Chapter 15

Institutional Innovation and Entrepreneurial Deployment of a Software Product:
Case of Financial Technologies Group in India

Biswatosh Saha
Indian Institute of Management, India

ABSTRACT

This chapter represents entrepreneurship as a temporal evolution of the creation and control over assets. The value of the asset lies in its transactional relations with other assets in the ecosystem or in other words being part of the architecture of related assets. It is argued that the deployment of financial trading software, as a product in brokerage houses in the emerging securities trading ecosystem in India by the software firm called Financial Technologies (FT), hastened institutionalization of new rules governing transactions embedded in the software design. As a result, FT implicitly collaborated with the regulator and other ecosystem participants who coordinated the innovation in design of the ecosystem. The software firm went on to expand the market for its own products (trading software) by incubating exchange ventures. This was achieved through a strategy of spawning of linked subsidiaries that led to both a growth of the trading ecosystem and further entrenchment of the innovated ecosystem.

INTRODUCTION

Is it ours, this dream in us,
I make my way alone and multiplied
Am I myself, am I another
Are we but imagined beings.
(Geo Libbrecht, quoted in Bachelard, 1971: 105)

All of human intelligence and endeavor has a 'value'. It is the intrinsic power vested in a thought, pulsating with life. It lives within an idea, waiting patiently for those with the imagination to unlock it. And when liberated, it has the power to change the world view (Jignesh Shah, in Financial Technologies Annual Report FY07-08).

Narratives of entrepreneurship have mostly emphasized 'individual creativity' or have stressed the elements of competition. A typical account would identify a snatching of opportunity that takes an entrepreneur ahead of the pack. This account of growth of the *software product* company Financial Technologies (acronym FT from hereon) provides, instead, a narration of a temporal unfolding of an entrepreneur's idea, that materializes into creation of assets as part of a shared ecosystem. While rivalry is important to the story, cooperation is equally important and our account focuses the narrative gaze on the cooperative aspect without denying the role of rivalry. Rivalry and cooperation possibly inheres as part of the same process. Entrepreneurship, it is argued, may be viewed more pragmatically as creation and control over novel assets; novelty being understood with respect to the *particular ecosystem* where an entrepreneurial play occurs.

Assets generated by entrepreneurs derives its value as part of wider ecosystems, which in turn can be viewed as an architecture of inter-related and inter-connected assets. Value of an asset is thus relational, flowing out of specific relations and transactions with other connected assets. The transactions between assets (or asset-holders) occur under specific rules that define the relation between the assets. The specific rules also define the governance within which asset-holders transact, identifying roles and partitioning risks. Such rules must have a temporal stability, at least over a horizon for it to work. Following North (1990), we can visualize such temporally stable rules as 'institutions'. The software *products* of FT embody such rules that connect different categories of asset holding organizations in the contemporary financial securities market in India, where securities transaction occur over an information highway with intense information exchange between multiple actors under specified constraints (rules). The software is thus like an *infrastructure* both in a sense of structuring the exchange of digital information and providing the infrastructure of underlying rules. Adoption of a software *product* embodying the *standard* rules hastens the cooperative subscription to a set of rules within the ecosystem. The *product* stance in contrast to the *service* one becomes valuable for a software writer within this context.

Ecosystems, constituted thus, would be in *contest* with each other. This *contest* is distinct from familiar notions of competition; it is more like a contest between several proposed architecture of governance rules. A winner ecosystem has a larger following – its specific governance architecture has dominance over a larger terrain or business space. Assets within a winner ecosystem are generally more valuable than assets in ecosystems that have lost out in the *contest*. (Banerjee, 2008). This contest between ecosystems defines an element of rivalry that an asset owner participates in. This rivalry is distinct from the familiar sense of competition in a defined product market which has been extensively dealt with in economics, particularly within the structure-conduct-performance paradigm. Regulator's vote in favor of a particular ecosystem often becomes crucial. The market making of the software products of FT piggybacked on a regulation driven inter-ecosytem contest.

The temporal dimension too is crucial. We must view an entrepreneurial narrative as indelibly etched in time. The entrepreneur must take note of the *particularity* of descriptions of important actors in an ecosystem at every point of time with respect to the assets held by each, the inter-relations between the assets and a possible temporal profile of evolution of such assets driven by the entrepreneurial motives of asset holders. Unlike managerial coordination, entrepreneurial agency and coordination lies in this space of dynamic evolution of an envelope of inter-related assets. An entrepreneur, as an asset generator, looks towards increasing the value of owned asset, either through change in inter-relations with other assets or through expansion of the ecosystem and establishing links with other ecosystems that so

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