Global Surgical AI Healthcare

Hospital Presentation

Global Surgical AI Healthcare

Mark Kembel
Founder A. I. Online Developer + Inc.
CTO & Chairman of the Board

5 years as a Microsoft Test Engineer and Manager

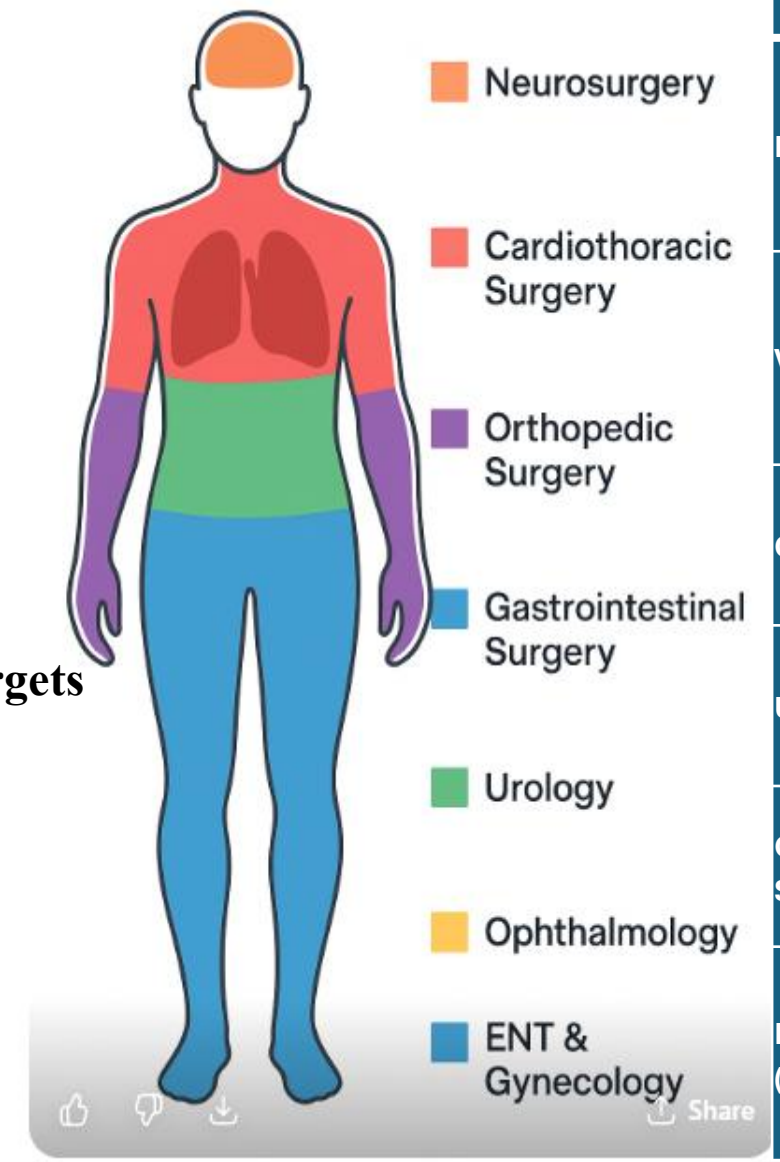
Mark's background in technology and being an AI Engineer is being used to work with developers on the AI Healthcare Project. His knowledge and partners in the development section will do the work on Cancer Research. He will bring in a CEO that has a medical background to help with the knowledge to get through the FDA trials and work with the Board on managing the Nurses that will sell our programs. He will also help with explaining to investors and hospitals for the medical knowledge that we provide.

website www.globalvisionproai.com **AI will prevent cancer by detecting it early.**

markkembel@gmail.com **for questions on stock offering.**

💡 Top 5 “Billion-Dollar” Vision Pro Targets

1. **Neurosurgery**
2. **Orthopedics**
3. **Ophthalmology**
4. **Cardiothoracic Surgery**
5. **Vascular Surgery**
6. **Cancer Surgery**



Specialty	Example Surgeries	Global Market Value (Est.)
Neurosurgery	Brain tumor removal, spinal fusion, aneurysm repair	$60B+
Vascular Surgery	Aneurysm repair, carotid endarterectomy, stenting	$40B+
Ophthalmology	Retinal surgery, cataract removal, corneal grafts	$75B+
Urology	Kidney tumor resection, prostatectomy	$40B+
Gastrointestinal Surgery	Liver resection, pancreatic tumor removal, bariatrics	$60B+
ENT (Otolaryngology)	Sinus surgery, cochlear implants, throat tumor removal	$30B+

AI-Powered Cancer Detection & Surgical Assistance System

Comprehensive Design Document with Milestones & Budget

Executive Summary

This document outlines the development of an innovative AI-powered application for Apple Vision Pro that revolutionizes cancer detection and surgical procedures through spatial computing and augmented reality. The system integrates real-time medical imaging analysis, surgical planning, and intraoperative guidance to enhance diagnostic accuracy and surgical precision.

Early Cancer Detection Module Medical Imaging Analysis: AI-powered analysis of CT, MRI, X-ray scans Multi-Cancer Detection: Breast, lung, prostate, colorectal, pancreatic, skin, and brain cancers Skin Lesion Analysis: High-resolution capture and AI classification of skin lesions Real-time Alerting: Immediate feedback system for healthcare professionals

Vision Pro Benefits

- Create a **huge profit** after the first year, programs take 5 months to develop
- **Global Surgical Market:** $579B+ by 2030
- Surgeons see 3D anatomical overlays, real-time imaging, and AI-assisted guidance **directly in their field of view**
- Voice, hand, and eye controls keep the surgeon sterile and focused—no keyboard or mouse needed
- A "digital twin" of each procedure is captured for instant playback, training, and quality control
- Remote experts can join live surgeries virtually—anywhere in the world—cutting consultation delays from days to seconds
- If Vision Pro captures **just 2%** of the surgical technology market, that's a **$10B+ opportunity**—with hospitals paying $50K–$200K per OR setup plus recurring software licensing

Hospitals that adopt it will:

- Perform safer, faster, and more precise surgeries
- Reduce costs from complications and re-operations
- Attract top surgical talent and global patients
- And unlock a **billion-dollar market opportunity** that is wide open today

Advantages of Vision Pro

Problem:

Modern surgery is a triumph of medicine, but it still suffers from:

- Limited intraoperative visibility of hidden structures
- Reliance on multiple external monitors, forcing surgeons to look away from the patient
- Training bottlenecks due to limited access to real surgeries
- Inconsistent precision between surgeons, leading to varied patient outcomes
- These inefficiencies cost hospitals millions annually and contribute to longer recovery times, surgical complications, and preventable readmissions.

Solution:

The Apple Vision Pro Surgical Platform turns the OR into an intelligent, augmented reality environment where:

- Surgeons see 3D anatomical overlays, real-time imaging, and AI-assisted guidance directly in their field of view
- Pre-op scans and MRI data are layered on the patient's actual anatomy with sub-millimeter accuracy
- Voice, hand, and eye controls keep the surgeon sterile and focused—no keyboard or mouse needed
- A "digital twin" of each procedure is captured for instant playback, training, and quality control
- Remote experts can join live surgeries virtually—anywhere in the world—cutting consultation delays from days to seconds

Press Release for Vision Pro for 2025

Apple just revealed that the Vision Pro headset is getting upgraded to an M5 chip. There's also a new strap called the Dual Knit Band, which the company says will "help users achieve an even more comfortable fit."

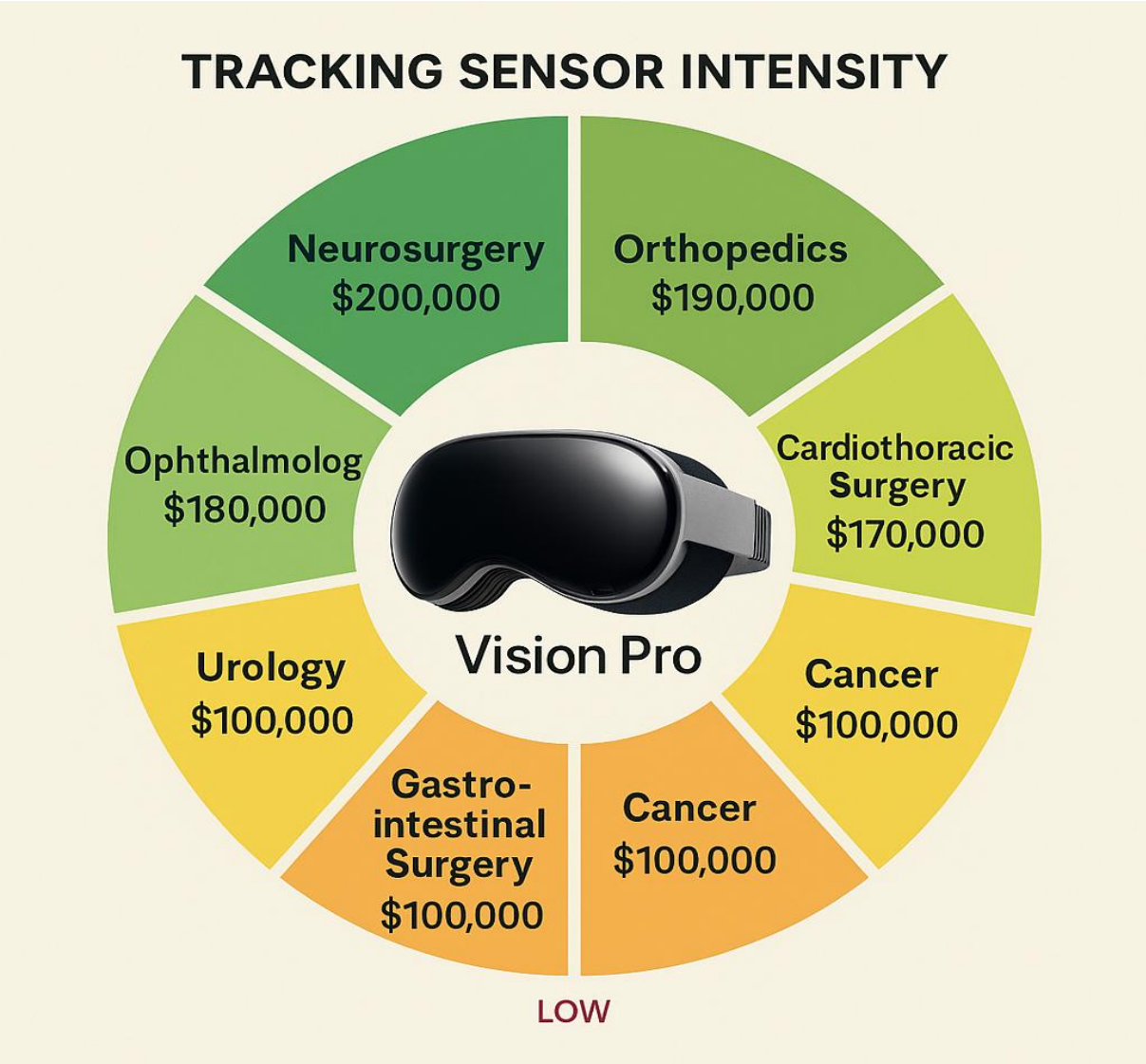
The M5 headsets will be available starting October 22nd for the same $3,499. But aside from the chip upgrade, nothing about the Vision Pro's design has changed. Instead, Apple's press release claims that the M5 chip will bring faster processing and more detailed image rendering. Specifically, the M5 renders 10 percent more pixels on the OLED displays and can increase refresh rates up to 120Hz. Previously it maxed out at 100Hz. As for processing, AI-powered features like a Persona or spatial photos are up to 50 percent faster. Battery life is also improved by about 30 minutes, up to 2.5 hours of general use and three hours of video playback.

Here is the additional equipment required for the Vision Pro for surgeries. Most of the equipment is already in the hospital. Before purchasing make sure your hospital has the equipment already. We supply a software program that converts images for the PCs for images such as tumors.

✅ Summary:

Tracking sensors aren't built into Vision Pro for surgical precision. They're **external systems** used in operating rooms, mounted in the OR and linked to existing surgical navigation platforms. You would typically source them from companies like Medtronic, Brainlab, Stryker, or NDI — not Apple.
Would you like me to create a **second infographic** that shows the difference:
Vision Pro's **built-in sensors** (good for general AR), versus
External surgical tracking sensors (needed for high-precision medical use)? That way, your investors and hospital partners instantly see why both are required.

- **Medtronic StealthStation** (commonly used in neurosurgery, spine, ENT).
- **Brainlab Curve Navigation** (high-end surgical tracking system).
- **Stryker Navigation** (orthopedic and trauma surgery).
- **NDI (Northern Digital Inc.)** Polaris and Aurora systems (optical and electromagnetic trackers used in research and ORs).



High Use (Green)
- **Neurosurgery ($200,000)**
- **Orthopedics ($190,000)**
- **Ophthalmology ($180,000)**

These specialties rely heavily on **precision navigation and tracking sensors** (optical, electromagnetic, or eye-tracking).

Moderate Use (Yellow)
- **Cardiothoracic Surgery ($170,000)**
- **Vascular Surgery ($160,000)**
- **Cancer ($100,000)** *(depends on the surgery type —brain/breast/prostate use more sensors, others less)*

These use tracking sensors in certain procedures (catheter navigation, robotic surgery, tumor resections), but not as universally as high-use fields.

Low Use (Orange/Red)
- **Gastrointestinal Surgery ($100,000)**
- **Urology ($100,000)**

These rely more on laparoscopic/robotic visualization and less on dedicated tracking sensors, though robotics adds some tracking indirectly.

Sensor Tracking Usage

✅ **Surgeries that rely heavily on tracking sensors**

•**Neurosurgery ($200,000)**

Uses neuronavigation systems with optical or electromagnetic tracking sensors to precisely guide instruments relative to brain structures. This is one of the most sensor-intensive fields.

•**Orthopedics ($190,000)**

Joint replacements (hip, knee, shoulder) often use optical or robotic navigation systems with tracking sensors to ensure implant alignment and bone cuts are exact.

•**Ophthalmology ($180,000)**

Eye-tracking sensors are essential in laser surgeries (e.g., LASIK, cataract surgery), ensuring lasers or tools follow micro-movements of the eye.

•**Cardiothoracic Surgery ($170,000)**

Increasingly uses sensors for catheter navigation, robotic surgery systems (like Da Vinci), and 3D heart mapping during minimally invasive heart procedures.

✅ **Most sensor-intensive:** Neurosurgery, Orthopedics, Ophthalmology

⚠️ **Moderate use:** Cardiothoracic, Vascular, Cancer (depending on type)

❌ **Lower use:** Gastrointestinal, Urology

⚠️ **Sometimes use tracking sensors (depending on approach/tech)**

•**Vascular Surgery ($160,000)**

Endovascular procedures often rely on fluoroscopy and imaging, but advanced labs may incorporate electromagnetic tracking sensors for catheter and stent navigation.

•**Cancer ($100,000)**

Depends on the surgery type. Tumor resections (brain, breast, prostate) often use tracking sensors for image-guided navigation, but systemic cancer surgeries (like open abdominal resections) rely less on them.

❌ **Limited or indirect use of tracking sensors**

•**Gastrointestinal Surgery ($100,000)**

Most GI surgeries rely on laparoscopic or robotic visualization rather than dedicated tracking sensors, though robotic platforms may include instrument tracking.

•**Urology ($100,000)**

Robotic prostatectomy or kidney surgery uses robotic arms with tracking, but not as sensor-intensive as neurosurgery or orthopedics.

Vision Pro Required Sensors

We will have a specialist visit the hospitals to make sure the sensors get installed properly. They will also deliver the Vision Pro glasses with a battery pack.

1. Hand Sensors
Specialized downward-facing cameras track your **hand movements and gestures**.
They detect things like pinching, tapping, swiping, and finger positions.
This allows **hands-free interaction**—you don't need controllers.

2. Cameras
Outward-facing **RGB cameras** capture the real world.
Provide **video pass-through**, letting you see your surroundings while wearing the headset.
Enable **mixed reality** by blending digital objects with your actual environment.
Also help with **environment mapping** and anchoring virtual objects.

3. LiDAR Scanner
Uses **laser pulses** to measure distances and build a **depth map** of your environment.
Essential for **3D spatial awareness**, accurate room mapping, and object placement.
Makes AR experiences more realistic (objects can appear on tables, floors, walls with correct scaling).

4. Infrared (IR) Cameras & Illuminators
Allow **eye tracking** by illuminating your eyes with invisible IR light.
Track **gaze direction**, so the system knows what you're looking at (menus, buttons, objects).
Enable **foveated rendering**: Vision Pro renders the highest quality where you're looking, saving processing power.
Also work in **low-light conditions** to improve hand and environment tracking.

✅ **In short:**
Hand sensors = gesture input
Cameras = video pass-through + environment view
LiDAR = depth sensing + spatial mapping
Infrared cameras = eye tracking + precision input

Subscription Cost Table with Vision Pro for Hospitals Tier 1

Total Subscription Value: $1.2M USD **Bundle deal** $1 Million USD
3 Vision Pro glasses included in price for each program if you pay the Assigned Subscription Cost.
When calling Identify your country. For pricing outside the United States, Europe or Middle East email markkembel@gmail.com for prices. Special pricing for Mid Tier Hospitals in the countries listed.

Tier 1 Revenue = $1,200,000 USD

Surgery Specialty for Tier 1 Hospitals	Assigned Subscription Cost
Neurosurgery	$200,000 USD
Orthopedics	$190,000 USD
Ophthalmology	$180,000 USD
Cardiothoracic Surgery	$170,000 USD
Vascular Surgery	$160,000 USD
Cancer	$100,000 USD
Gastrointestinal Surgery	$100,000 USD
Urology	$100,000 USD

Subscription Cost Table with Vision Pro for Hospitals Tier 2

Total Subscription Value: $ 840,000 USD **Bundle deal** $ 500,000 USD
3 Vision Pro glasses included in price for each program if you pay the Assigned Subscription Cost. When calling Identify your country. For pricing outside the United States, Europe or Middle East email markkembel@gmail.com **for prices. Special pricing for Mid Tier Hospitals in the countries listed. For regional hospitals or teaching institutions**

Total Tier 2 Revenue = $840,000 USD

Surgery Specialty for Tier 2 Hospitals	Assigned Subscription Cost
Neurosurgery	$140,000 USD
Orthopedics	$130,000 USD
Ophthalmology	$125,000 USD
Cardiothoracic Surgery	$120,000 USD
Vascular Surgery	$110,000 USD
Cancer	$70,000 USD
Gastrointestinal Surgery	$70,000 USD
Urology	$75,000 USD

Research Summary

I'm developing a groundbreaking AI-powered software integrated with augmented reality (AV) glasses to transform cancer detection and surgical procedures. This innovative technology enables real-time identification of cancerous tissues, assisting surgeons during operations and reducing reliance on external monitors. By overlaying critical imaging data directly into the surgeon's field of view, it enhances precision and efficiency in the operating room.

Global Surgical AI Healthcare

Vision Pro Summary

Applications in Cancer Surgery

Applications in Orthopedic Surgery

Apple Vision Pro in Heart Surgeries

Our AI system is designed to analyze various medical imaging modalities, including CT scans, MRIs, and X-rays, to detect multiple cancer types such as breast, lung, prostate, colorectal, pancreatic, skin (including basal cell carcinoma, squamous cell carcinoma, and melanoma), and brain cancers.
All these surgeries listed in the middle of the page are on our list for developing a program for using Vision Pro in surgeries.

Email the following:
markkembel@gmail.com

Global Surgical AI Healthcare

Thank you for your time,

Mark Kembel
CEO, CTO & President
markkembel@gmail.com
Global Surgical AI Healthcare
425.403.5468

We are looking for Hospital Partners in AI to test and provide feedback. By Doing the FDA trials you Get a discount on the Vision Pro glasses.

If your hospital is located outside the US, you will get your order as soon as we get our stock offering underway. It takes 5 months to develop the program.

If your located in the US and want to participate in the FDA trials then we can sign you up as soon as the program is ready.