X-PLANT BUSINESS ANALYSIS

Applied Global Business Learning – India

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Acknowledgements

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Introduction

AGBL has created this report for the employees and leadership of X-Plant at St. Xavier’s College in Ahmedabad, India after meeting with the organization in January 2014. It is clear that although X-Plant has faced a number of struggles over the past seven months, its members are committed to the success of the company. Based on the presentations, meetings and discussions with the members and leaders of X-Plant, we have compiled the following report. The report identifies current areas of strength as well as places where improvement is needed. We hope that by addressing the issues of concern, that X-Plant can become a more profitable enterprise.
Human Resources Considerations

**REACTIVE VS PROACTIVE APPROACH**

X-Plant has done an excellent job of responding to the different crises that have faced the company; particularly with regards to the challenges associated with contamination. That being said, we would like to see the company exhibit a proactive, versus a reactive attitude towards the management of the company. We strongly encourage X-Plant to re-evaluate production of X-Plants during monsoon season due to the high probability of contamination. It is our understanding that even during good years, this contamination is very difficult to avoid. We believe that the resources and efforts of the company could be redirected during this period of time towards other efforts. For example, X-Plant could focus on administering workshops only during the monsoon season and refrain from the production of X-Plants during that time.

Additionally, we suggest X-Plant implement a regular fumigation schedule when X-Plant production is under way, to prevent future contamination. This schedule should be determined based on an evaluation of the costs of the process compared to the potential benefits to the plants. You will also need to consider the efficiency impacts resulting from interrupted production time in the lab during the fumigation process. The purpose of setting up a fumigation schedule is to maintain consistency of the laboratory environment. Even when production is stable, consistent fumigation should be administered to carry forward the sterile environment.

**IRREGULAR MEMBERSHIP PARTICIPATION**

An identified challenge faced by X-Plant is the irregularity of member participation. Weak participation is toxic to the moral of members who are forced to pick up the slack created by nonparticipation of others. This can be especially stressful for the department heads. To address this issue and motivate members, we suggest that X-Plant begin by analyzing the underlying reasons for poor participation. Is this due to unmotivated members or is there some underlying source of frustration (e.g., poor communication, ineffective leadership, etc.) that generates this problem. It is vital that the leadership address this problem since nonparticipation undermines the success of X-Plant.

One effective way of analyzing this problem could be through the problem solving activity that we conducted while visiting X-Plant. An example of the implementation of this exercise is detailed in Appendix A.
To prevent future motivation problems, we suggest that X-Plant management make expectations of members clear and uniform during the recruitment process this spring. We also suggest the implementation of a member contract that outlines these expectations so as to make responsibilities clear from the beginning of employment. This member contract could be outlined in the form of an honor code, identifying responsibilities of departments as a whole, as well as individually for management roles.

INTERNAL COMMUNICATION

It was apparent that communication between the CEO, managers and employees was not adequately structured and this caused some tension within X-Plant. It is important for the leadership team and managers to understand the value in delegation of responsibility by managers, and this is especially important when considering the top manager, the CEO. It is important for the CEO to avoid engaging in micromanagement and to focus on the delegation of responsibility as opposed to having a direct hand in operations.

A clear, defined line of communication must be implemented to increase transparency within the organization. Beginning the regular use of email communication would benefit members on many levels. Not only would it mean an easy way to communicate within the company, but it would also prepare members for future employment where e-mail usage will more than likely be mandatory.

The AGBL team understands the limitations faced by some students with regards to technology. In addition to starting electronic communication we also highlight the importance of a physical tool, such as a message board that could aid in communicating to members about fumigation, meetings and other necessary messages.
Technical Support

DATABASE

The establishment of a database for the company’s documentation and archival materials is commendable due to the fact that it mirrors the workings of a true company. This database should be a tool used and enhanced by future generations of X-Plant leaders. In recognizing this, it is crucial to compile a database manual. The next team of X-Plant workers may not be as confident with the software used to develop and maintain the database and hence a user manual they will allow them to use this tool to its full capacity. It is also important to note that future X-Plant members should continuously update the user manual as they upgrade and expand upon the database itself. Please refer to the user manual example provided as a separate attachment to this report.

WEBSITE ISSUES

The implementation of a functioning, accurate website should be made a priority by this year’s leadership team. Further exploration should be done to eliminate the previous website on Weebly since this creates confusion and mixed messages for those who mistakenly access this site. Also, in establishing the new website it is important to link all social media applications to X-Plant’s web address. Marketing should recognize the importance of linking all company media in an effort to better improve brand awareness of X-Plant.

Many companies today have created a position within marketing geared specifically towards the development and maintenance of social media presence. We highly recommend that the website issue be promptly addressed and that a specific person or group of people at X-Plant take on the social media accounts as part of their job description. Again, it is important for individual and group responsibilities to be clearly defined. If one person or a small group of people takes on the responsibility for X-Plant’s online presence it will insure a more consistent brand presence. It will also solidify the importance of an online presence within the organizational structure. Instead of having the online presence be something associated with marketing or the whole group as a whole, making it a direct responsibility will ensure that it is given the importance and time allocation that is needed to make it successful.
Production

The contamination resulting from the monsoon season greatly diminished the number of X-Plants that could be produced this year. However, the company is to be commended for how it capitalized on the opportunity to further develop other aspects of their product line, most notably frames and custom stands. The picture frames and customizable stands are attractive and are certain to generate high demand. With that said, a major concern lies within the viability of these products in terms of labor costs and transferability of products between batches of X-Plant employees. While the detail in the frames is attractive, there are several hours of labor involved in their production, which may detract from the cost effectiveness of the product. In addition, the skills necessary for the frames’ production are not guaranteed to be transferrable to future X-Plant generations. We suggest that X-Plant pursue a more cost effective picture frame product by outsourcing its production. In anticipating demands of these frames we also suggest that the vendor chosen to produce the picture frames also be responsible for the artistic element so as to allow X-Plant and its members to concentrate on the management side of the company as well as the direct biotechnology objective.

Additionally, X-Plant should establish a contract with the carpenter used to produce the custom frames. The wooden frames seem to be cost effective and capable of generating high demand so it is important to secure their presence in X-Plant’s product line in the future. We find it valuable to have a formal agreement rather than depending on a verbal understanding.

Research and Development

X-Plant and its leadership has been very proactive in developing ideas and plans so as to bypass the great limitations that have come with the production of the X-Plant product this year. The marketing of the workshops was an efficient way of dealing with the crisis of contamination for the company. Although the workshops have been a source of revenue generation and resource investment for the company, it will also be in the best interest of X-Plant to brainstorm and develop a product that can become both more established and less vulnerable than the X-Plant.

Since the purpose of X-Plant is to teach and guide students in understanding the business world via the workings of biotechnology, it will be beneficial to the stability of the company to develop and maintain an inventory
of a product that can be more easily manufactured, and is less susceptible to contamination. The terrarium idea that was already suggested might be an example of a product that is less vulnerable to contamination, and can also be sold at a price high enough to generate a steady stream of profits. It is also consistent with the “Nature on your Desktop” theme of X-Plant.

Another good example is the design and production of a branded t-shirt that can be given out at workshops (which will increase the price of said workshops, to cover the cost of the shirt) and that can also be kept on inventory to sell as an individual product item. As a guide, it may be useful to apply the same idea generation activity to this issue as well.

A key consideration for the future of the X-Plant product is to consider modifying the production schedule. One estimate showed that the monsoon season resulted in a 95% failure rate in terms of production compromised by contamination. Although we understand the positive impact that fumigation has, from our understanding this is not true during monsoon season. There is a need to consider the risk that comes with running production during this high failure rate season and compare that to the potential gain of only running workshops during this time period.

It is important to also realize the limitations of the X-Plant as a product. As an example, the “Boston Matrix” found in Appendix B to this report can be used to better analyze the viability of this product for the long-term. The Boston Matrix is frequently used within the world of marketing in evaluating a product within a given market. Most products start off as question marks, represented by the upper left quadrant. Upon first introducing a product into the market it is almost impossible to be certain of its success or failure. After the initial introduction into the market, some products move on to the star category, represented by the upper right quadrant. These products are stars in that they account for the majority of the market share, or business, within their specific sector of the market. This period can last as long or as short as the market and consumers allow. After having been a star, a product tends to move on into the cash cow period of its product lifecycle, or the lower right quadrant. Products tend to sell themselves after they have been on the market for a while. This means that companies may not need to market or advertise this particular product as much and consumers will still look for it. Again, this period can last as long or as short as consumers allow it to. Competitors, and even the company itself, will begin to produce similar products to the one that was deemed successful, introducing new elements or varieties. At this point, the hypothetical product we have been mentioning in this example, is no longer a major seller and there is a better option available. The product then moves into the dog stage. Companies still produce this product because there is a small number of consumers that are still loyal to this particular product, but production is less and is not advertised unless to a certain niche market.
The Boston Market is useful in evaluating the lifespan of any product and we recommend a conversation be initiated within upper management on the current position of X-Plants. AGBL has concluded that the X-Plant may potentially have reached its maturity. Due to the complications that come with maintaining a high inventory for the X-Plant, it may be in the best interest of the company to look for new ways to combine biotechnology with business. Although the X-Plant is a product that has had some success, it is difficult to maintain enough inventory of this product in order to successfully grow the company. There has been a great amount of energy and resources invested into the production of the X-Plant, which has contributed to a beautiful creation.

We recognize that the X-Plant is your signature product and we are not suggesting that you completely discontinue its production. However, the efforts of future generations of students may need to be directed towards other products that are more viable in terms of production and sales rather than exclusively devoting production efforts towards the X-Plant.

Additional Suggestions

EXPANDING X-PLANT

To continue expansion of the X-Plant product beyond Ahmadabad, we suggest exploring shipping opportunities. Several members suggested that the X-Plant can be shipped but our understanding is that you have never attempted to do so. Before advertising that X-Plant will ship, we strongly recommend test shipping various vials, frames and holders. Lack of testing could result in unsatisfied customers and lost inventory should the process be unsuccessful.

CUSTOMER RETENTION

Given the novelty of the X-Plant, incentivizing returning customers is vital to future profits. One key way of doing this would be to offer refills of the X-Plant vial. This could take one of two forms. First, we suggest offering a discount on a future refill with the purchase of a frame or stand. Not only would customers be more likely to purchase another vial, but also they would see more value in the initial purchase of the frame or stand. Second, we suggest partnering with XICE to
produce a vial-sized refill candle. For example, a purchase could include a framer/stand, X-Plant and an XICE candle. These collaborations can benefit both companies in terms of greater exposure to the innovation in their product line. In addition, it extends the shelf-life of your stands which enhances their value to potential buyers, and it highlights the role of ITU’s at St. Xavier’s College.

Conclusion

AGBL would like to take the opportunity to once again thank the X-Plant team for all of their time and hospitality. X-Plant is a company featuring many strong features and we are confident in its future success. The AGBL team was very impressed with X-Plant’s problem solving and crisis management and we hope that by taking a more proactive approach to such issues as contamination, that production will begin generating viable x-plants.

AGBL was extremely impressed with the dedication and enthusiasm of the X-Plant team. We encourage X-Plant to continue to innovate and to involve all members of the organization given that the organization’s members are its most valuable asset. Through the use of tools, such as the idea generation activity outlined in the appendix, members will feel more valuable to the overall company which will help in securing a positive, productive business culture.

The AGBL team is confident that through proactive measures X-Plant will be able to successfully begin production of X-Plants. The hope is that moving towards the future, X-Plant is able to brainstorm other products involving biotechnology that also guides students in learning entrepreneurial skills and allows X-Plant to keep an inventory and make a sustainable product. We are, once again, extremely impressed with the dedication of X-Plant and its members and are hopeful for its future success.
Appendix A

Suppose that the idea-generation procedure is being applied to generate ideas as to how to improve the operation of the Marquette University campus.

I. Step One
   a. Identify things you would like to change at Marquette based on your observations and personal experience. Write down as many as possible and anything that comes to mind.
   b. Examples: access to fresh food for students, reduce environmental impacts such as paper waste at Marquette, address parking issues/congestion around the campus, etc.

II. Step Two
   a. Identify ONE problem that you would like to solve today. Create a problem statement.
   b. Examples:
      i. How could we find feasible ways to reduce the environmental impact of the university?
      ii. How can we supply fresh food at affordable prices to students on campus that lack access to grocery stores?
      iii. How can we lessen the abundance of paper waste on campus?
      iv. How can we make more efficiently provide parking at Marquette?

III. Step Three
   a. Who are the people affected by your problem? What is their environment like? What are their needs? What are their wants? Create a persona for a typical “customer” who experiences the effects of the problem you have identified.
   b. Example:
      i. Paper waste at Marquette is mostly caused by Marquette professors who use paper in class as handouts, tests, quizzes, and make students purchase books. Majority of professors are in the 40-60 age range with limited to no technology expertise.

IV. Step Four
   a. Create an opportunity space for your solution based on your personas. Remember that an opportunity space is a place where solutions can be developed. It should also make sense for your personas.
   b. Example:
      i. Opportunity spaces to solve “How can we supply fresh food at affordable prices to Marquette students who lack access?” after identifying that students lack access to fresh food in certain areas, may be: transportation, products, retail spaces, services
   c. Choose one opportunity space you like for brainstorming

V. Step Five
   a. Brainstorming = Problem statement + Opportunity Area
   b. Example:
      i. How can we increase the amount of fresh food available existing within retail spaces in underserved areas?
   c. Write down as many solutions as possible—one post-it note for each. There is no bad solution. More is better!

VI. Step Six
   a. Everyone tag the top 2 solutions that you think are best.
   b. As a group narrow it down to one
   c. Examples:
      i. Give every Marquette student an iPad and ban the use of paper
      ii. Give every MU professor a course on the use of technology and make tech help easily accessible.
      iii. Have a fresh food van deliver foods and vegetables straight from farms to a centrally located market on campus

VII. Step Seven
   a. Create an experiment to test your idea. It must be within $200 and take less than 2 hours to complete.

VIII. Step Eight
   a. 90 seconds to pitch the idea and your experiment.
PORTFOLIO PLANNING MODELS: THE BCG GROWTH-SHARE MATRIX

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<th>Annual real rate of market growth (%)</th>
<th>Relative market share</th>
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<td>LOW</td>
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<td>LOW</td>
<td>Earnings: low, unstable</td>
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<tr>
<td>HIGH</td>
<td>Earnings: high stable</td>
<td>Cash flow: high stable</td>
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Strategy: analyze to determine whether business can be grown into a star, or will degenerate into a dog

Earnings: low, unstable, growing
Cash flow: negative
Strategy: invest for growth

Appendix B