Blue Spoons Sparking Communication About Appropriate Technology Use

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An enduring puzzle regarding technology adoption in developing countries is that new technologies often diffuse slowly through the social network. Two of the key predictions of the canonical epidemiological model of technology diffusion are that forums to share information and higher returns to technology should both spur social transmission. We design a large-scale experiment to test these predictions among farmers in Western Kenya, and we fail to find support for either. However, in the same context, we introduce a technology that diffuses very fast: a simple kitchen spoon (painted in blue) to measure out how much fertilizer to use. We develop a model that explains both the failure of the standard approaches and the surprising success of this new technology. The core idea of the model is that not all information is reliable, and farmers are reluctant to develop a reputation of passing along false information. The model and data suggest that there is value in developing simple, transparent technologies to facilitate communication.

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