

## Teaching Note

### IDEAFORGE: MECHANICAL CHARGER

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*Atanu Adhikari and Rama Deshmukh wrote this teaching note as an aid to instructors in the classroom use of the case ideaForge: Mechanical Charger, No. 9B12A013. This teaching note should not be used in any way that would prejudice the future use of the case.*

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#### SYNOPSIS

In the ever-changing technological era, the challenge for Ankit Mehta as a “social entrepreneur” was to cope with this fast pace. With a concern for the environment and conservation of energy, Mehta made his foray into the role of an entrepreneur with the development of a new product — a mechanical charger. His company, ideaForge, manufactured and sold two types of products: mechanical chargers and other conventional chargers such as bicycle chargers. The mechanical charger was ideaForge’s innovation, a product that could produce electricity through mechanical operation. This energy could charge rechargeable battery cells without the use of electricity. To create interest among the members of the distribution channel Mehta also introduced other conventional chargers as part of the company’s product range. In 2010, the sale of conventional chargers was increasing while the sale of mechanical chargers was decreasing.

The tension in the case surfaces out of the two major challenges that the company faced while running the business. The first of these was marketing this innovative product in a milieu in which the customers were habituated to using traditional mobile phone chargers. The second was the question of whether the company should increase the product range in mechanical chargers or concentrate on the existing products. The decision that it had to make was whether to sell through the distribution channel or through its own sales force, or both. The three young entrepreneurs also had to decide on how to position their product in the market. The market was largely segmented into two categories: high-end branded chargers and non-branded cheap chargers available on the roadside. A further question concerned the pricing of its own products.

In addition to these issues, Mehta knew that with a changing market scenario, several initiatives as well as calculated risks would have to be taken if he wanted to develop new product offerings such as laptop and bicycle chargers, both of which would mean diversifying his business. The issue that confronted the three entrepreneurs was the best way to allocate funds for research and development.

## **POTENTIAL AUDIENCE AND INSTRUCTOR'S MATERIAL**

The case has been developed for use in social entrepreneurship management as well as environment management courses, and is appropriate for MBA and executive development programs as well as advanced undergraduate courses. The case is appropriate for courses that deal with new product development and specialized modules focusing on product positioning.

The case provides an apt simulation of the innovative entrepreneur in India who struggles with the challenges posed by the business environment while launching an eco-friendly product. In the executive program courses, discussion may also lead to business strategy and issues related to a new product such as product positioning, channel selection, pricing of the product and product and brand extension.

## **USE OF THE CASE**

The case has a few major issues to address. Firstly, the case explores the role of channel members in the diffusion and adoption of new and socially innovative products. The sale of new products such as mechanical chargers can be jeopardized when marketed with substitute products that are popular and more convenient to use. If students consider selling through company-appointed salespeople, they must develop a sales scheme that supplements the sales that the company makes through the existing distribution channel. The related issue here is how to price the existing product range to penetrate the market. Would pricing be the sole penetration strategy, or are there other strategies that the company needs to adopt in order to establish the concept of mechanical chargers in the market? Another important issue is whether or not the company should enter another category of mechanical chargers — chargers that can be used for domestic appliances. This strategy requires several new initiatives and the allocation of resources to develop another product that can provide a substitute to the dependence on electricity.

## **TEACHING OBJECTIVES**

The case is structured to achieve the following learning objectives with the aim of helping the student to do the following:

- Understand the challenges faced by a social entrepreneur while introducing a new eco-friendly product that intends to alter the existing traditional products;
- Assess the cost and benefits of alternative courses of action while marketing an eco-friendly product;
- Identify the business opportunities to extend the product offerings;
- Come up with a plan for expanding a business that has a small start-up capital.

## **TIME FRAME FOR CLASS DISCUSSION**

This case can be taught in one session of 75 minutes.

## **ALTERNATIVE TEACHING METHODOLOGY**

A role play of about 25 minutes can be adopted in which three students will play the roles of Mehta, Ashish Bhat and Rahul Singh. The role play can focus on their entrepreneurial abilities and individual personality traits. It can also bring out the issues related to product development, research and

development, manufacturing, marketing and finance. This role play can be followed by a discussion in which the observers can give their input in terms of the possible solutions that the company could implement.

### SUGGESTED ASSIGNMENT QUESTIONS

- 1. IdeaForge has positioned its product in the premium category with the current price of Rs450 per unit. However, this price is not easily accepted by the consumers. What course of action should be taken in such a situation? Should the company resort to lowering the price, or should it adopt effective promotion strategies and keep the current price?**

The basic axiom of marketing, as pointed out by Peter Drucker, states that “businesses are not paid to reform customers. They are paid to satisfy customers.”<sup>1</sup> Thus ideaForge should ensure that consumers positively perceive the eco-friendly mechanical charger with which it plans to augment the existing conventional charger. This does not necessarily have to involve reducing prices. IdeaForge’s product orientation may involve enhancing customers’ perceived value of the mechanical charger in order to create customer satisfaction.

As compared to competitive products, the mechanical charger is positioned in the middle segment of the branded chargers category (see case Exhibit 7). In line with similar products, ideaForge could increase the price to Rs500 and stay within the same market segment. This increase would provide marginally increased annual revenue (at a modest estimate of Rs13.4 million to around Rs15.0 million, taking existing sales figures into consideration). This increased revenue could be utilized by the company in order to enhance the perceived value to the customer. The company could highlight the flexibility offered by the use of this charger. Customers who are conscious about using eco-friendly products will not mind paying an additional Rs50 if they are convinced that this charger offers a one-time solution.

Reducing the price to Rs350 (the lowest price point in the branded segment) in order to enter into a price war with the existing branded chargers would not be an effective strategy. In fact, it may have an adverse impact in terms of mixing the ideaForge brand with similar products that are already in the market. This price reduction would also result in a loss of annual revenue from Rs13.4 million to Rs10.4 million (taking into consideration the existing sales volume), which the company cannot afford at its current level of profit. (Using Excel, students can analyze the impact of different price points on revenue and interpret the result in the context of the case.)

For a technology-based innovative product, it is essential to focus on the customer segment of early adapters and meet their expectations in terms of satisfaction and perceived value.

- 2. IdeaForge introduced other products including a bike charger and car charger in the same category in order to offer a wider range for dealers. Does this strategy dilute its main focus of selling eco-friendly products? If so, is a potential increase in profit due to this strategy worth the dilution of the company’s eco-friendly focus?**

“The new venture has ‘idea;’ what it does not have is a ‘business’, a viable operating, organized ‘present’ in which people know where they are going, what they are supposed to do and what the results are or

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<sup>1</sup> [www.daviddalka.com/createvalue/quotes-i-live/](http://www.daviddalka.com/createvalue/quotes-i-live/), accessed May 25, 2012.

should be.”<sup>2</sup> The instructor may refer to the ‘analysis’ part of this teaching note to provide a starting point for this answer. The answer to this question will be dependent on the way students address the issue. We have found that two groups emerged advocating in favour of two ideas. One group was in favour of making the product eco-friendly and targeting the niche segment having inclination towards green product. This group favoured positioning ideaForge products as green product to have less competition, differentiation from competitor and a separate positioning strategy. The group that advocated selling the mechanical charger with the other products stressed large sales volume and larger profit.

**3. With new trends such as the introduction of a single charger for all types of handsets or technical changes such as longer-lasting batteries, what types of challenges might ideaForge face? What steps should it take in order to combat these changes?**

Several mobile phone companies have come up with mobile sets that have longer lasting batteries. Such types of batteries reduce the necessity of a secondary charger to be purchased by a consumer to have their phones on. Certainly this is one of the upcoming challenges Ankit is going to face. Possible ways to counter such a threat include:

- a. Tie up with original equipment manufacturers to supply a eco-friendly secondary charger along with the mobile set.
- b. Targeting the customer segment who buy mobile phones that do not have sufficient battery backup time.
- c. Positioning the product more as the eco-friendly product than a popular secondary charger available in the market.
- d. Advertising and promoting the product more as a standby charger that users must keep as a backup.

Common practices for entrepreneurial management for new products may include the following:

- a. Market focus,
- b. Financial foresight,
- c. Building the top management team long before the new venture actually requires it,
- d. Founding entrepreneur’s decision with respect to his own role, area of work and relationships.

### **SUGGESTED DISCUSSION QUESTIONS**

The instructor could initiate the discussion or lead participants to the right issues by asking the following questions:

1. What should ideaForge do?
2. Will people use the mechanical charger, or even prefer it over conventional chargers?
3. How are the challenges faced by Mehta (as a social entrepreneur) different from those of an entrepreneur with an innovative product?
4. What are the pros and cons of ideaForge’s distribution strategy?
5. Considering the financial situation, how should ideaForge allocate resources for the ongoing research and development if Mehta is to remain a social entrepreneur?

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<sup>2</sup> “The Entrepreneurial Business and New Venture,”

[www.softwareresearch.net/fileadmin/src/docs/teaching/SS04/PM/Gatterer\\_Gruber\\_Ladstaetter\\_paper.pdf](http://www.softwareresearch.net/fileadmin/src/docs/teaching/SS04/PM/Gatterer_Gruber_Ladstaetter_paper.pdf), accessed May 25, 2012.

## ANALYSIS

1. What should ideaForge do?
2. Will people use the mechanical charger, or even prefer it over conventional chargers?
3. How are the challenges faced by Mehta as a social entrepreneur different from those of an entrepreneur with an innovative product?

The instructor may notice that the key issue in almost every sphere of the case analysis boils down to one question: What should ideaForge do now? New ideas are expected to arise as the discussion progresses. Students may address this question in a number of ways: channel selection; developing marketing mix elements such as product, price, promotion and distribution; offering business strategy on new product extension; suggesting an alliance with original equipment manufacturers (OEMs); recommendations on how to increase consumer awareness. These varied perspectives will help to enhance the richness of the class and are sure to build a solid discussion on several issues that emerge from the case.

In the case of ideaForge, the products are considered ‘mass market’ products if we merely define them as ‘secondary mobile chargers.’ The mechanical charger is an innovative product and carries the unique value of an eco-friendly charging solution without the need of an electric power supply. This “extreme green”<sup>3</sup> company needs a unique positioning (see Exhibit TN-1). Extreme green companies often serve niche markets and sell their products through specialty channels. In such a scenario, the traditional approach of sales and distribution may not help in giving leverage to Mehta as a social entrepreneur.

Companies contemplating a green strategy must consider whether key competitors are already playing in the green consumer space. In the Indian market, there is a lower level of awareness about green products<sup>4</sup> such as the mechanical charger. While urban areas are flooded with several varieties of conventional chargers, in the rural market there is hardly any awareness of green products. In such a scenario, Mehta will have to fix his product in the existing supply chain of the larger mobile charger industry.

These strategies can be summarized in the form of a table (see Exhibit TN-2). The instructor can conduct a brainstorming session and encourage students to identify the strategy mix that ideaForge has adopted and determine whether this is in line with its current positioning. IdeaForge has currently adopted a ‘toll gate’ strategy in the ecology niche, as is apparent in the “Inception of ideaForge” section of the case and also from the interview with Mehta.<sup>5</sup>

#### 4. What are the pros and cons of ideaForge’s distribution strategy?

The instructor may start the discussion with a focus on alternatives available in the choice of distribution channel: (i) market and sell the product through the distributors according to the conventional mode, or (ii) employ own sales force and manufacture through an OEM (original equipment manufacturer). The instructor may write these two options on the board and ask the students to give arguments in favour of and against these two options. There could be a strong preference for the second option; however, there may be a solid minority in favour of distributing through the conventional channels. At the initial stage of

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<sup>3</sup> Jill M. Ginsberg and Paul N. Bloom, “Choosing the Right Green Marketing Strategy,” *MIT Sloan Management Review*, 46, Fall 2004, pp. 79-84.

<sup>4</sup> B. Mannarswamy, “A study on environmental awareness and the changing attitude of the students and public in Coimbatore towards green products,” *Research Journal of Social Science and Management*, volume 1 number 7, pp. 75 – 84.

<sup>5</sup> [www.youtube.com/watch?v=9sZeH5P9y-M](http://www.youtube.com/watch?v=9sZeH5P9y-M), accessed May 25, 2012.

the discussion, the instructor may note students' arguments on the board. Some of the points that may emerge in favour of and against these two channels are as follows:

#### Arguments in Favour of Conventional Mode of Distribution

- a. Established channel with significant market access,
- b. Can be easily distributed to the customers,
- c. The unit margin can be controlled,
- d. No fixed investment,
- e. Channel members are aware of the product.

#### Arguments Against Conventional Mode of Distribution

- a. The distributors sell products that will give them high turnover, and in the present case this would be the conventional chargers,
- b. The distributors may have better relationships with the competitors and may push their products,
- c. Distributors will not be aware of the new technology and may not have adequate knowledge to explain the long-term benefits of the products to the customers.

#### Arguments in Favour of Distribution Through OEM

- a. Distribution through an OEM would lend credibility and reliability to the technology and use of mechanical chargers,
- b. It would give the end-customer confidence about the product and help ideaForge establish traction in the marketplace,
- c. It will be a guaranteed revenue model for ideaForge,
- d. Direct access to the end-users through the OEM,
- e. There will be very little competition.

#### Arguments Against Distribution Through OEM

- a. It may be hard to convince an OEM to include a second charger in its mobile instrument offering or service provider's connection,
- b. An OEM may require a higher margin than distributors,
- c. ideaForge may lose its brand identity,
- d. Future brand extension may be difficult.

#### Arguments in Favour of Selling Through Own Sales Force

- a. The advantage of the technology can be effectively communicated to the users,
- b. ideaForge will be able to balance the sale of conventional chargers and mechanical chargers, since the sales targets for two different products will be in the hands of the company,
- c. The diffusion of innovation would be fast and authentic.

### Arguments Against Selling Through Own Sales Force

- a. Employing salespeople requires separate fixed costs (including office space),
- b. Company may have to invest substantially in training these salespeople,
- c. The initial turnover would be low as it may take some time to educate end-users and retailers about the benefits of the mechanical charger.

The instructor may draw the following matrix on the board after discussion. The matrix provides a snapshot of students' arguments about the sales and distribution strategies of ideaForge.

	Distributor	OEM	Own Sales Force
Conventional Charger	YES	NO	YES / NO
Mechanical Charger	YES	YES	YES

### **5. Considering the financial situation, how should ideaForge allocate resources for the ongoing research and development if Mehta is to remain a social entrepreneur?**

Mehta is a young innovator who failed to address market issues and tried to find the solution in his product. This can be analyzed through careful observation of the company's income statement (see case Exhibit 3). The introduction of the new products in the existing category has resulted in an increase in the overall revenue, but the sales of the mechanical charger have reduced from 31,500 units (in fiscal year 2007/08) to 29,900 (2008/09). Students may refer to figures given in the income statement and information about pricing provided in the "Pricing" section of the case.

The problem exists in identifying the market needs and positioning the product accordingly. This issue cannot be addressed through diversification or mere product mixing. This enables one to understand that a great innovator may not always be a good entrepreneur. For the entrepreneur, the sustainability of the business depends on two key factors: how to identify and address the market needs and how to scale up the business.

Since there exists a problem in the sale and adoption of mechanical chargers, some students may argue that selling conventional chargers and mechanical chargers may be separated. Some students will recognize the long-term sustainability of the mechanical chargers, and these students need to be identified in order to discuss the issue in-depth.

One point that must be discussed is that conventional chargers have several competitors, while the mechanical charger is ideaForge's own innovation and is a patented product. It is not likely to be copied by the competitors in the near future. It is a differentiated product that has green appeal.

### **SOME INITIATIVES RECOMMENDED**

The dilemma faced by ideaForge is as follows: the long-term sustainability of the business lies with the mechanical chargers, but it is time-consuming to sell and diffuse them in the market. Promoting the adoption of mechanical chargers and eventual migration from conventional chargers to mechanical chargers may happen over time.

At present, immediate adoption of the mechanical charger may not happen due to its higher cost and unclear immediate value. The price may be a deciding factor for users to buy a mechanical charger immediately, unless they are convinced of the long-term benefit of the product.

In order to maintain its unique position, ideaForge can take the following actions:

1. Highlight the product's differentiation,
2. Manage competitors by creating entry barriers,
3. Create environmental awareness with the use of blogging, Internet, etc.,
4. Redefine the market.

Adopting a "blue ocean"<sup>6</sup> strategy and penetrating the rural market may look like an attractive option, but one needs to analyze the pros and cons.

Peter Drucker has elaborated four major strategies<sup>7</sup> (see Exhibit TN-3). Each strategy fits a certain kind of innovation and does not fit others. Entrepreneurs can combine two or three elements in order to formulate their own strategies. However, they have to understand the limitations and risks associated with each strategy. Changing the economic characteristics of a product market and industry can be effected through the following: creating utility, altering price, adapting to consumers' reality and delivering what represents true value to the customer.

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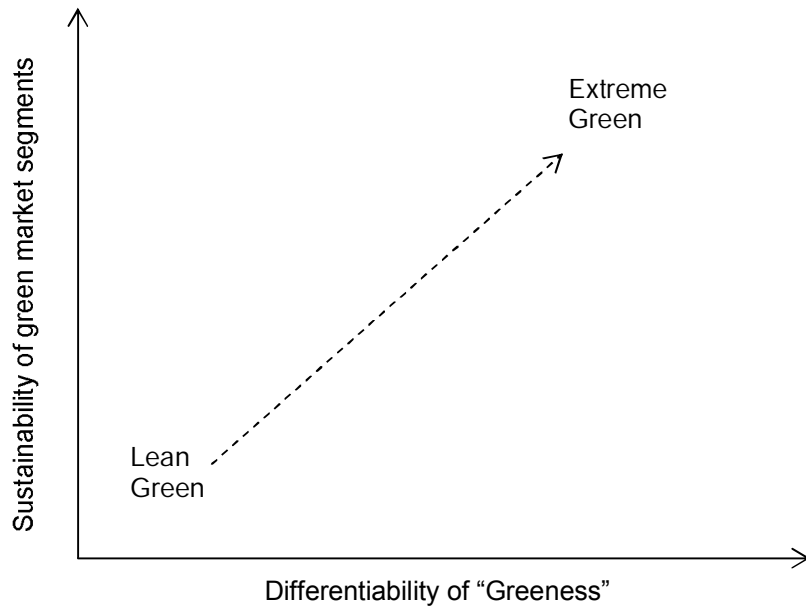
<sup>6</sup> W. Chan Kim and Renee Mauborgne, *Blue Ocean Strategy*, Harvard Business School Press, Boston, 2005. The book illustrates how organizations can generate high growth and profits by creating new demand in an uncontested market space, or a "Blue Ocean," rather than by competing head-to-head with other suppliers for known customers in an existing industry. More detail can be found at [www.blueoceanstrategy.com/](http://www.blueoceanstrategy.com/), accessed May 25, 2012.

<sup>7</sup> Peter Drucker, *Innovation and Entrepreneurship: Practice and Principles*, Perfect Bound. Accessed through <http://metro-natshar-31-71.brain.net.pk/articles/InnovationDrucker.pdf> on May 25, 2012.



Exhibit TN-1

Differential Ability and Sustainability Metrics for Green Products



Source: Jill M. Ginsberg and Paul N. Bloom, "Choosing the Right Environmental Marketing Strategy," *MIT Sloan Management Review*, 46, Fall 2004, pp. 79-84.

## Exhibit TN-2

## SEVERAL STRATEGIC OPTIONS FOR IDEAFORGE

Strategy	Motive	Long-term outcome	Aim	Prerequisites	Limitations / risks	Opportunities	Examples
'Being Fustest With The Mostest'	Market or industry leadership, if not dominance (positioning in the large market)	Big companies	Permanent leadership position	Extreme concentration of efforts Substantial resources Systematically cut price of own product and processes	Only success or failure. No space for 'near miss' or 'almost success'	New market Big success	Apple, DuPont, Johnson & Johnson
'Hitting Them Where They Ain't'			Market dominance	It requires growing market with alertness, flexibility and willingness to accept the market verdict	Imitate creatively what then turns out not to be the winning development in the marketplace	Less risky	IBM, P&G (soap and detergent market)
Creative imitation			Obtaining leadership and dominance	It required some degree of innovation to offer same product at lower price	Habit to maximize rather than optimize	Appropriate for fast-moving market	Sony, Citibank
Entrepreneurial judo							
Ecological niche	Control (obtain practical monopoly in small area)	'Take cash and let credit go'	Creating unique space in the market for intermediate product	Original product which would cut down some of the processes Correct timing of launch Specialized knowledge of market	Tendency to exploit monopoly Limited in scope and time When specialty market becomes mass market	Core competence	Alcon Company Bendix, A.O. Smith (U.S. based auto ancillary companies) Thomas Cook, American Express (Traveler's cheques)
Toll gate			Creating space in the ancillary industry				
Specialty skills			Creating new market				
Specialty market							
Changing the economic characteristics of product market and industry			'Value proposition' in the existing market	Ability to charge for what represents 'value' to customer rather than what represents 'cost' to the entrepreneur	Create and sustain the 'value proposition'	Core competence	Linco China Company, Gillette razor

Source: Created by authors.

## Exhibit TN-3

**FOUR MAJOR STRATEGIES SUGGESTED BY PETER DRUCKER**

Four major strategies are:

1. "Being Fustest With The Mostest"
2. "Hitting Them Where They Ain't"
  - a. creative imitation
  - b. entrepreneurial judo
3. Ecological niche
  - a. Toll gate
  - b. Specialty skills
  - c. Specialty market
4. Changing the economic characteristics of product market and industry by creating utility, by pricing, by adaptation to consumer's reality and by delivering what represents true value to the customer.

*Source: Peter Drucker, Innovation and Entrepreneurship: Practice and Principles, Perfect Bound. Accessed through <http://metro-natshar-31-71.brain.net.pk/articles/InnovationDrucker.pdf> on May 25, 2012.*