



PRINTERIA

# Potential Users

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MIT Market segmentation table

# Overview

When developing a synthetic biology device as Printeria is, we first had to identify the real-life problems that could be solved with our product, and so decide our main **interested stakeholders**.

Printeria offers the possibility of printing basic genetic circuits automatically, and so it brings SynBio closer to the general public. As a consequence, its **social impact** is wide and can positively affect many target groups. We concluded our potential users were:

- Bioartists
- High schools
- Museums
- Researchers

However, we realized we needed to be sure that we were focusing our efforts on the **right target groups**, as there are always economical and cultural frameworks to consider during the creation of a useful, affordable and safe scientific product.

Thus, we decided to evaluate the **interest of our potential user groups** by answering a **MIT market segmentation** table.

In this table, we answered each question by punctuating from **1 (less)** to **5 (maximum)**, previous analysis of the reasons of each punctuation.

Finally, the sum of all the points allowed us to conclude the **most interested groups** to focus on.

| Market Segment<br>Describe the market segment  | 1<br>Bioartists | 2<br>High schools | 3<br>Laboratories | 4<br>Museums | Reason  |
|--|-----------------|-------------------|-------------------|--------------|---|
| <b>Buyer</b><br><i>Is there a single, identifiable buyer? Is this an early adopter?</i>        | 5               | 2                 | 3                 | 1            | <b>BioArtist:</b> the person in charge of making the decision is the artist himself. <b>High schools:</b> there is a long chain of command that involves consensus decision from the teacher staff. <b>Laboratories:</b> the chain of command is not that long, but some administrative requirements must be followed. <b>Museums:</b> obligatory administrative paperwork for exhibitions, workshops and activities involving this device.   |
| <b>Well-Funded?</b><br><i>Is the target customer well funded?</i>                              | 1               | 2                 | 5                 | 3            | <b>Bioartist:</b> they are usually freelancers, so they do not have funds from the state. <b>High schools:</b> they usually have a low budget. <b>Laboratories:</b> highest budget for research lines. <b>Museums:</b> really variable; funds depends on the museum.  |
| <b>Buying reason?</b><br><i>Does the customer have a compelling reason to buy?</i>             | 5               | 3                 | 2                 | 1            | <b>Bioartist:</b> Printeria offers a compact and user-friendly device to produce their own genetic modified bacteria without requiring a biotechnologist (economic benefit). <b>High schools:</b> it is not strictly necessary, but is an extra point to enrich the hand-on STEM curricula and so facilitate students learning. <b>Laboratories:</b> the device is not a necessity, but it is useful to avoid time-consuming protocols. <b>Museums:</b> Printeria can be part of divulgative workshops, but they need to have enough resources to keep up specialized sections in SynBio. |
| <b>Accessible?</b><br><i>Is the target customer readily accessible to you?</i>                 | 4               | 2                 | 5                 | 3            | <b>Bioartists:</b> they are updated about the newest technologies in SynBio. <b>High schools:</b> they can be informed though educational publicity, but it is not common. <b>Laboratories:</b> they always keep updated with scientific advances. <b>Museums:</b> they can be accessible only if they have educational sections related with SynBio.   |
| <b>COCA</b><br><i>What is the estimated cost of customer acquisition?</i>                      | 4               | 2                 | 3                 | 3            | <b>Bioartists:</b> easy customer adquisition; by acquiring Printeria they benefit from not having to work hand-in-hand with scientists. <b>High schools:</b> high estimated cost, as the chain of command is very long. <b>Laboratories:</b> once adquired they benefit from saving in operating costs and increasing experiments reproducibility. <b>Museums:</b> the estimated cost depends on each museum; they need to have a SynBio section.   |
| <b>LTV</b><br><i>What is the estimated lifetime value of your customer?</i>                    | 3               | 1                 | 1                 | 1            | <b>Bioartists:</b> they need to buy the device and the whole toolkit (there is a complete purchase necessity). <b>High schools:</b> they will only be interested in buying the basic toolkit for an education purpose. <b>Laboratories:</b> they will only need to buy the device, as they can design and construct their own part collections. <b>Museums:</b> they only need Printeria for practical workshops.   |
| <b>Whole product?</b><br><i>Can you deliver a whole product?</i>                               | 5               | 5                 | 1                 | 5            | Printeria basic kit (device + basic inputs) is useful for <b>bioartists</b> , <b>high schools</b> and <b>museums</b> . For <b>bioartists</b> , is easy to offer a specialized kit to produce a wide palette of pigmented bacteria. For <b>researchers</b> , it is required to have the capability of offering more complex genetic construction assemblies.   |
| <b>Competition?</b><br><i>Is there no competition that could block you?</i>                    | 4               | 5                 | 1                 | 3            | <b>Bioart:</b> they may be other innovative approaches to produce BioArt. <b>High schools:</b> very few educational genetic engineering kits are on the market. <b>Laboratories:</b> many high-tech devices are being developed simultaneously. <b>Museums:</b> there are other scientific products to divulgue about.  |
| <b>Next segment</b><br><i>If you win this segment, will it help enter additional segments?</i> | 1               | 1                 | 2                 | 4            | If winning the <b>museums segment</b> , promotiong of the product with workshops eases the adquisition of the <b>educational and bioartistic</b> segments as well   |
| <b>Founder's dream</b><br><i>Is the market consistent with your founder's dreams?</i>          | 5               | 5                 | 2                 | 1            | We have designed our product (biosafe and sofisticated hardware and a user-friendly software) as a device with an <b>educational or bioartistic</b> purpose; it can also be adapted to the <b>laboratories</b> niche.   |
| <b>Like the customer</b><br><i>Do you like the people that will be your customers?</i>         | 5               | 5                 | 3                 | 2            | Printeria main objective is to break down the barriers that prevent people from coming into the SynBio field, so bioartists and high school students are our most liked target groups.  |
| <b>Total Score</b>   | <b>42</b>       | 33                | 28                | 27           |   |

# Conclusion

As it is indicated in the table, **bioartists** got the higher punctuation, followed by **high schools and researchers**.

Thus, we decided that one of our main goals would be the **promotion** of the **BioArt branch**, not only for the art niche, but also for the general public.

Because of this, we promoted the SynBio field through the **Bacterial Art** as part of our **Public Engagement and Educational work**.

Doing so, **interest** and **curiosity** about **SynBio** would be increased for the **lay-public**, so **fighting** against common **misconceptions** in regard to bacteria. In the same way, it would be positive for **Printeria integration**, as it facilitates the **expansion and growing** of the BioArt market niche.

In relation with the design and implementation of Printeria, this results helped us to **focus** on gathering information from the **artistic world**.

On the other hand, we were also aware by the fact that we should not forget the **educational** and **research** future **possibilities** of Printeria. Due to this, we decided that one of our **target groups** to get feedback from should always be **high school students**, as well as the importance of receiving information from a **microbiologist point of view**.

