

Mission Impossible? How Nonprofit Research Institutes Advance Science and Technology to Achieve their Social Mission

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Scientific and technological problems of all sorts—from scientific research questions scientists grapple with to large-scale grand challenges affecting millions of people—abound in today’s fast-paced and complex world. Because of their potential impact on society and humanity, various organizational constituents of society, such as businesses, governments, and nonprofits, have been active in their endeavors to solve these problems through scientific research and technological innovation. Nonprofit research institutes—such as Fred Hutchinson Cancer Research Center in Seattle, WA, that exists to eliminate “cancer and related diseases as causes of human suffering and death” and SRI International in Menlo Park, CA, that strives to create “world-changing solutions to make people safer, healthier, and more productive”—are among the largest and the most visible nonprofit organizations that have strived to solve specific scientific and technological problems through scientific research and technological innovation to further the social mission which caters to varied segments of population relevant to each nonprofit research institute and thereby benefit the society at large.

Given that they are founded and exist to serve through science and technology diverse populations in society that may be underserved by businesses or governments, I wanted to understand, in my research, how nonprofit research institutes engage in scientific research and technological innovation to achieve their mission. Would nonprofit research institutes have distinct ways of advancing science and technology compared to, for example, those of businesses who primarily invest in and create technology (as opposed to science) to gain competitive advantage and thus financial profit in the marketplace?

According to my research, the answer to this question starts with the social mission of nonprofit research institutes. A nonprofit research institute’s scientific research and technological innovation tend to start with an issue or a problem to solve that aligns with its social mission. This is because a nonprofit research institute’s social mission itself, for which the organization exists, often includes the notion of solving some sort of problem to benefit society. Because of this focus on problem solving in research, a nonprofit research institute is often perceived as a problem solver with whom problem holders share their problems to solve.

Furthermore, because a nonprofit research institute is a nonprofit organization which does not pursue profit for private gains but tends to serve others for a social mission, it is generally perceived as a trustworthy research collaborator that does not opportunistically appropriate collaborative research outcomes for itself. As such, diverse organizations that hold problems, ranging from businesses and federal government laboratories to universities and nonprofits, trust and thus collaborate with nonprofit research institutes by sharing their problems with these problem solvers.

These facets of nonprofit research institutes may have practical implications for managers of businesses. For example, since nonprofit research institutes are generally deemed to be trustworthy research collaborators, managers may be able to take these nonprofits into consideration as potential collaborators when they initiate (joint) research and development projects that may be highly sensitive to knowledge leakage or appropriation concerns.

In conclusion, social mission drives how nonprofit research institutes advance science and technology, and the relevant dimensions of these nonprofits that differentiate them from other organizations, such as businesses, may play an important role in how these nonprofits may impact other stakeholders and, ultimately, society.

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