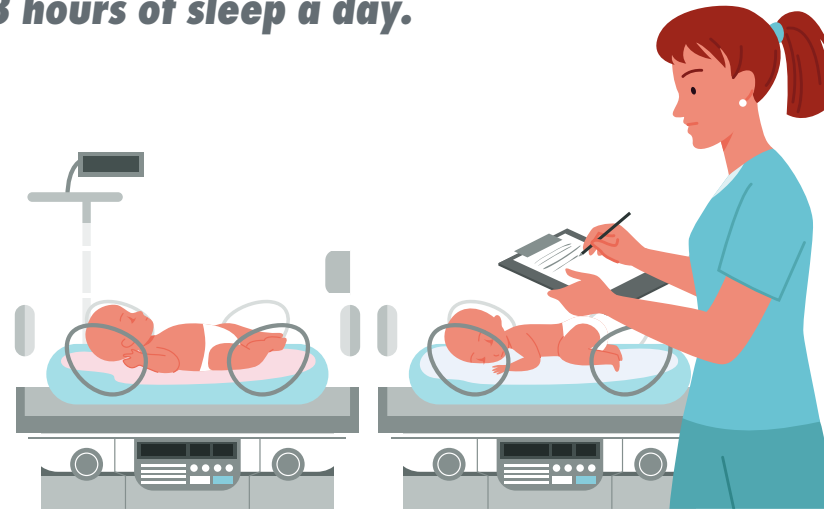
**Following and analyzing babies in newborn intensive care,
with image processing software**

PROBLEMS EXPERIENCED



1 - CHECKING PROBLEM

- Babies need 18 hours of sleep a day.



2 - BUSY WORK SCHEDULE



- Inability to devote enough time to parents
- The family is stressed because they can't see their baby and can't get information

3 - THE BOND BETWEEN BABY AND MOTHER

- Reduction in milk productivity
- Sleep disorders
- Long-term mental problems
- The psychological and neurological development of the baby



4 - PARENT ANXIETY



- Mobbing and violence

**This conclusion was reached as a result of the interviews and researches.*

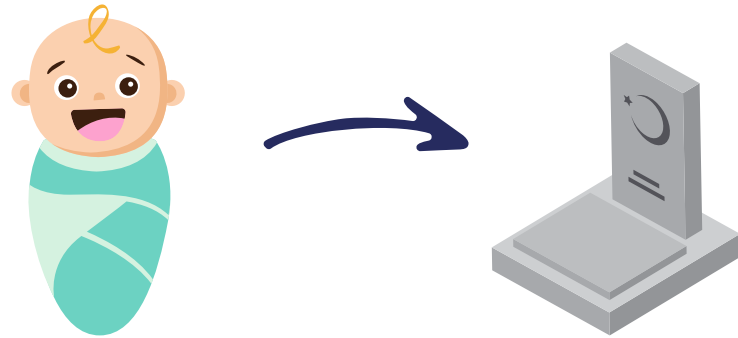
Source; 1 - Şahin, Z.A., Özdemir, F.K., "Hemşirelerin Tıbbi Hata Yapma Eğilimlerinin İncelenmesi", Hemşirelikte Eğitim ve Araştırma Dergisi, 3, 210-214 (2015).
2 - Bal, M.D., "Yataklı Tedavi Kurumlarında Hemşire İnsan gücü Planlama Yaklaşımları", Sağlık ve Hemşirelik Dergisi, 147-154 (2014).



STATISTICS



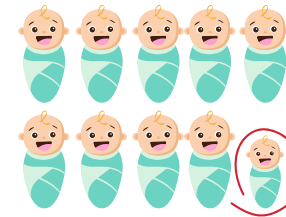
1- PREMATURE BABY DEATH NUMBER



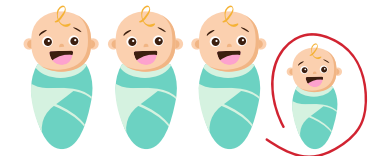
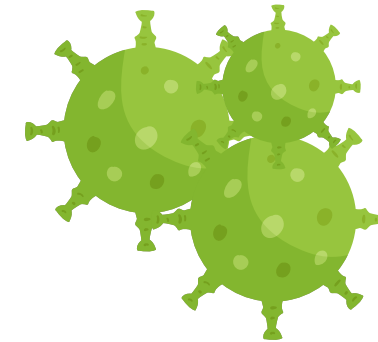
15 Million Babies +1 Million Babies

*According to WHO and UNICEF, 75%
of them are PREVENTABLE...*

2- PREMATURE BIRTH INCREASE RATE



%10



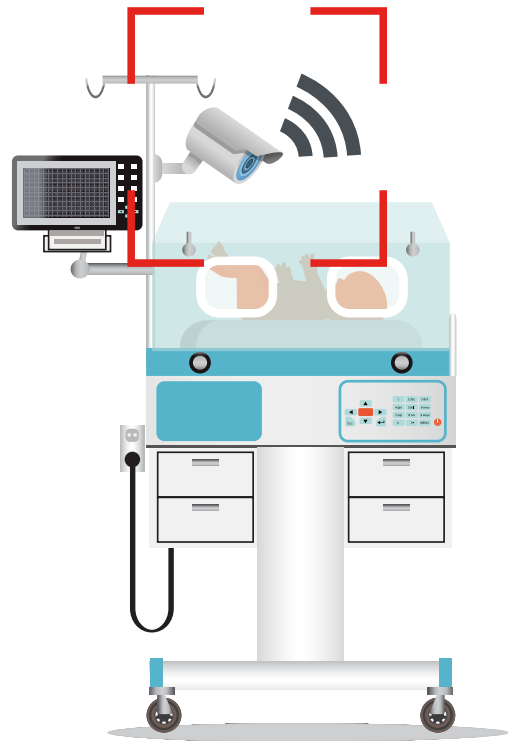
%25

**This conclusion was reached as a result of the interviews and researches.*

Source; 1 - Şahin, Z.A., Özdemir, F.K., "Hemşirelerin Tıbbi Hata Yapma Eğilimlerinin İncelenmesi", Hemşirelikte Eğitim ve Araştırma Dergisi, 3, 210-214 (2015).
2 - Bal, M.D., "Yataklı Tedavi Kurumlarında Hemşire İnsan gücü Planlama Yaklaşımları", Sağlık ve Hemşirelik Dergisi, 147-154 (2014).



SOLUTIONS DEVELOPED BY BABYISTAN



1-INCUBATOR BABY TRACKING

- *Motion and Sound Detection*
- *Warning System*
- *Early Intervention*

2-PARENT TRACKING SYSTEM

- *Image sharing with family*
- *Reduction in family anxiety*
- *Milk productivity*
- *Sleep efficiency*



3-MOTHER VOICE TRANSFER







- *Controlled audio streaming*
- *30 - 50 decibel range*
- *Calming effect*
- *Bond strengthening*



OUR TECHNOLOGICAL ASPECT

Image Processing (Warning System)

Neonatal Infant Pain Scale - NIPS

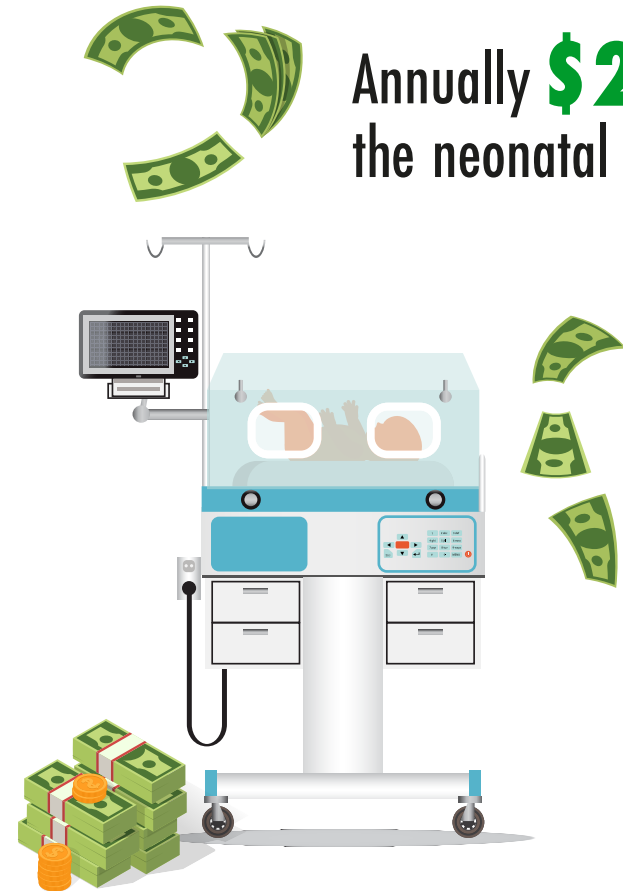
CRITICAL SCORE							
	FACE EXPRESSION	CRYING	BREATHING FORM	ARMS	LEGS	AWAKENING STATUS	
	0	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>
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Score Evaluation Criteria

- IV 15 minutes after drug administration
- PO/ After 1 hour in rectal applications
- 0-1:** No Pain, Minimal Pain (no intervention required)
- 2-4:** Moderate Pain (Use non-pharmacological methods. Re-evaluate after 30 minutes.)
- 5-7:** Severe Pain (Requires pharmacological treatment. Inform the doctor. Re-evaluate after 15 minutes.)



SIZE OF THE MARKET



Annually **\$26.2 billion** is invested in the neonatal intensive care unit in the USA.

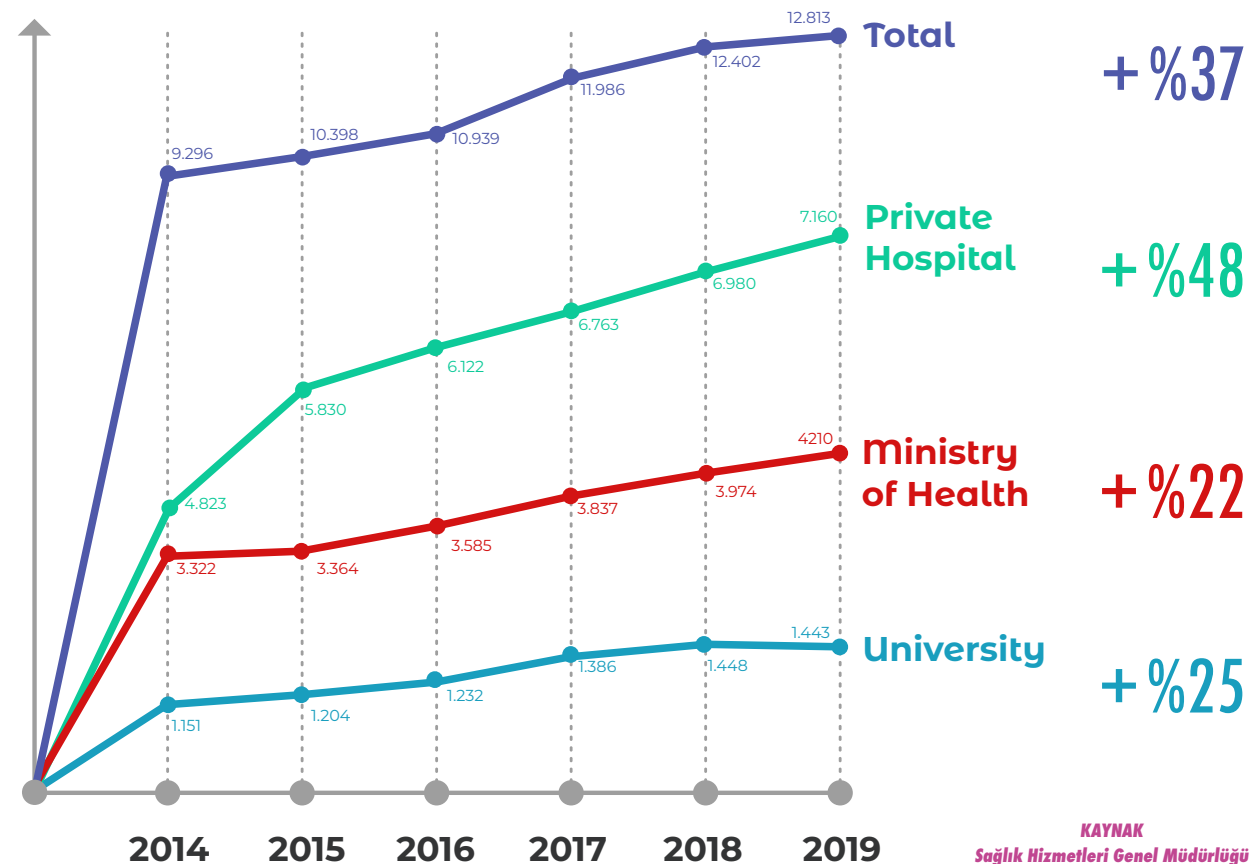
Annual Number of Premature Babies



15 Million Babies

180 Thousand Babies

Number of neonatal intensive care beds in Turkey



SOURCE

- Smart Neonatal Intensive Care for Urban Hospitals
- https://www.researchgate.net/publication/336881453_Smart_Neonatal_Intensive_Care_for_Urban_Hospitals

- <https://www.aa.com.tr/tr/saglik/her-yil-15-milyon-bebek-hayata-erken-basliyor/1647119>
- <https://www.sozcu.com.tr/2020/saglik/turkiyede-her-yil-200-bin-bebek-premature-doguyor-5667394/>

- T.C. Sağlık Bakanlığı, "Sağlık İstatistikleri Yıllığı 2015", SAGEM-2016/1,1054, 100-115 (2015)
- <https://www.neonatology.org.tr/media/2016/12/NeonBulten18.pdf>

- https://jag.journalagent.com/sisietfallip/pdfs/SETB_50_1_14_19.pdf
- T.C. Sağlık Bakanlığı Sağlık İstatistikleri Yıllığı 2014, 2019



COMPETITOR ANALYSIS



Customer Segment	B2C	B2B	B2B / B2C
Use of Artificial Intelligence	✓	✓	✓
Instant Alert System	✗	✓	✓
24/7 Monitoring of Healthcare Professionals	✗	✓	✓
Having the Application	✓	✗	✓
Ability to Watch Past Records	✗	✓	✓
Data Upload	✓	✗	✗
Image Sharing with Family	✗	✗	✓
Transfer sound to Incubator	✗	✗	✓
Target group	Premature and Risky Babies	Premature Babies	Premature and Risky Babies
Usage Period	Newborn Intensive Care Order	Newborn Intensive Care Order	During and After Neonatal Intensive Care
Evaluations	Serabral Palsi / MS	Thermal Imaging Analysis	Neonatal Pain Scale (NIPS)



REVENUE MODEL



<u>PACKAGES</u>	<u>LIMIT</u>	<u>RENTAL</u>	<u>PURCHASING AND MAINTENANCE (ANNUAL)</u>
<i>Package 1</i>	15 Incubators	\$1500 per month	\$60.000 + 15%
<i>Package 2</i>	30 Incubators	\$2000 per month	\$90.000 + 13%
<i>Package 3</i>	60 Incubators	\$3500 per month	\$150.000 + 10%



CAPITAL NEEDED



EXPENSE

PRICE

R&D Expense

(annual) \$60.000

Personnel Expense

(annual) \$100.000

Marketing Expense

\$40.000

Certification Expense

\$45.000

Office Expense

\$35.000

TOTAL

\$280.000



ROAD MAP



1

2018 - 2019

IDEA DEVELOPMENT



2018



7 months
internship

2

2019 - 2021

CONCEPTUAL PROCESS



200+



**Ethics
Committee**



19



Patent
2022/004040



28

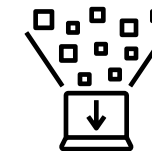
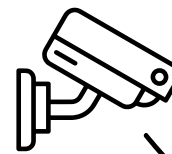


Success

3

2021 - 2022

PROTOTYPE PROCESS



Collection



Cleaning



Training

4

2022

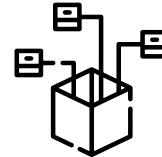
FIRST PRODUCT



5

2023 - 2024

PRODUCTION



LETTERS OF INTENT

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- *Başakşehir Çam ve Sakura Hastanesi* **Coordinator Deputy Chief Physician** Opr. Dr. Arslan ÇOBAN
- *Marmara Hastanesi* **Pediatrics** Dr. Nazlı JALALZADA
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- *Atakent Acıbadem* **Biomedical Engineer** Oğuzhan KILIÇ



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ÜNİVERSİTESİ

HACETTEPE
ÜNİVERSİTESİ

NİSA

İSTANBUL
ÜNİVERSİTESİ
CERRAHPAŞA

DUYGU
HASTANESİ

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İSTANBUL EYLÜF KAMU KADIN VE ÇOCUK
HASTALIKLARI EĞİTİM VE ARAŞTIRMA HASTANESİ

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EĞİTİM VE ARAŞTIRMA HASTANESİ

MANİSA ŞEHİR HASTANESİ

MEDİPOL
SAĞLIK GRUBU

SABİRKİTİM ÜNİVERSİTESİ



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THANKS

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