LEAN START-UP APPROACH TO SALES – A CASE STUDY

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Abstract. *In this paper, the application and advantages of the lean approach to start-up business is presented, through an example involving the sales of personal energy appliances intended for outdoor use. By using a thoroughly developed step-by-step approach, BioLite company was able to come up with a way to sell their equipment to even the most remote of markets (in this case, towns in India that do not have access to large retail stores) by carefully analysing all of the key factors and problems involved. In addition, this paper contains the explanation of how specific lean principles were applied in achieving of the company's goal.*

Key words: *Lean management, start-up business, personal energy appliance, build-learn-measure (BLM), Get out of the building (GOOB)*

1. INTRODUCTION

In the recent years, the lean management concept was developed and found application in numerous areas. Lean management is based on the principles according to which entrepreneurs are everywhere, entrepreneurship is management and that validated learning is of great importance [1]. It also involves more specific principles, such as Build-measure-learn, Get out of the building and innovative accounting [2,3]. Due to its nature, which relies on quick and efficient production of small batches of products, as well as on systematic and detailed approach to target market analysis, the lean principles works exceptionally well when combined with start-up businesses, since the purpose of start-ups is to sell simpler, smaller and cheaper products, as the first step towards large-scale entrepreneurship.

The practical application of the build-measure-learn and Get out of the building principles, hereinafter referred to as BLM and GOOB was, is illustrated with an example involving BioLite, a company which manufactures personal energy appliances, such as cookstoves, mainly for outdoor use. Their products are typically bought from retail stores, however, the company attempted to sell them to more remote markets, including sub-Saharan Africa and certain locations in India. BioLite was faced with a number of problems, including the lack of retail stores and means of advertising and transportation of their products.

2. METHODOLOGY

In this part of the paper, the two aforementioned lean methodologies will be briefly described, along with the step-by-step process that BioLite had undertaken in order to ensure efficient and profitable distribution of their product to a remote town in India.

The build-measure-learn cycle represents an iterative lean methodology and consists of the following stages:

1. **Plan** – idea development, defining of hypo–theses and adequate metrics for measuring them.
2. **Build** – creating of a minimum viable product, on which the final product will be based.
3. **Measure** – analyse the results obtained by the previous stages.
4. **Learn** – Compare these results with the initial hypothesis and use the newly acquired knowledge to improve the cycle.

Once the BLM cycle is complete, additional itera–tions are performed (if necessary), until a satisfying solution is obtained. It can be seen that this

methodology strongly relies on experience gained during the iteration, which is used as the base for improvement (Figure 1).

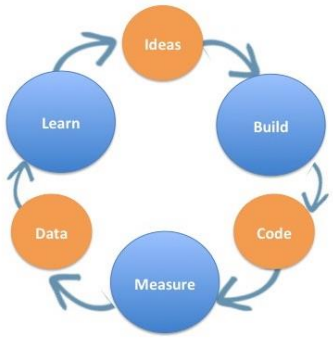

Figure 1. The Build-Measure-Learn cycle

The Get out of the building methodology was devised by Steve Blank [3], and represents an important step before the actual start-up business is initiated. It sug–gests that entrepreneurs should first establish contacts with interested partners and customers, in order to ensure a reliable source of valuable feedback about their needs regarding the product, and aids the process of improving of following iterations. In this way, a solid base for future start-up related work is created.

The case study presented here involves BioLite, accompany that manufactures personal energy appliances (such as portable cookstoves) both online and in major retail stores, while providing all of the necessary information to their customers.

In the case of certain markets, even a combination of online and retail presence could not reach the custo–mers and in order to solve this problem, BioLite had to adapt their approach to selling in accordance with the new, completely different market that they have discovered in India [4].

In order to solve this issue, their team in charge of emerging markets developed a series of experiments, for the purpose of determining the best way for their products to reach their intended users. The product in question (HomeStove) can be seen in Figure 2.

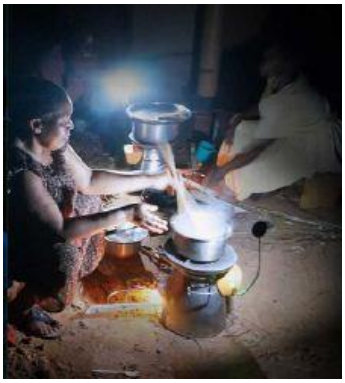

Figure 2. The HomeStove, manufactured by BioLite

2.1 Experiment 1: The Handi shop

Since BioLite's target customers in India don't have access to large retail shops, an alternative was found in the so-called Handi shops. BioLite attempted to sell their product (the HomeStove) through these shops.

This experiment failed due to lack of information available to buyers, and it was conclude that a more proactive approach is required.

2.2 Experiment 2: The Chaiwala

The next experiment involved the supplying of Chaiwalas, (tea sellers in India), with both the product and the appropriate training on how to use it. Even though the promotion was successful, it still failed in terms of sales, since the customers were more focused on getting their tea as quickly and as cheap as possible, without considering the technology behind it.

Thus, this experiment failed due to an inadequate target market and this was the next factor to consider.

2.3 Experiment 3: BioLite flagship store

The next experiment aimed to set up a business in a busy market in the town of Bhubaneswar, India. BioLite's local team would distribute promotional materials and demonstrate the product to anyone interested in a quick and comprehensive manner.

Although this approach attracted a large number of customers quickly, it turned out that it could not retain these costumers for longer periods of time.

This was due to the fact that the users who needed the cookstove the most, lived outside of town, and it was complicated for them to reach the flagship store.

Hence, the next issue that needed to be resolved was the distribution of products to the target market.

2.4 Experiment 4: Avon calling

Based on the previously revealed issues, it was concluded that there is a need for a partner that would distribute the product. BioLite partnered with the Greenlight Planet company in India, who were already in the business of distributing energy products to remote locations through local sales representatives.

This process involved the training of Greenlight Planet employees in terms of demonstrating value of the BioLite cookstoves. On the other hand, BioLite had to adapt their cookstoves to make it easier to transport them from one demonstration location to the other.

Insight gained from Greenlight Planet salesmen aided BioLite in searching for their own team of salespeople which would go from door to door to demonstrate the stoves and gain the attention of potential customers.

With this approach, the only remaining issue was related to the affordability of the product. In other words, BioLite needed to ensure that their target customers can actually buy the cookstove.

2.5 Experiment 5: Microfinance institutions

Microfinance is an economic engine used to aid low-income households by allowing customers to take loans, arrange payments and monitor their finances. BioLite's partnerships with microfinance institution (MFI), allowed their employees to present the cookstove using real-time demos, along with the possibility of showing the interested customers their finance programmes.

The programmes in question would immediately enable the customers to purchase the cookstoves, relying on the fact that their efficiency will make the stoves pay for themselves after a couple of months, by saving both fuel and energy.

This experiment managed to solve the final issues preventing people from becoming BioLite's customers, thus completing the experimental process of determining the best way to sell cookstoves in remote locations.

3. DISCUSSION

As can be seen by the flow of the experiments, the process of determining the optimal way for BioLite to sell their product under the given circumstances was iterative. Each unsuccessful iteration provided valuable knowledge and information about the problems which needed to be solved in the steps that would follow. In addition, every experiment mana–ged to solve some of the previously encountered issues.

The experiments started with a simple concept of selling the product through the available stores, continuing with educating of the customers, deter–mining of the distribution channels and finally offe–ring financial plans that would allow said customers to afford the product.

It can be seen that the approach undertaken by BioLite is based on the principles of the aforementioned Build-Measure-Learn cycle and the Get out of the Building methodology. The BLM is reflected in the iterative approach wherein the results of each experiments were analysed and conclusions were made about what can be improved, before moving onto the next stage.

However, this alone was not enough to obtain satisfying results, and there was the need to communicate with the target market, and provide clear and straightforward information about the product to the customers. For this purpose, BioLite employees and their partners in India personally demonstrated the product to the buyers. In this way, they were able to educate their buyers about the product, as well as the ways in which they can afford to buy it. Establishing and maintaining direct communication with the customers is the basic concept of the GOOB approach.

4. CONCLUSION

The case study presented in this paper, involving the selling of cookstoves in remote parts of India, confirmed that not succeeding on your first attempt at establishing a business is not necessarily a failure and that it can have its advantages, if approached in the correct manner. It can be seen how combining different lean management approaches can contribute to developing of a successful business model.

By using the BLM and GOOB principles, BioLite company was able to ensure efficient product distribution to their target market, despite the numerous problems related to selling, transportation and finances, wherein the product in question was a cookstove (a personal energy appliance for outdoor use). The experiments that were carried out allowed the company to obtain valuable information which was then used as a base for further improvements, and with each following experiment, one of the issues was eliminated. In addition, the BLM approach allowed BioLite to identify problems that were not taken into consideration previously.

Another well-known lean methodology, the GOOB approach, also played an important part in these experiments. Direct and adequate communication with the target market allowed BioLite to understand their customers' needs, and react to them accor–dingly. This manner of communication, which included training of employees in the best ways to demonstrate the advantages and capabilities of their product, ensured that the target buyers would be interested in the product itself. Additionally, direct communication with the locals aided BioLite in solving the issues related to transportation of their product to the target location, which was further away from the town where the stores are.

Hence, it can be seen that applying the lean approach to start-up businesses represents a reliable and effective long-term strategy, mainly due to one of the essential lean principles – the iterative learning based on previous unsuccessful attempts. It also emphasises the importance of direct communication with the target market, in order to fully understand and adequately take into account the customers' needs and potential problems related to the product aimed at them.

REFERENCES

[1] M.S. Martinez: Good practices of the Lean Startup Methodology: Benefits, challenges and recommendations, Master Thesis, Aalto University School of Science, 2016

[2] E. Ries: The Lean Startup, Crown Publishing Group, 2011

[3] S. Blank, B. Dorf: The Startup Owner's Manual Vol. 1 – The step-by-step Guide for Building a Great Company, K and S Ranch Inc., 2012

[4] J. Cedar: How one startup developed a sales model that works in emerging markets, Harvard Business Review, 2016