

# BUSINESS MODEL CANVAS – NEUROGUARD

## CUSTOMER SEGMENTS (CS)

- **Primary Segment:** Patients with epilepsy (adults, children, elderly) who need continuous monitoring and early seizure prediction.
- **Secondary Segments:**
  - Caregivers & families who require real-time alerts to ensure patient safety.
  - Neurologists & healthcare providers interested in remote patient monitoring.
  - Elderly population at risk of falls, sleep apnea, or heart arrhythmias (future expansions).
  - Sports/fitness enthusiasts (long-term expansion for performance tracking).

## VALUE PROPOSITIONS (VP)

- **For Epilepsy Patients:** Continuous, AI-powered monitoring with seizure prediction (1–5 minutes before onset), reducing risks of injury and death.
- **For Caregivers/Doctors:** Real-time alerts via mobile app/cloud dashboard + historical reports for better medical decisions.
- **For Healthcare Providers:** Scalable, cost-effective remote monitoring tool compared to hospital-based EEG monitoring.
- **Future-Proof Design:** Same hardware can expand into stroke, heart disorders, Parkinson's, fall detection, sleep apnea, and stress monitoring without new devices.
- **Accessibility:** Affordable alternative to high-cost EEG monitoring, lightweight, and easy to use.

## CHANNELS (CH)

- **Direct Sales:** Through hospitals, clinics, and neurologists recommending the device.

- **Online Platforms:** Company website, e-commerce stores (Amazon, Jumia, Noon).
- **Partnerships:** NGOs, epilepsy foundations, insurance companies.
- **Mobile App:** As the main engagement channel (notifications, data, subscriptions).
- **Pilot Programs:** Collaborations with universities and medical research centers.

## CUSTOMER RELATIONSHIPS (CR)

- **Personalized Support:** Setup guides, onboarding tutorials.
- **Automated Monitoring:** Continuous alerts without user effort.
- **Community Engagement:** Patient support forums, awareness campaigns.
- **Subscription-based Relationship:** Premium analytics & extra features.
- **B2B Partnerships:** Long-term collaboration with hospitals and insurance companies.

## REVENUE STREAMS (RS)

- **Device Sales:** One-time purchase of NeuroGuard wearable.
- **Subscription Plans:** Free basic monitoring. Premium plan: advanced analytics, AI insights, multi-condition detection.
- **B2B Licensing:** Hospitals & clinics pay for dashboards and patient monitoring.
- **Data Insights (Ethical/Consent-based):** Partnerships with research institutions for anonymized data.
- **Extended Services:** Paid reports, predictive analytics for caregivers/doctors.

## KEY RESOURCES (KR)

- Hardware components (BioAmp, MAX30102, MPU6050, ESP32, SIM800L).
- AI/ML algorithms (seizure prediction, anomaly detection).
- Mobile app (Flutter-based, cross-platform).
- Cloud backend (Firebase, real-time sync).
- R&D team (AI engineers, embedded systems experts, app developers).
- Partnerships with hospitals, NGOs, research labs.

- Brand reputation & medical certifications.

## KEY ACTIVITIES (KA)

- Hardware prototyping & testing.
- AI model training & validation with medical datasets.
- Mobile app & dashboard development.
- Cloud infrastructure setup & maintenance.
- Clinical trials & validation for medical approval.
- Customer support & onboarding.
- Marketing, partnerships, and awareness campaigns.

## KEY PARTNERS (KP)

- **Medical Institutions:** For clinical validation & trials.
- **Universities/Research Centers:** For AI model development.
- **Suppliers & Manufacturers:** For wearable production.
- **NGOs & Epilepsy Associations:** For outreach & trust-building.
- **Telecom Providers:** For SIM-based emergency alerts.
- **Insurance Companies:** For coverage & patient affordability.
- **Cloud Providers (Google/Firebase):** For secure backend services.

## COST STRUCTURE (C\$)

- Hardware prototyping & mass production.
- AI model development & continuous training.
- Cloud services (Firebase, hosting, analytics).
- Mobile app & dashboard development.
- Regulatory compliance & certifications (FDA, CE, HIPAA).
- Marketing & distribution (ads, awareness campaigns).
- Customer support & after-sales services.
- Partnerships & licensing costs.