

Flow Cytometry in Life Science Research

Flow cytometry is a powerful technique for analyzing cell populations and sorting cells in the conduct of life science research by academic and industrial scientists. Flow cytometers and cell sorters have historically been complex and expensive to purchase and maintain, realities which have led to an evolution of flow-cytometry core facilities based in academic centers, drug companies and biotechnology firms. These core facilities purchase and maintain the equipment while providing analysis and cell sorting as services to individual researchers.

Our purpose was to support a client firm in exploring the commercial viability of a new paradigm in research applications of flow cytometry.

Market Landscaping

Our first step was to survey the research-based flow cytometry market overall, identify unmet needs, test the validity of a "personalized" market segment, and characterize the competitive forces likely to be encountered. We began by adding resources to our project team, acknowledged experts in flow cytometry experiments and instrumentation. We also purchased and analyzed several syndicated market research reports covering the fields of interest. All sources were then tapped to compile a landscape assessment of the current market including research applications, functional segmentation, customer/user segmentation, existing "personalized" products, apparent unmet needs and relevant trends.

Product Positioning and Strategy

Our next step was to support development of our client's new-product strategy by assessing the prospective utility of its various product offerings and identifying the best-fit applications and market sectors. The centerpiece of this work was a series of in-depth telephone interviews of thought-leading flow cytometry users representing the market sectors and applications of greatest relevance. The receptivity of some prospective products was established, and the best-fit research applications were characterized.

User Requirements and Product Attributes

With a focus on evolving types of flow cytometry users, we attempted to fully understand their current needs, primary research applications, and levels of interest in our client's contemplated product offerings. This was accomplished by means of an online survey taken by members of an established panel of life science researchers in academia and industry. The findings of this survey established the key required product attributes and performance specifications to be met.