

6.2.1 Nature of the R&D

During the early, exploratory stages of a research program, when technical uncertainties are great and market opportunities are unclear, collaboration with a trade or professional association, or support of an industrial consortium are both appropriate technology transfer strategies (Fig. 6.3). Risks are often too great to gain the participation of a single industrial partner in a joint venture or cost-shared research. DOE's exploratory R&D programs often involve research conducted at national laboratories and universities. When breakthroughs occur as the result of such research, and when potential markets are identifiable, licensing enables private companies to develop the final products to meet the needs of their intended markets. Several of our case study innovations were initiated by DOE

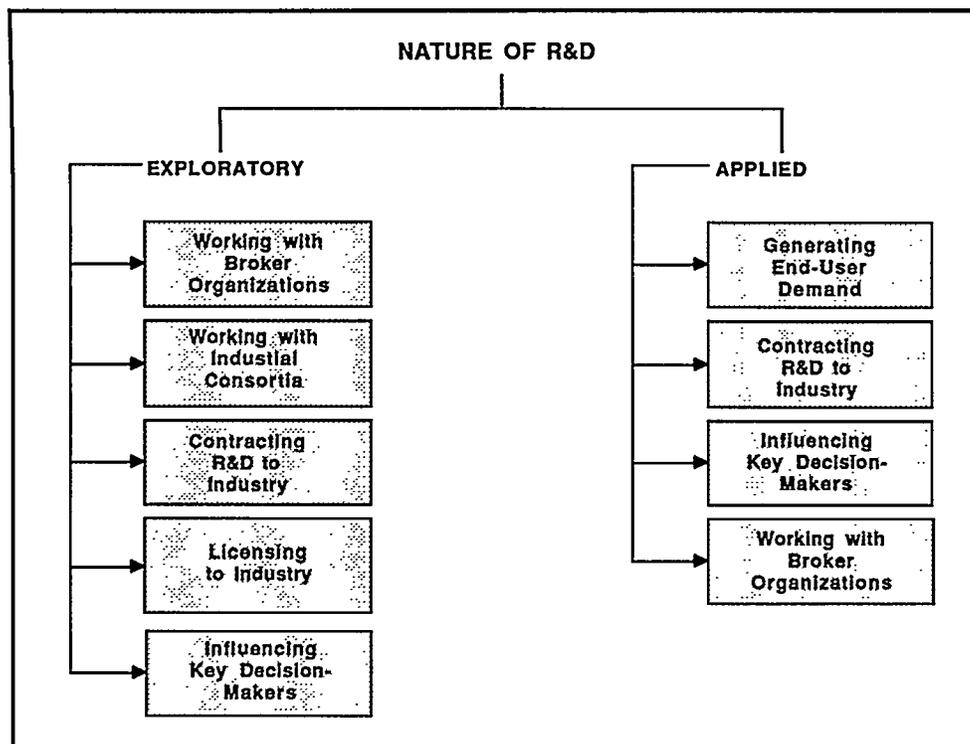


Fig. 6.3. Strategies for different types of R&D.