**PROBLEM**

- Doctors don’t have an effective tool for collaboratively evaluating complex cases, planning for surgery, and communicating these decisions to patients
- New minimally invasive methods require more detailed anatomical visualization and significantly more cross-functional preoperative and intraoperative collaboration
- Trends in patient empowerment aren’t reflected in the quality of data shared with patients during the informed consent process

**BOSC FEATURES**

- Synchronous viewing and communication experience (a la Google Hangouts)
- Bookmark views, and leave voice annotations that can be shared with collaborators and patients anywhere in the world
- Easily integrate with acquisition software (e.g. GE AW Server) to upload, manage, and review data using the Bosc web application and SaaS model manager

**COMPETITIVE LANDSCAPE**

- Bosc will be the first MR preoperative collaboration tool
- Though 3D printing is growing rapidly, Bosc benefits from no maintenance overhead, advanced digital interactions like slicing, and fits into fast-moving hospital workflows
- Unlike competitors EchoPixel, Jump Simulation, and Surgical Theater, Bosc uses mixed reality and doesn’t rely on model segmentation. Though MR displays are not yet ready for the hospital, their inclusiveness and mobility are more suitable for the dynamic atmosphere and collaborative requirements of complex preoperative planning

**REVENUE STRATEGY**

We plan to engage hospitals in 5-year contracts with an annual price of $100k, plus a marginal usage fee of $100. This incentivizes usage with a high initial fixed cost and low variable costs rather than a per-use model. This pricing and sales model is consistent with current imaging software competitors.

**TEAM**

- Ryan James, Development
- Mark Laughery, Design
- Jonah Rankin, Business
- Kevin Li, Research

**ADVISORS**

- Beth Ripley, MD, PhD, Radiologist
- Dmitry Levin, Medical Educator

**MARKET OPPORTUNITY**

30% of radiologic examinations have medical errors, and roughly 12 million Americans are adversely affected by inaccurate or delayed diagnoses. According to the American College of Radiology, 10% of annual health care costs in the United States are for medical imaging - $100 billion. Of this $100 billion, 10% of “all imaging services are unnecessary or duplicative”. This is a $10 billion market.

**WHY NOW - Cultural**

- Emphasis on outcomes. The US is shifting from away from a fee-for-service model toward a Medicare/Medicaid model of Accountable Care Organizations (bundling). This provides an enormous incentive for hospitals and insurers to lower costs
- Care is increasingly patient-driven
- Our research has revealed a much greater interest in VR/MR technology amongst younger doctors
- Recent regulations penalize hospitals for not showing meaningful use of their data

**WHY NOW - Technological**

- Until recently, MR head mounted displays (HMDs) were too expensive and too clunky for practical consumer use. Current HMDs are mobile and cost $1.5-3k.
- Moore’s law benefitting graphics processing and display quality
- All major imaging manufacturers (GE, Siemens, Philips, etc) include segmentation and 3D model generation in their workstation software due to growing demand for 3D models

**SOLUTION**

Bosc is a collaborative, mixed reality (MR) environment which facilitates image-based medical decision making. Bosc brings members of a care team to the table and places the patient’s anatomy and health problems in the center of that table - in true 3-dimensional space. Each team member’s unique view of the problem can be addressed with a common reference point, allowing for greater collaboration and more informed decision making.