Learning from Falling Short: Star Scientists and Firm Investments in Radical New Technologies

Abstract We argue that organizations that fall short of performance expectations are not only more likely, but also quicker to make investments in a radical new technology. To illuminate this process, we add a microfoundations dimension that highlights the key individuals that facilitate this process - highly visible knowledge workers. Empirically, we study the global pharmaceutical industry, where we investigate which firms are the first to make investments in biotechnology and the individuals within these firms that accelerate this investment using fine-grained performance, publishing, and patenting history data from 108 incumbent pharmaceutical firms over 34 years (1970-2003). Our findings suggest that firms adopt a more proactive approach to investments in radical new technologies after falling short of performance expectations.

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