Knowledge Transfer in the Precommercialization Phase of a New Industry: Star Scientists' (im)Mobility in the Presence of a Potential Lead User

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Abstract:

We extend prior research on industry evolution by focusing attention to knowledge transfer in the precommercialization phase of a new industry. Specifically, we build on research that highlights the role of star scientists' mobility as a mechanism of knowledge transfer to mitigate technological uncertainty and the role of potential lead users as the mechanism for knowledge transfer to reduce demand uncertainty. Using the image sensor industry's precommercialization phase as our context, we find that the star scientists of Texas Instruments, Tektronix, Jet Propulsion Laboratory, Bell Laboratories, and other organizations were largely immobile, that is, rooted to the same organization. Our article not only uncovers the role of star scientists' mobility and the potential lead user as complementary mechanisms of knowledge transfer, but also highlights the boundary condition of the benefits of star scientists' mobility in the precommercialization phase of a new industry.

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