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On Behalf of:

<table>
<thead>
<tr>
<th>Company Name</th>
<th>SynMylk Düsseldorf</th>
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<tbody>
<tr>
<td>Street Address</td>
<td>Heinrich-Heine-University of Düsseldorf, Universitätsstr. 1</td>
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<tr>
<td>City</td>
<td>Düsseldorf</td>
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<tr>
<td>State</td>
<td>NRW</td>
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<td>Zip</td>
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This business plan is meant to be an overview of the general business idea and its strategy. It is meant for the iGEM Competition. Specific market data was taken from statista.com.
COMPANY OVERVIEW:
Company Name
SynMylk

Company Website
www.igem.hhu.de

Company Slogan
Sustainable, Synthetic, SynMylk

What the company does in one sentence:
Building sustainable products from high-quality fatty acids and milk proteins produced in microorganisms.

Explanation of the Company
SynMylk, founded 2019 in Düsseldorf, has the aim to produce purest fatty acids and milk proteins in harmless, genetically manipulated organisms. These are used to create sustainable products or are sold separately.

COMPANY MISSION:
What is the mission of the company?

We contribute to a better world with engineered microorganisms.
TARGET MARKET:
What markets or niche is the company going after?

Following statements refer to the division of SynMylk Dairy products.

Dairy and alternative dairy Market, alternative protein market

What is the estimated market size of your primary target market?

Value: 2019 global dairy market value projection of 442 billion USD. 2019-2023 estimated CAGR (Compound Annual Growth Rate) of 4.7%.
Volume: 2019 projection of global milk products volume amounts 340.769,37 million kilograms. 46,2 kg per capita.
Revenue: Revenue in the Milk Products segment is estimated to amount to 674,866 million USD in 2019. 91.57 USD average revenue per capita.

Alternative dairy market is expected to reach 28.7 billion USD by 2025 at a 16.7% CAGR. 2017 value was at 10.7 billion USD.

How many percent within this market do you think you can get Year 3?

0%, first 5 years are reserved for research of dairy products. B2B of basic components may be applicable after year 3.

How many percent within this market do you think you can get Year 10?

Our 10-year goal is to have a 10% market share.
PRODUCT OR SERVICE:
Name any particular products or services.

- Dairy products
- Bioplastic (SynPlas, soon to come)
- Biofuels (SynFuels, soon to come)
- Business to business of fatty acids and milk proteins (SynB2B, soon to come)
- CraftMilk Collection (Expertise)

Do you have patents or pending patents?
Process after iGEM competition can be applicable for patent. We have contact to patent division of our university.

CURRENT STATE OF BUSINESS:
What is the current state of business (idea, seed, revenue, traction, growth)
Project within iGEM science competition

Do you have any revenue currently?
SynMylk is in its research phase.

What year do you expect revenue?
First revenues may be applicable for fatty acid and proteins sold separately to companies after year 3.
**DISTRIBUTION:**
Difference of the average cost of your service or product to competitors:

| Our Goal is to not overshoot +50% in the first years. |

What is your one MAIN method of promotion?

| Promotion via Internet |

Describe any other promotion and marketing strategies:

| CSR programs (corporate social responsibility)  |
| Synthetic biology education  |
| Participating in TV/Internet reportages and shows  |
| Information booths & fairs  |
| Implementation of new tech  |

Will the majority of your distribution be online or via sales?

| sales |

Please explain the sales process of discovery to procurement?

| When the consumer sees the promotions in the Internet, they will look for it in the supermarket. Then the product will convince through the same taste and the added value it offers. |
SWOT ANALYSIS:
Describe your main Strengths

- Environmental value
- Animal welfare
- Safety (no animal related steps, therefore no hormones, antibiotics, etc.)
- Modular System (Components are present in their purest form and can be added together as needed.)
  - Optionality
  - Transparency
- Place saving (no livestock and grazing fields)

Describe your main Weaknesses

- Price
- Scientific time expenditure

Describe your main Opportunities

The shift of consumers behavior in favor of sustainable products, rising population and food demand

Describe your main Threats

Scientific failure, Strict GMO laws and maybe a patent on the name “milk”.
COMPETITION:
Explain your main competitors

Dairy industry: Nestlé, Lactalis, Fonterra, FrieslandCampina, etc.
Alternative dairy industry: Alpro, etc.
Alternative protein industry: LegenDairyFoods, PerfectDay, etc.

What is your main differentiation point from your competitors?
Using microorganisms instead of livestock.

What is ONE thing that you do MUCH better than your competitors?
Sustainability