

Kinova's case study

Cambridge Consultants builds connected OR
to accelerate cutting-edge digital innovation

Today more than ever, the ability to innovate is a key driver for any business. As one of the world's leading technology and product innovation firms, Cambridge Consultants stands out with projects that shift paradigms and transform their clients' operations, while fulfilling a holistic vision of contributing to humankind advancement.

Their agile teams of engineers, scientists, and market experts assemble to identify high value unmet needs and develop breakthrough solutions in a variety of pivotal industries, including digital surgery and surgical robotics. To this end, Cambridge Consultants has invested in building a new connected digital operating room (OR) in their Boston office as a platform for accelerating the development of computer assisted and connected digital features, products, and systems.

"To innovate at the forefront of surgical technology and make the largest positive impact on patient outcomes, we will need to effectively leverage data from many different sources to create holistic solutions to more elusive clinical problems. Successful next-generation systems will apply the latest in advanced sensing, robotics, human machine understanding, and artificial intelligence, on a rich network of real-time intraoperative information to augment clinicians and significantly outperform stand-alone surgical devices."



Alex Maret – VP Robotics & Digital Surgery at Cambridge Consultants

A multi-functional, digital operating room

This new surgical environment fulfills three complementary needs, benefiting clients as well as internal teams.

A surgical environment suited for product development

Instead of setting up their own environment at great cost, each client can rely on the digital OR to test their new products in a simulated operating space, along with other innovative devices. Far better than an electronic presentation, the OR also serves as a showroom to display cutting-edge technology to key stakeholders and decision makers.

A connected, in-house hub to accelerate the development process

Since Cambridge Consultants' engineers can use the space to test their concepts, the OR helps accelerate and de-risk product development at the same time. It provides a first-class connected platform to leverage all aspects of tomorrow's surgery, from AI assistance to collaborative robotics.

At the heart of the OR concept: human factors research

Innovation flourishes when it allows for optimal human interactions with devices, people and procedures. The new digital OR makes it possible all in one place. Engineers and clients can meet together to assess, refine and field test their innovations with an agile system architecture.

A reliable, collaborative arm to evolve in a strictly controlled environment

In a room where each square inch is valued, all devices are meticulously chosen to meet the highest standards and bring significant added value to the development teams. For time and cost effectiveness, Cambridge Consultants preferred to look for an existing robotic arm rather than developing their own. Kinova's collaborative arms have been selected for many reasons, including its ability to work safely in a crowded room, to simulate many different types of usages, and its user-friendly interface.



Kinova's experience in developing robotic arms for medical, surgical interventions, made this proprietary technology the most attractive for Cambridge Consultants.

This combination of medical track record, product specifications, reliable operating functions and extensible usages altogether made it easy to select Kinova as a partner for this state-of-the-art operating room, providing a unique platform to shape tomorrow's surgical devices and protocols.



"Kinova and Cambridge Consultants share the same vision of what innovation should be: an opportunity to improve processes, automate tasks, assist humans in the best effective ways, but also to improve the quality of care of as many people as possible, and ultimately, to raise the bar for everyone's benefit, on a global scale."

François Boucher – VP strategic growth at Kinova

Kinova is a global leader in designing and manufacturing robot arm for various applications in the Industrial, Professional, Academic and Medical markets and for Assistive technologies. We have for mission to provide humanity with robots that empower them to achieve the extraordinary everyday.

KINOVA
Together in robotics

