

# Co-opetition as a framework for technology start-ups.

By Snehal Shah and Ashish Kumar Jha

he world around us is changing fast—fast enough for us to overlook the fundamental ways in which firms need to change the way they operate. The past couple of decades have witnessed a slew of start-ups opening and closing at a frantic pace. A combination of factors is behind this. The biggest of these is the limited resources at the disposal of start-ups to solve the huge challenges that threaten their survival. In this hypercompetitive environment, technology firms can fall back on one of the strategies employed by select large firms to drive breakthrough innovation—the strategy of co-opetition.

# Fundamental change in business environment

A business environment characterised by cloud computing, driverless cars and artificial intelligence has prompted a fundamental shift in the way we think of existing business models. Market sizes have transcended geographic boundaries and New Age firms typically target much larger populations than new firms did a decade ago. Today, meaningful value is derived when a company is an active participant in shaping the environment to one's own strategic advantage.

One way to achieve this objective is to rethink the strategic There is a growing realisation that business is no longer alliances and partnerships companies enter into to unleash their innovation potential. Companies typically enter into a winner-takes-all or zero-sum game in which one company wins at the expense of others. In fact, a competitor from collaborations with their buyers, suppliers, and producers of raw the same industry chipping away at the market share is no material, with academic institutions and, more recently but longer as much of a concern as it was in the past, primarily relatively rarely, with their competitors. Expanding the scope because the problem being solved and the markets being served of collaboration to include competitors is seen by scholars and are too large for a single firm to cater to efficiently. In such management thinkers as a bold move to bolster a company's an environment, it is not about you versus me. It's about us quest to change the rules of the game to their own advantage.

A business environment characterised by cloud computing, driverless cars and artificial intelligence has prompted a fundamental shift in the way we think of existing business models.

together, surviving or risk being wiped out altogether. As the American financier, philanthropist and statesman Bernard Baruch once said, "You don't have to blow out the other fellow's light to let your own shine."

Given this scenario, the narrative is not just about playing the game better than everyone else by following the existing rulebook. In fact, the biggest opportunity to address such threats lies in changing the very nature of rules that define the game. In doing so, companies are able to shape the future the way they want it to be, rather than make do with what they wish it could be. Such companies are not merely market driven, they drive the markets.



The Indian telecom industry is characterised by rapid growth, fierce competition, wafer-thin margins and high capital investment. In 2007, Indus Towers was born as a joint venture among three big players in the telecom service space-Bharti Airtel, Essar Vodafone and Idea Cellular. In spite of being staunch competitors, these companies came together to construct and maintain telecom towers, thereby reducing their high capital investment in infrastructure. Over the years, with a portfolio of more than 110,000 cell towers, Indus has guickly become the largest telecom tower company in the world while reducing the cost per telecom operator by up to 60 percent.

Shantharaju, the visionary and the longest serving CEO of Indus Towers, provides the rationale for such a unique co-opetitive business model. According to him, this model serves the strategic needs of the customer. The first is the competitive pricing offered by the industry, which is only possible when important players work together to bring down high capital investment costs. Second, customers want speed of delivery of telecom service. With space constraints and complex regulations to navigate, "there is no point putting up single tenancy of cell towers whose payback period is 11-12 years and the internal rate of return is not more than three to four percent. In such a scenario, there is definite financial compulsion to ensure collaboration, so that industry tenancy ratios will exceed 2.25-2.50 in about five years," he said. An increased number of operators leveraging existing cell towers to offer expanded 3G and 4G services is seen as a key growth driver of the telecom industry in India while satisfying the ever-growing appetite for faster and improved services of a huge customer base.

### Collaborate with competitors: 'Co-opetition'

In a widely influential book, Adam Brandenburger and Barry Nalebuff capture the interplay of collaboration and competition by introducing the concept of co-opetition, which is meant to combine the advantages of collaboration and competition in a new dynamic that taps into the hidden capabilities of the companies involved. It is a strategic framework that not only can change the way companies play the game, but also help determine which game they should play in to derive maximum benefit. When companies, on the one hand, help each other by collaborating on solving problems of mutual interest, while on the other, fight each other for market share and profits by competing, they move themselves towards innovation and improved performance.

To put it differently, co-opetition is a higher order phenomenon that moves beyond a binary formulation of collaboration versus competition. It is a more inclusive concept that captures environmental complexity at a deeper level and enables sophisticated decision-making. Figure 1 demonstrates a company's journey through a collaboration maturity continuum. In the first stage, collaboration assumes a traditional form wherein a firm enters into a relationship primarily with its suppliers and buyers. At the next stage, it enters into partnership with ancillary institutions such as academic institutions, government bodies and complementors who help augment its/their current offerings. At the third and the highest level of this continuum, a company enters into a relationship with its competitors so as to break the cycle of a zero-sum game. The dynamics of collaborating with one's competitors may itself take many shapes and directions.

There are historical examples of competitors collaborating within the domains of competition. One of the most celebrated of such examples of co-opetition is the partnership between Samsung and Sony to produce Liquid Crystal Display (LCD) panels. In 2004, both companies entered into a joint venture which was then considered controversial, especially since Sony pulled out of a LCD panel development group backed by the Japanese state. Through the venture, Sony was instrumental in launching its hugely successful Bravia TV brand, while Samsung emerged as a trendsetter in the LCD panel industry, reaping huge profits supported by Sony's superior technology.

#### The three 'Ws' of co-opetition

Co-opetition, i.e., simultaneous cooperation and competition, is considered as a strategy for innovation. Conceptual and practitioner-focused work done in the area of co-opetition

indicates that co-opetition produces superior performance for the participating firms. However, even if they have the potential to benefit from co-opetition, not many firms may choose to engage in it. The first question that arises is: Why do *firms* co-opetate?

In India, as well as globally, the most prominent co-opetitive examples seen so far have been from the stables of large firms that collaborate to solve seemingly insurmountable challenges. Our contention is that this is a strategic tool whose time has come. It is time that the hypercompetitive start-up world embraces the co-opetitive strategy to build on mutual expertise and solve the consumer's problems with minimal resources. Such collaborations have the benefit of maintaining a competitive market place and innovating at the same time. In developing economies with a fast-growing entrepreneurial culture like India, Malaysia and Indonesia, such strategies would be highly utilitarian. The food delivery industry in India is an example of such a partnership between two start-ups with limited resources. This instance exemplifies

the power of the strategy, which can

increase resources and innovativeness

without decreasing competition.

A competitor from the

away at the market

share is no longer as

same industry chipping

much of a concern as it

was in the past, primarily

because the problem

being solved and the

markets being served

are too large for a single

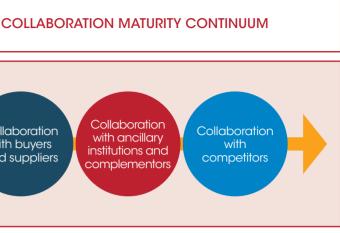
firm to cater to efficiently.

Collaboration with buyers and suppliers

FIGURE 1

restaurant listing space while Foodpanda has substantially more feet on the ground. Though they compete in both spaces, they also collaborate to fulfil customer demands by building on their competitor's strengths.

20



# The food delivery industry

Food delivery was seen as one of the hottest sectors for start-ups in India a few years ago.<sup>1</sup> Several enterprising souls set out to enable millions of Indians to get their food from restaurants on time in a cost-effective manner. The sector was the blue-eyed boy of the start-up world before things started going downhill.<sup>2</sup> A wave of consolidations and acquisitions pointed to the fact that the sector was grappling with fundamental problems that single firms might not have the resources to solve. For instance, the vast size of Indian cities and the clogged traffic meant that firms had to invest sizable amounts of money to get all restaurants listed on their platform and also hire huge numbers of delivery personnel. For many start-ups with limited funds and significant competition, this challenge was enormous. The way out was through collaboration. For instance, Zomato is a leader in the

The second question that needs to be answered regarding co-opetition is: What are the factors leading to such strategic decisions? There are multiple industry-specific external factors that contribute to the firm's propensity to adopt a co-opetitive strategy. Some of the examples from industry which elucidate the need and impact of co-opetition in the presence of various external factors are:

- Small and medium enterprises in an industry collaborate with competitors to create economies of scale, mitigate risk, and leverage resources together. For instance, Mips Computer Systems, a U.S. firm employing less than 1,000 people, was able to take on well-established players such as IBM and Hewlett-Packard by creating a network consisting of several small semiconductor firms in the reduced instruction set computing industry.
- When strategic goals converge but competitive goals diverge, co-opetition may succeed. In the mid-1980s Philips and DuPont came together to share the know-how of developing and manufacturing compact discs. However, neither of them impinged on each other's market territory.
- When the combined size and power of the partners are small compared to industry leaders. This humbling realisation forces the partners to depend on each other. Given the massive difference in Fujitsu and IBM's size, Fujitsu continues to rely on its foreign partners to ensure international market penetration.
- As per the network loci theory of the firm, resources lie not only internal to the firm but are also available externally. When the objective is to unlock resources external to the firm, co-opetition among leading firms with differentiated external networks can procure competitive advantages for them.
- When there is a high degree of separation from the consumers, competitive firms are more likely to co-opetate than when there is a low degree of separation. In a classic example from Sweden, the collaborative and competitive interactions were separated across two parts of the value chain. The competitors competed in the distribution of beer to wholesalers but cooperated in bottle returns. They developed a common system of packing that made cooperation in bottle returns easier. The Swedish Brewers' Association played a vital role in the cooperation among the breweries as they coordinated and controlled the movement of empty bottles. Similarly, they worked together in areas like regulatory standards to advise and inform 'enlightened regulation'

Often, legal or infrastructure or other challenges need to be overcome, and co-opetition can also help reduce environmental uncertainty. Companies might do so by co-developing infrastructure, co-lobbying or coming together to influence social behaviour.

While the above-mentioned examples explain the factors that play a central role in increasing or decreasing the propensity of a firm to adopt co-opetiton as a strategy, we need to analyse and condense these factors further to come up with a framework to answer the final question: When does a company co-opetate? We propose two frameworks to help firms answer this question.

The first model, referred to as the Co-opetition Decision Analysis (CDA) framework, is suitable for diagnosing macro factors external to the firm as well as internal considerations. The six points in the CDA framework represent six dimensions, which carry different probabilities of impacting a firm's decision whether or not to co-opetate. The star shape emphasises the fact that any of the six dimensions may independently tilt the scale in favour of or against the decision based on the magnitude of its impact (refer to Figure 2).

The first three dimensions, that is, the outer layer of the framework, which includes economies of scale, product cycle speed and costs, indicates the firm or product level dimensions. If either of the dimensions is high, i.e., if the economies of scale or cost of production through raw materials or R&D or the pace of change of products is high, then the firm (at least for the specific product line in question) should attempt to utilise co-opetition as a strategy.

The final three dimensions, which form the inner layer of the framework, include customer degree of separation, industry differential and objectives-represent the strategic dimensions layer. When either the degree of separation of the firm from the customer is high (for instance, electronic microchip manufacturer Snapdragon is further removed from its core customers purchasing mobile phones and tablets); or there is a high match in objectives among competing firms (in terms of either strategic or technological objectives); or the industry differential-the gap between potential co-opetiting partners and the industry leader-is high, then co-opetition lends itself as a very potent strategic mechanism

Figure 3 proposes a second framework that offers a within-firm perspective that is broken down at the task or activity level. Typically, a firm's activities can be classified as core and non-core. Core activities are those that provide a strategic advantage in terms of value creation for the end user, resulting in higher revenues and increased profits. Non-core tasks are



Industry differential

essentially hygiene factors that are needed to support value-added activities but they do not impact the top line by themselves. For instance, installing, deploying and managing ATM machines can be seen as a hygiene activity that all banks need to undertake but does not necessarily give them a unique advantage in the market. In this case, competing banks can come together to build the ATM infrastructure while continuing to compete for share of customers' wallets for financial products and services.

A firm's choice of which model to adopt will depend on the diagnosis of the context surrounding the decision to co-opetate and the companyspecific capabilities that would hinder or facilitate such a strategy.

## What specific capabilities are required for co-opetition success?

While it is important to understand the what, why and when of co-opetition, it is equally essential to develop capabilities to make the best use of such partnerships. Unlike the more famous example of Sony and Samsung, tech start-ups working with limited resources have constraints on their capabilities to build and expand Success is predicated on the firm's higher order ability to dynamically adapt its internal skills, processes and systems to a new form of partnership, i.e., co-opetition. This ability is also known as the 'dynamic capability' of the firm. It refers to a firm's ability to make internal adjustments to its routines, structures and processes to bring out the best potential of such a partnership.

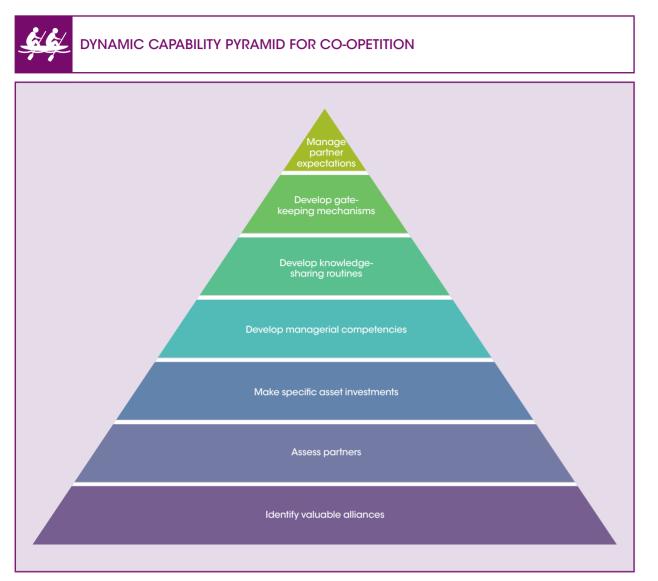


FIGURE 4

Figure 4 illustrates the seven critical dynamic capabilities that a firm needs to build. The first couple of capabilities focus on building a firm's ability to identify the right potential partner. Just as in any relationship, all eligible partners may not be the best suitors. More so in the case when the relationship entered into is fundamentally not on cordial terms. With the firm's strategic objectives in mind, there is a need to sift through different competitors, understand their competencies and ensure a match that brings about favourable outcomes. More importantly, the softer aspects of the relationship need to be understood at a deeper level. Aspects such as power and status equations, equity and fairness issues, and expectation mismatches should be identified as they can pose a serious threat to the functionality of such relationships.

The next couple of capabilities focus on the firm's ability to make the best out of such a partnership. Firms need to identify and invest in the right managerial skills such as negotiation and leadership, which are often lost in the din searching for technological breakthroughs in start-ups. Capability-building investment is also required in assets for driving innovation or working with partners. Firms that will do this best are those that develop skills in identifying, attracting, engaging, contracting with, managing, and monitoring potential co-opetition partners.

The final three capabilities in the pyramid cater to the finer dynamics of managing the partnership for maximum benefit. While the knowledge sharing mechanism among partners needs to be established, there should be a focus on gatekeeping mechanisms to ensure that the boundaries of competition are respected. The partner's expectation also needs to be managed carefully. This is of prime importance as the firms could be competing in open market fiercely and such partnerships are drastically different from mergers or strategic tie-ups. The success of the co-opetition strategy depends on the partners' ability to adapt, integrate and reconfigure competencies developed through collaborative experiences.

solve hitherto unresolved problems whilst showing non-linear growth. Pooling of resources through co-opetition can be a very efficient method to achieve these goals, while maintaining a high degree of competitiveness in the market.

#### The way forward

While the strategic implications and directions required for successfully executing co-opetition have been understood by managers, there are some obstacles in executing this strategy which need to be accounted for. The major challenge relates to ensuring regulatory compliance. Antitrust issues such as cartel formation may raise eyebrows if the partnership is not well thought out. Typically, such issues can be taken care of if the partnering firms develop the top three capabilities of the capability pyramid adequately before entering into the partnership. Dedicated special purpose vehicles, joint ventures and specialised joint R&D units are some of the ways to manage the gatekeeping versus knowledge-sharing conundrum. Equally, investments, contributions, as well as the benefit sharing mechanisms need to be well established and dispute resolution procedures agreed upon for a successful partnership.

Almost all strategic choices come with their own caveats and co-opetition is no exception. However, it needs to be stressed that firms can unearth substantial potential from such partnerships, if leveraged successfully. The developing economies of the world expect New Age start-ups to use minimal resources to

#### **Snehal Shah**

is Professor of Organisational Behaviour and Head of Research and the Doctoral Programme at S.P. Jain Institute of Management and Research, India

#### Ashish Kumar Jha

at Rennes School of Business, France

#### References

- <sup>1</sup> D. Ghosh & S. Mitter, "India's Growing Appetite for Food Service Startups", Forbes, March 18, 2015.
- <sup>2</sup> R. Kochar, "The Demise of Foodtech Startups in India", Entrepreneur, May 23, 2016
- <sup>3</sup> Adner, R. (2016), Navigating the Leadership Challenges of Innovation Ecosystems, MIT Sloan Management Review, 58(1). <sup>4</sup> Adner, R. (2006), Match your innovation
- business review, 84(4), 98. Brandenburger, A. M., and Nalebuff, B. J.
- (2011), Co-opetition. Crown Business 6 Gnyawali, D. R., and Park, B. J. R. (2009), Co-opetition and technological innovation in small and medium sized enterprises: A multilevel conceptual model. Journal of small business management, 47(3), 308-330. <sup>7</sup> Hamel, G., Doz, Y. L., and Prahalad, C. K. (1989), Collaborate with your competitors and win, Harvard business review, 67(1), 133-139.
- styles, processes, and their drivers: an organizational perspective. Technology. Innovation, and Enterprise Transformation, IGI-Global, 143-171.
- 9 Mention, A. L. (2011), Co-operation and co-opetition as open innovation practices in the service sector: Which influence on innovation novelty?, Technovation, 31(1), 44-53. <sup>10</sup> Yu. L. (2008). Collaborating with the right partners, MIT Sloan Management
- Review, 50(1), 8.

The developing economies of the world expect New Age startups to use minimal resources to solve hitherto unresolved problems whilst showing non-linear growth.

is Assistant Professor of Information Systems

- strategy to your innovation ecosystem, Harvard
- 8 Jha, A. K., and Bose, I. (2014), Innovation