ITC’s e-Choupal : Taking e-business to Farmers

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Throughout the latter half of the twentieth century, the introduction of information technology exerted a profound influence on the business landscape. Over the course of the last decade, the impact of information technology upon the market and the economy has become increasingly significant. Most notably, the technology boom that occurred during the late 1990s, is e-Choupal spurred in large part by the rapid spread of internet-based business models, produced a period of prosperity and affluence that was virtually unprecedented in its intensity and magnitude. An e-Choupal effort that places computers with internet access in rural farming villages; the e-Choupals serve as both a social gathering place for exchange of information and an e-commerce hub. Computer literate farmer, called the Sanchalak uses the internet and the site www.e-choupal.com to discuss matters with other farmers in the state and country, lookup prices etc and fix prices in the local market. The ITC e-choupal has made a significant network today which reaches out to over 3.5 million farmers in more than 31,000 villages, enabling them to access crop-specific, customised and comprehensive information in their local language and has won the 'IT excellence award 2005' instituted by the 'MIS Asia' magazine in the category of 'Best business enabler'. The present paper is an attempt to study ITC’s contribution to e-choupal.

Introduction

Agriculture is vital to India. It produces 23 per cent of the GDP, feeds a billion people, and employs 66 per cent of the workforce. Because of the Green Revolution, India's agricultural productivity has improved to the point that it is both self-sufficient and a net exporter of a variety of food grains. Yet most Indian farmers have remained quite poor. The causes include remnants of scarcity-era regulation and an agricultural system based on small, inefficient landholdings. The agricultural system has also traditionally been unfair to primary producers. Farmers have only an approximate idea of price trends and have to accept the price offered to them at auctions on the day that they bring their grain to the mandi. As a result, traders are well positioned to exploit both farmers and buyers through practices that sustain system-wide inefficiencies. (World resources Institute, 2009)

One of India's foremost private sector companies, which has a diversified presence in tobacco, hotels, paperboards, specialty papers, packaging, agri-business, branded apparel, packaged foods and other fast moving consumer goods, initiated e-choupal in 2000. Soybean farmers in India have traditionally sold their product through ineffective and frequently dishonest physical marketplaces (mandi). Farmers are generally poor and often illiterate and are forced to be "price-takers" after an arduous journey to the mandi. They also have very limited access to information and education on farming techniques. The present paper describes the use of Internet technologies to reach these farmers and, in particular, examines the system called the eChoupal, developed by the Indian conglomerate ITC. The present paper describes of empowering the rural farmer with knowledge on the market place, prices for his crops, the prices of seeds, fertilizers, etc. This enables him to get the best price for his crops and avoid middlemen and at the same time procure best quality, raw materials at lowest prices.

The company has initiated an e-Choupal effort that places computers with Internet access in rural farming villages; the e-Choupals serve as both a social gathering place for exchange of information (choupal means gathering place in Hindi) and an e-commerce hub.

E-choupal launched in June 2000 and has become the largest initiative among all internet based interventions in rural India. Today e-choupals cover 7 states reaching out an estimated 3.5 million
farmers spread over 31,000 villages via 5000 odd e-Choupal installations growing a range of crops- Soyabeans, Coffee, wheat, Rice and pulses in over 31000 villages through 52000 kiosks across six states. (Madhya Pradesh, Andhra Pradesh, Karnataka, Uttarpradesh, Maharashtra and Rajasthan). E-Choupal was implemented in partnership by ITC and govt. entities to make commodities trading in rural India more efficient. It also enables farmers to access Crop-Specific real time information in their own language/s. This initiative is an important example of local populations solving global problems.

Kick started in the state of Madhya Pradesh in the year 2000 by ITC, a large corporation in India, it involves providing a set of 10 surrounding villages with a computer linked to the Internet via VSAT. Each such unit benefits 600 farmers. Via this system, an educated, computer literate farmer, called the Sanchalak uses the internet and the site www.e-choupal.com to discuss matters with other farmers in the state and country, lookup prices etc and fix prices in the local market. Sanchalak is the key to managing the geographical and cultural breadth of ITC’s network. Sanchalak is trained in computer operation and act as a familiar and approachable human interface for the illiterate farmers and other villagers. The Sanchalaks receive a commission for every transaction processed through E-Choupal and they also get benefited from the increased social status. ITC employs a variety of motivation techniques to encourage sales. One technique is to hold a ceremony where sanchalaks are presented with their annual commission checks and public announcements of earning are made this further motivates the non-performers to work.

A secondary, but still important role is played by Samyojaks, or cooperating commission agents. They provide logistic services that substitute for the lack of rural infrastructure, by providing information and market signals on trading transactions to the E-Choupal system. They play a key role in initial stages of setting up the E-Choupal (icmriiindia, 2005).  

Industry background

Spurred by India's need to generate foreign exchange, ITC's International Business Division (IBD) was created in 1990 as an agri-trading company aiming to "offer the world the best of India's produce". Initially, the agricultural commodity trading business was small compared to international players. By 1996, the opening up of the Indian market had brought in international competition. Large international companies had better margin-to-risk ratios because of wider options for risk management and arbitrage.

For an Indian company to replicate the operating model of such multinational corporations would have required a massive horizontal and vertical expansion. In 1998, after competition forced ITC to explore the options of sale, merger, and closure of IBD, ITC ultimately decided to retain the business. The Chairman of ITC challenged IBD to use information technology to change the rules of the game and create a competitive business that did not need a large asset base. Today, IBD is over Rs 700 crore company that trades in commodities such as feed ingredients, food-grains, coffee, black pepper, edible nuts, marine products, and processed fruits. What began as an effort to re-engineer the procurement process for soy, tobacco, wheat, shrimp, and other cropping systems in rural India has also created a highly profitable distribution and product design channel for the Company.

The Business model

The model is centered on a network of e-Choupals that serve both as a social gathering place for exchange of information and an e-commerce hub. A local farmer acting as a sanchalak (coordinator) runs the village e-Choupal, and the computer usually is located in the sanchalak's home. ITC also incorporated a local commission agent, known as the samyojak (collaborator), into the system as the provider of logistical support.
ITC make significant investments to create and maintain its own IT network in rural India and to identify and train a local farmer to manage each e-Choupal. The computer, typically housed in the farmer’s house, is linked to the Internet via phone lines or, increasingly, by a VSAT connection, and serves an average of 600 farmers in 10 surrounding villages within about a five kilometer radius. Each e-Choupal costs between US$3,000 and US$6,000 to set up and about US$100 per year to maintain.

Using the system costs farmers nothing, but the host farmer, called a sanchalak, incurs some operating costs and is obligated by a public oath to serve the entire community; the sanchalak benefits from increased prestige and a commission paid him for all e-Choupal transactions. The farmers can use the computer to access daily closing prices on local mandis, as well as to track global price trends or find information about new farming techniques—either directly or, because many farmers are illiterate, via the sanchalak. They also use the e-Choupal to order seed, fertilizer, and other products such as consumer goods from ITC or its partners, at prices lower than those available from village traders; the sanchalak typically aggregates the village demand for these products and transmits the order to an ITC representative. At harvest time, ITC offers to buy the crop directly from any farmer at the previous day’s closing price; the farmer then transports his crop to an ITC processing center, where the crop is weighed electronically and assessed for quality. The farmer is then paid for the crop and a transport fee. “Bonus points,” which are exchangeable for products that ITC sells, are given for crops with quality above the norm. In this way, the e-Choupal system bypasses the government-mandated trading mandis.

Farmers benefit from more accurate weighing, faster processing time, and prompt payment, and from access to a wide range of information, including accurate market price knowledge, and market trends, which help them decide when, where, and at what price to sell. Farmers selling directly to ITC through an e-Choupal typically receive a higher price for their crops than they would receive through the mandi system, on average about 2.5% higher (about US$6 per ton). The total benefit to farmers includes lower prices for inputs and other goods, higher yields, and a sense of empowerment. The e-Choupal system has had a measurable impact on what farmers chose to do: in areas covered by e-Choupals, the percentage of farmers planting soy has increased dramatically, from 50 to 90% in some regions, while the volume of soy marketed through mandis has dropped as much as half. At the same time, ITC benefits from net procurement costs that are about 2.5% lower (it saves the commission fee and part of the transport costs it would otherwise pay to traders who serve as its buying agents at the mandi) and it has more direct control over the quality of what it buys. The system also provides direct access to the farmer and to information about conditions on the ground, improving planning and building relationships that increase its security of supply. The company reports that it recovers its equipment costs from an e-Choupal in the first year of operation and that the venture as a whole is profitable.

In mid-2003, e-Choupal services reached more than 1 million farmers in nearly 11,000 villages, and the system is expanding rapidly. ITC gains additional benefits from using this network as a distribution channel for its products (and those of its partners) and a source of innovation for new products. For example, farmers can buy seeds, fertilizer, and some consumer goods at the ITC processing center, when they bring in their grain. Sanchalaks often aggregate village demand for some products and place a single order, lowering ITC’s logistic costs. The system is also a channel for soil testing services and for educational efforts to help farmers improve crop quality. ITC is also exploring partnering with banks to offer farmers access to credit, insurance, and other services that are not currently offered or are prohibitively expensive. Moreover, farmers are beginning to suggest—and in some cases, demand—that ITC supply new products or services or expand into additional crops, such as onions and potatoes. Thus farmers are becoming a source of product innovation for ITC.
Development Benefit

The e-Choupal system gives farmers more control over their choices, a higher profit margin on their crops, and access to information that improves their productivity. By providing a more transparent process and empowering local people as key nodes in the system, ITC increases trust and fairness. The increased efficiencies and potential for improving crop quality contribute to making Indian agriculture more competitive. Despite difficulties from undependable phone and electric power infrastructure that sometimes limit hours of use, the system also links farmers and their families to the world. Some sanchalaks track futures prices on the Chicago Board of Trade as well as local mandi prices, and village children have used the computers for schoolwork, games, and to obtain and print out their academic test results. The result is a significant step toward rural development.

ITC has plans to saturate the sector in which it works with e-Choupals, such that a farmer has to travel no more than five kilometers to reach one. The company expects each e-Choupal to serve about 10 villages within a five-kilometer radius. Today its network reaches more than a million farmers. In the Mandi, the following operational process was followed: Inbound logistics > Display and Inspection > Auction > Bagging and weighing > Payment > Outbound logistics. E-choupal brought about a strategic change to the process: Pricing > Inbound logistics > Inspection and grading > Weighing and payment > Hub logistics.

Another path-breaking initiative – the ‘Choupal Pradarshan Khet’, brings the benefits of agricultural best practices to small and marginal farmers. Backed by intensive research and knowledge, this initiative provides Agri-extension services which are qualitatively superior and involves pro-active handholding of farmers to ensure productivity gains. The services are customised to meet local conditions, ensure timely availability of farm inputs including insurance and credit, and provides a cluster of farmer schools for capturing indigenous knowledge. This initiative, which currently covers 60,000 hectares, has a multiplier impact and reaches out to 1.4 million farmers.

How ITC contributes

The agri-commodities were purchased traditionally through intermediaries, incurring costs like transportation, labor, handling losses etc, besides poor quality and unremunerative prices, for both the food processors and primary producers. There was no alternative due to the small sized farms needing aggregation of volumes by someone, besides the imperative of physical price discovery process in the mandis (market yards). ITC eChoupal enabled online price discovery and virtually clustered the farmer
community using Internet technologies to aggregate the farm produce, at the village level through sanchalaks and bring the produce directly to the processing plants eliminating several non-value-adding supply chain costs. Low yields and inferior quality were two major problems faced by the farming community which are addressed through services ranging from soil testing, seed treatment, supply of quality inputs along with expert advice. A novel rural distribution platform has been built on the foundation of the above procurement network (Internet Access + Sanchalak) to offer an unique value to rural consumers and participating companies. The farmers and rural consumers benefit in terms of the assured quality, wider choice, convenience of shopping in local market and fair price. The participating companies benefit from the greater market access, lower risks, reliable market/consumer feedback, lower capital and operating costs and better inventory management.

The e-choupal project of ITC Ltd has won the 'IT excellence award 2005' instituted by the 'MIS Asia' magazine in the category of 'Best business enabler'. It’s e-choupal won the award for the innovative use of information technology (IT) to transform livelihoods, creating new markets, for improving competitiveness of value chains and build new capacities and capabilities. The MIS Asia IT Excellence Awards are given away annually by MIS Asia magazine, which is used by IT managers across Asia. Its award recognises excellence in management and the deployment of technology in enterprises and projects that have made a significant contribution to business and honours the role of IT and the chief information officer (CIO) in businesses. The ITC e-choupal network today reaches out to over 3.5 million farmers in more than 31,000 villages, enabling them to access crop-specific, customised and comprehensive information in their local language. Vernacular websites relating to each agricultural crop that ITC traded in, created by the Company, provided information to the smallest marginal farmers on prevailing Indian and international prices and price trends for their crop, along with expert knowledge on best farming practices, and micro-level weather forecast. The e-choupal acted as a direct marketing channel, eliminating intermediation and multiple handling and thus reducing transaction costs and improving logistical efficiency.

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<tr>
<th>Event</th>
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<tr>
<td>TC wins Top UNIDO Award for e-Choupal</td>
<td>Dec 01, 2008</td>
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<td>ITC’s e-Choupal expands to Tamil Nadu</td>
<td>Jul 31, 2008</td>
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<td>ITC e-Choupal wins Development Gateway Award 2005</td>
<td>Sep 16, 2005</td>
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<td>ITC wins TERI Award for Corporate Social Responsibility (CSR)</td>
<td>Jun 01, 2005</td>
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<td>ITC wins Golden Peacock Global Award for CSR</td>
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<td>ITC's 'e-Choupal' wins Wharton-Infosys Business Transformation Award</td>
<td>Jun 03, 2004</td>
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<tr>
<td>ITC's e-Choupal wins inaugural 'World Business Award'</td>
<td>May 19, 2004</td>
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<td>UK grant for promoting rural insurance on e-Choupal</td>
<td>Jan 21, 2004</td>
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<tr>
<td>ITC wins ‘Intelligent Enterprise of the Year Award’ for e-Choupal</td>
<td>Nov 29, 2003</td>
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Source: www.icmrindia.org

Conclusion

Throughout the latter half of the twentieth century, the introduction of information technology exerted a profound influence on the business landscape. Over the course of the last decade, the impact of information technology upon the market and the economy has become increasingly significant. Most notably, the technology boom that occurred during the late 1990s, spurred in large part by the rapid spread of Internet-based business models produced a period of prosperity and affluence that was virtually unprecedented in its intensity and magnitude.

The eChoupal has reengineered the antiquated soybean export supply chain using digital technology in rural farm villages. Based on a clever understanding of technology, sociology, and the incentives of the various players involved, the eChoupal provides farmers with effective methods of price discovery, honest trading, and information sharing to the benefit of all in the channel. ITC’s example also shows
the key role of information technology - in this case provided and maintained by a corporation, but used by local farmers - in helping to bring about transparency, to increase access to information, and to catalyse rural transformation, while enabling efficiencies and low cost distribution that make the system profitable and sustainable. ITC’s strategic intent is to develop e-Choupal as a significant two-way multidimensional delivery channel, efficiently carrying goods and services out of and into rural India. By progressively linking the digital infrastructure to a physical network of rural business hubs and agro-extension services.

References: