



Growing Inclusive Markets
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CASE STUDY: CHINA

Tsinghua Tongfang: bridging a digital divide

Not all innovations use new technology. Many product adaptations successfully reach the poor through what seem like steps down on the technological ladder. But their accessibility to the intended beneficiaries allows businesses to make leaps in growth and profitability.

Tsinghua Tongfang (THTF) is a high-tech Beijing computer company that identified a rich new market in a low-tech sector: China's vast rural agriculture industry. China's 900 million farmers have been slow to benefit from technological advances that have boosted agricultural output elsewhere. Farming depends on timely and accurate information as much as any other industry, if not more. But personal computers and the Internet are still largely absent from rural China and remain unfamiliar to its inhabitants. In 2003 THTF saw this situation as an opportunity to seize a large untapped rural market while helping to bridge the 'digital divide'.

THTF conducted three rounds of market research and identified several challenges. In 2005, a basic computer cost the equivalent of three months' income for a farmer—a prohibitive expense even before adding the monthly cost of Internet service (which was elusive, in any case, because of high startup costs for Internet providers). And farmers who could afford a personal computer usually did not know how to use one. Moreover, the quality of agricultural information available online was fairly low.

The solution for THTF was to tailor a product to farmers' needs and resources. Prospective customers made it clear that the most appealing product would offer what THTF called a 'systematic solution': a versatile, durable, easily repairable platform, with value not just for agriculture but also for children's education and for broader capacity building.

THTF needed a simplified, low-cost computer that could do many things and withstand the rigors of the rural environment. So it built one. Jun Li, vice-general Manager of THTF's computer department, says: '[The] computer comes from the minds of ... people in the agriculture industry. Putting our feet in the shoes of farmers is our basic principle. What we did is to turn their ideas into tangible computer products.'

Using the open-source Linux operating system, THTF fit its product to the new market by contracting local vendors to replicate more expensive, brand-name programmes. To help its product work well in a difficult environment, THTF embedded electricity cables with rat-repellent materials. It adapted a specialized package of programmes for rural users, including agriculture, distance education and vocational skills training.

THTF adapted its product in ways that cater to the poor, and its customers are now seeing the difference that information technology can make to their jobs and lives. Before the rural computing initiative can become wholly self-sustaining, it must mature and grow. Yet THTF's innovation and skillful product adaptation showcase a strategy that can be used by other high-tech businesses looking to engineer a way into the markets of the poor.