

## Customer & Market Due Diligence Of Neuroscience Research Lab Instrument Manufacturer: Establishing Growth Outlook And Competitive Positioning

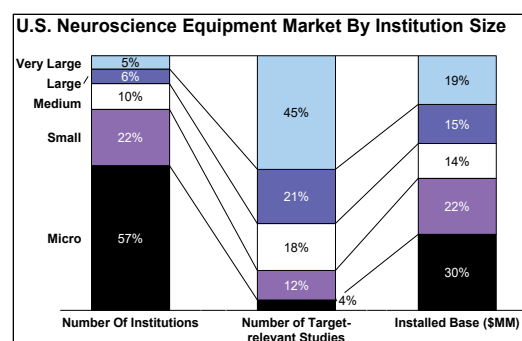
**The Challenge:** Our client, a leading middle market PE firm, was looking to acquire a specialized instrument manufacturer serving, among a number of end-markets, the neuroscience research market. Excited by the target's positioning as a market leader with high margins, a strong customer base, cutting-edge proprietary instruments, and an established software offering, our client wanted a clear view of the target's growth opportunities and the underlying neuroscience research market. To this end, our client asked Gotham to conduct customer & market due diligence to: (1) establish neuroscience research growth outlook and equipment dynamics; (2) understand product line expansion/acquisition opportunities; and (3) establish target's software monetization opportunities.

**Robust Niche Research Lab Equipment Market Assessment:** To deliver a comprehensive and fact-based view of the market and competitive dynamics and software monetization opportunities, Gotham:

- Established the neuroscience research outlook by analyzing: past 5 years of NIH grant funding data at the individual study level; trends within neuroscience research fields; PhD graduate trends; and pharmaceutical and venture capital investments in neurological research
- Conducted interviews with primary investigators at academic and non-profit research laboratories to gain insights into: (1) demand drivers for neuroscience research equipment purchases; (2) grant funding dynamics and drivers; (3) vendor selection and purchasing criteria; (4) software monetization opportunities; and (5) target's reputation
- Established product line segmentation and competitive dynamics by conducting SKU-level analysis of products offered by 20+ companies, and established commonality between the 10K+ items to map out the complicated product landscape
- Built a bottom-up market sizing model by leveraging and analyzing ~100K NIH grants to establish potential customer archetypes based on research relevance, laboratory size based on frequency and number of relevant studies, and research budget; to assess installed instrument base and future equipment need for various archetypes, Gotham collected equipment portfolio data on 50+ labs through research and customer interviews.

### Increasing NIH Funding Driving Neuroscience Research Growth

Federally funded early-stage research grants have been increasing at 11.8% CAGR over the last 5 years driven by growing mental health awareness, the opioid epidemic, and the BRAIN initiative (a research initiative launched in 2013 to support the development and application of innovative technologies that can create a dynamic understanding of brain function). While pre-clinical drug development is often performed and financed by pharmaceutical and biotech companies, early-stage research is primarily funded by the NIH and is concentrated in academic and non-profit research labs. Although ~20% of institutions account for over ~85% of applicable studies, the ~500 smaller institutions also conducting neurological research require research lab equipment as well. In addition, universities are increasingly establishing research cores by consolidating labs to optimize equipment and resource utilization. This, combined with increasing NIH funding, is driving progression in neuroscience research and generating a positive outlook for the overall neuroscience research lab equipment market.



### Target Well Positioned With Its Proprietary Technology In This Complex, Purpose-built Equipment Market

Neuroscience research studies involve various test and research requirements, with instruments often requiring high levels of customization. Manufacturers work with researchers to customize and tailor equipment to specific study needs. This buying behavior has led to a fragmented marketplace with many small, niche players focused on specific research areas, offering the target several product line expansion/acquisition opportunities. The target's advanced proprietary technology leverages software interface to consolidate various tests into a single piece of equipment, significantly reducing time and labor requirements and positioning itself to replace multiple legacy systems. Furthermore, study replicability is highly important, with primary investigators often referring to previous studies and their academic network to inform their equipment purchases, resulting in a sticky customer base. Nearly all top research labs have adopted the target's equipment, strengthening its position as a leading supplier, and increasing adoption likelihood of its proprietary technology.

### Significant Monetization Opportunity From Software-first Mindset

Customers view the target's software as superior to other alternatives in the market. In fact, some customers noted they had jury rigged a competitor's hardware in order to make it compatible with the target's software. Gotham identified a potential opportunity to provide interoperability with competitors' hardware in order to establish target's software as the industry standard. Furthermore, the target is still following the legacy software monetization model of selling software as a one-off purchase and offering free upgrades. Gotham developed a software monetization strategy of shifting to a software-as-a-service (SaaS) platform to establish a recurring revenue stream. Moreover, academic software benefits significantly from network effects, due to the collaborative nature of research. By shifting the software to the cloud, the target can substantially simplify data transfers between institutions and boost software adoption. Once established, the software could further cater to customer demand by adding in integrated analytical tools and an online marketplace for researchers to exchange test protocols.

**The Outcome:** Gotham's fact-based assessment of the growth outlook for neuroscience research, deep-dive into niche research lab equipment market, and development of a software monetization strategy provided our client a robust view of the target's market, its competitive positioning, and growth opportunity and provided our client confidence in moving forward with the acquisition.