



# STRATEGIC MARKET ENTRY



FOR A NOVEL BIO-COMPOSITE

BY ISA VAN DEN HEUVEL, IRIS HENDRIKS, SABRIN TABIB, SEAN DAMS, CYNTHIA PEPPING, MITCHELL CRETON & LISA PETMECKY





# TEAM



ISA VAN DEN HEUVEL



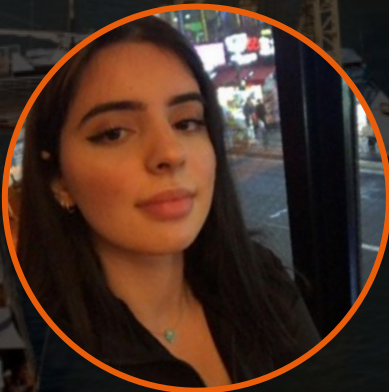
IRIS HENDRIKS



SEAN DAMS



LISA PETMECKY



SABRIN TABIB



CYNTHIA PEPPING



MITCHELL CRETON



# AGENDA

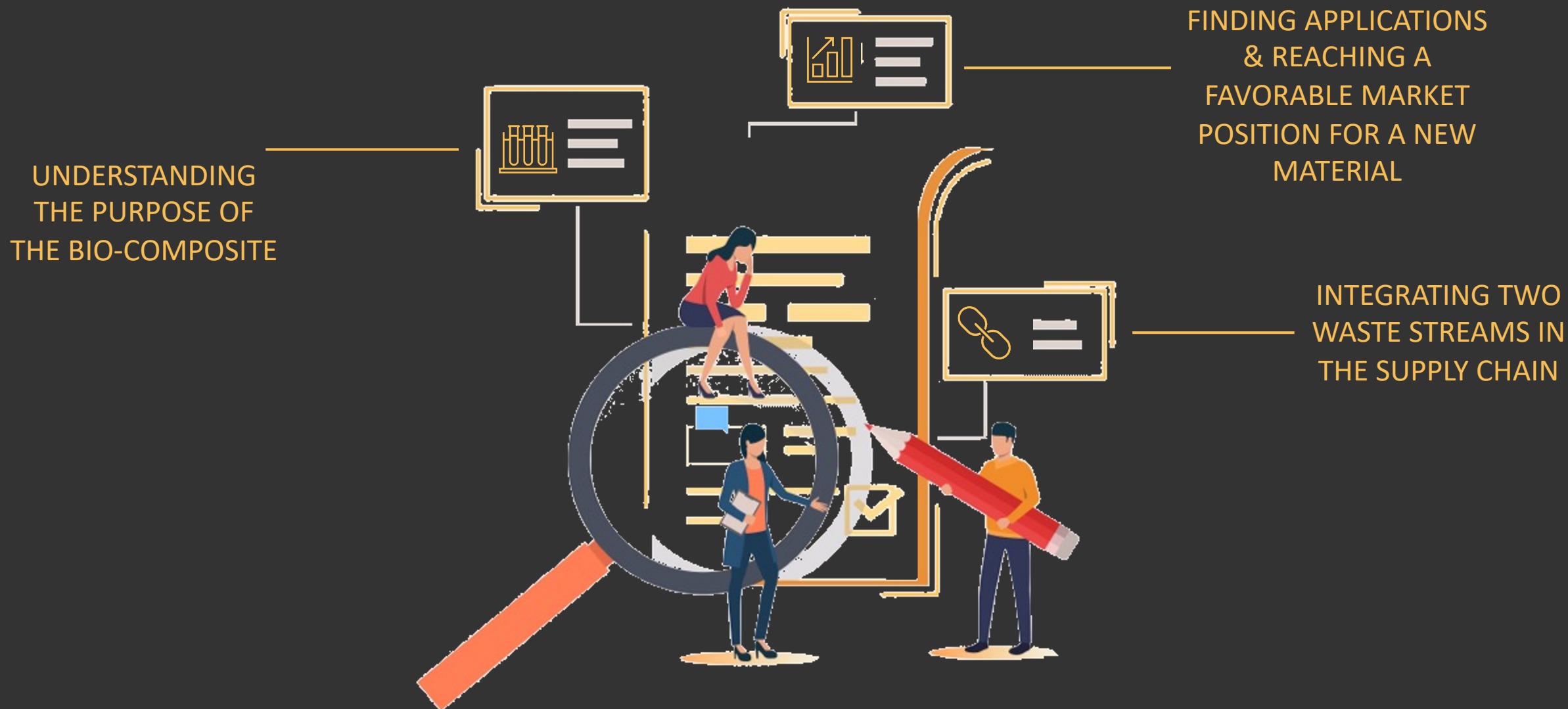
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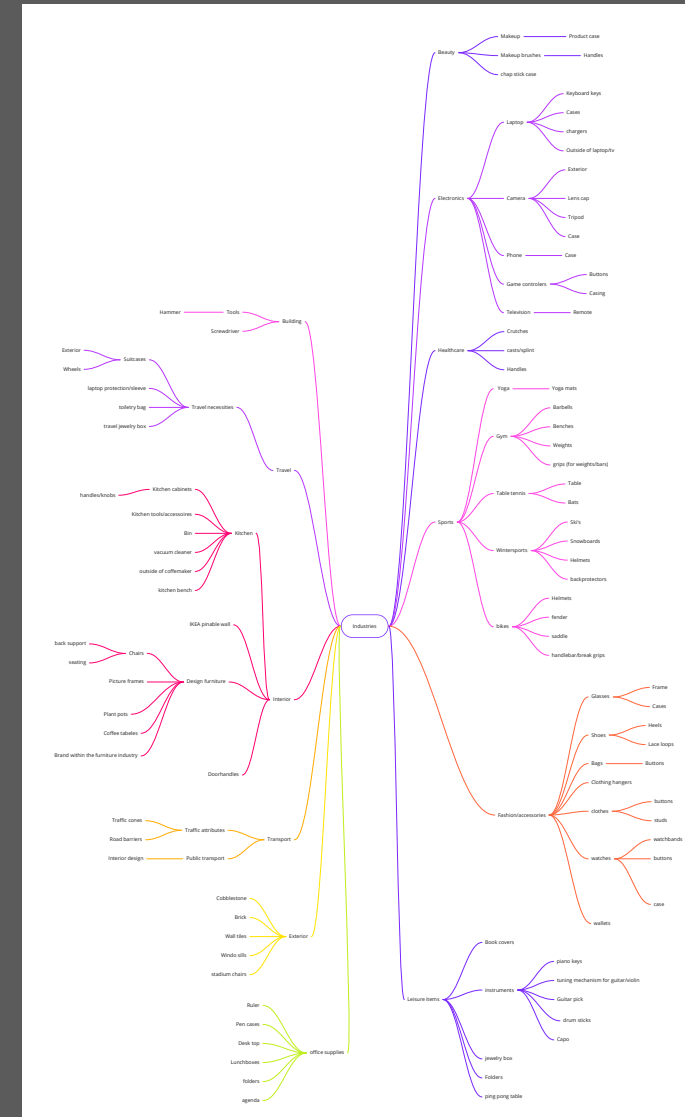




# PROBLEM DEFINITION









# MARKET OVERVIEW



GROWTH  
TREND FOR  
BIOBASED  
COMPOSITES  
INCREASING



THE  
NETHERLANDS  
ARE THE  
MOST  
FAVORABLE  
MARKET



WILLINGNESS  
TO SPEND  
MORE ON  
SUSTAINABILITY



SPORTS  
EQUIPMENT

TRAVEL GEAR

FURNITURE





# INDUSTRY OVERVIEW

POC

NORTVI.

Gispen



# INDUSTRY OVERVIEW

**LEGEND:** 1 = Not at all applicable  
5 = Very applicable

| BRAND          | PRODUCTS                      | SUITABILITY | AESTHETICS | SCALABILITY | CIRCULARITY | PRICE SENSITIVITY | TOTAL |
|----------------|-------------------------------|-------------|------------|-------------|-------------|-------------------|-------|
| <b>poc</b>     | Sports & protective equipment | 4           | 5          | 5           | 3           | 4                 | 21    |
| <b>NORTVI.</b> | Suitcases & suitcase straps   | 4           | 4          | 3           | 3           | 4                 | 18    |
| <b>Gispen</b>  | Design & office furniture     | 3           | 2          | 5           | 5           | 4                 | 19    |





# SUSTAINABLE BUSINESS MODEL

## Definition phase

### TRIGGER

The automotive industry produces large amounts of waste – 40% of utilized leather hides end up as waste. Material Sense LAB has tackled that challenge and created a new material out of PHBV and the leftover leather. They are trying to find a solution and to reuse valuable resources.

### DREAM

Material Sense LAB is highly focused on creating a circular economy through the innovation and developments of materials. MSL hopes to enter a new market for the novel material, not only replacing existing parts, but evolving and becoming a differentiated and important player in the chosen industry.

### VALUE PROPOSITION



Material Sense LAB – the hub for innovative materials that please the senses and the planet.

## Design phase

### BUSINESS MODEL

- 📌 **Circular Business Model**  
MSL created a material out of waste streams, rather than new resources (Narrow loop)
- 📌 Maximize product lifetime through reusing (closing loop)

### STAKEHOLDER

- 📌 Automotive companies
- 📌 Company shredding the leather to granulates
- 📌 Paques – provider of PHBV
- 📌 Material Sense LAB
- 📌 Production facility making final granulates
- 📌 Potential clients
- 📌 End consumer

### STRATEGY

- 📌 **Eco-Efficiency** – minimize waste impact
- 📌 **Lifetime extension** – repurpose leather and F&G waste
- 📌 **Cascading** – building a community to close loops and ensure circularity

### CORE ACTIVITIES

- 📌 **Refuse** newly produced materials and the sourcing of valuable resources (e.g. petroleum)
- 📌 **Reduce and repurpose** leather and agricultural waste
- 📌 **Implementation of return, repair and recycle** would add to the storytelling

### EXTERNAL TEST

- 📌 Demand
- 📌 Investment/Return
- 📌 Technologies
- 📌 Regulations
- 📌 Ethics
- 📌 Timeframe
- 📌 Relevance

## Results phase

### IMPACT

- 📌 **SHORT-TERM**
  - 📌 **Environmental Impacts:** leather and organic waste has found a new purpose
  - 📌 **Social Impacts:** Material is crafted in the Netherlands and European standards apply and are enforced.
  - 📌 **Economic Impacts:** Involvement of various stakeholders in the Netherlands (e.g. TU Delft, employees at Material Sense LAB, students at other universities for business-related projects). Creates jobs, learning opportunities and reduces the waste costs for the automotive industry and organic sector.
- 📌 **LONG-TERM**
  - 📌 **Environmental Impacts:** material is found within a range of products; impact depends on lifecycle of the product (MSL has the responsibility to choose a client that upkeeps the circularity)
  - 📌 **Social Impacts:** Customers can choose a product with circular materials, which creates less waste in the long-term and is generally more environmentally-friendly.
  - 📌 **Economic Impacts:** Material can be found in various products that adds to the economic well-being in terms of employment and income.

### VALUE CREATION

- 📌 **Sale of material** – transfer of ownership to the client (company that will utilize the material for the final product)
- 📌 **Sale of access** – to environmentally friendly material options
- 📌 **Bartering and beyond** – Material Sense LAB needs leather and organic waste and organizations may need to pay to get rid of it. This could lead to an exchange of goods that does not involve monetary transactions.



# VALUE PROPOSITION

MATERIAL SENSE LAB



THE HUB FOR INNOVATIVE  
MATERIALS THAT PLEASE THE  
SENSES AND THE PLANET.





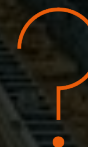
# SUPPLY CHAIN INTEGRATION

LEFTOVER  
LEATHER

ORGANIC  
WASTE



BIO-COMPOSITE



FURTHER RESEARCH  
WILL BE NECESSARY  
DEPENDING ON  
FUTURE PARTNERS

DIFFERENTIATION  
STRATEGY





# STRATEGY

**DIFFERENTIATION  
STRATEGY**

**UNIQUE BRAND/DESIGN**

**PRICE IS LESS IMPORTANT**

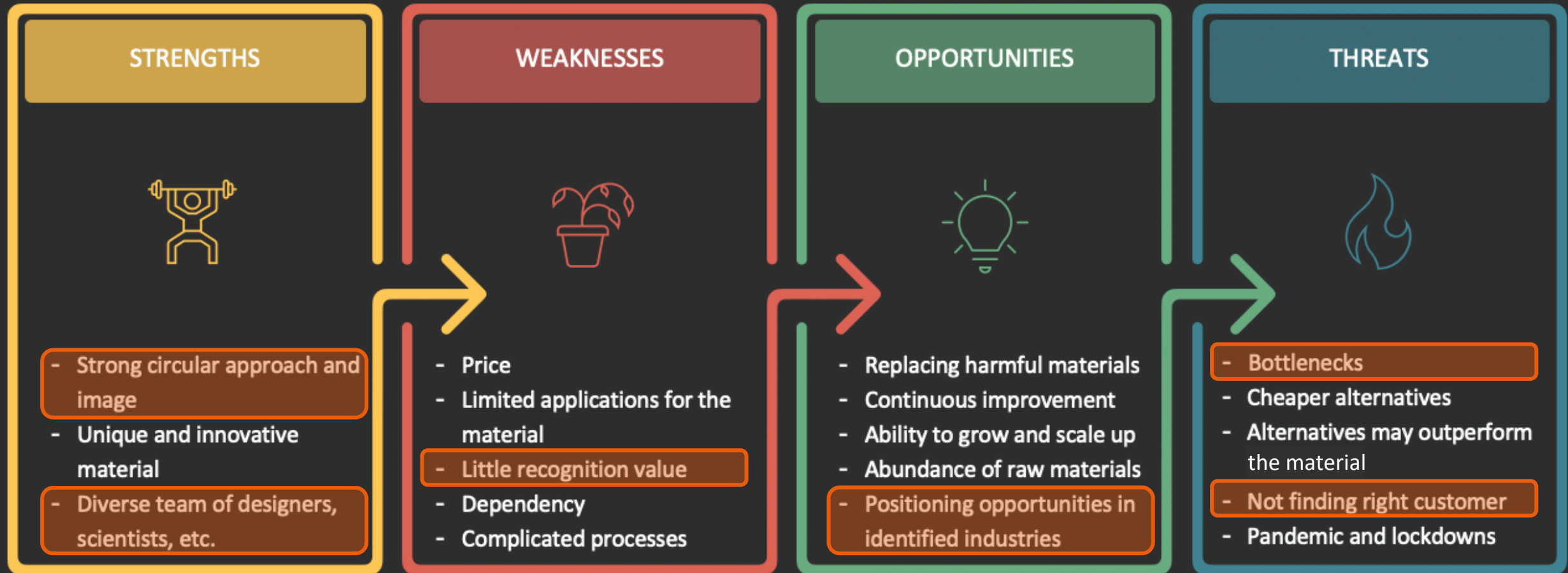
**ADDED VALUE**

**DIFFERENTIATION  
STRATEGY**





# CONCLUSION





# CONCLUSION

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- + GROWTH IN THE MARKET
- + THREE COMPANIES WITH INTEREST
- + ABUNDANCE OF RAW MATERIALS





# RECOMMENDATIONS

- A. EXPLORE POTENTIAL COOPERATIONS WITH THE FOLLOWING THREE BRANDS: POC, GISPEN AND NORTVI
  - consider a pilot project
- B. USE THE SUSTAINABLE BUSINESS MODEL AND VALUE PROPOSITION TO BUILD A STRATEGY THAT UNDERLINES THE POTENTIAL OF THE MATERIAL
  - communicate it to prospective customers
- C. ENSURE THAT CIRCULARITY IS AN ESSENTIAL PART OF THE MARKET POSITION AND A SHARED VALUE AMONG CHOSEN PARTNERS
- D. USE THE FOLLOWING SET OF KPI's TO MONITOR THE PROGRESS OF ACHIEVING THE RECOMMENDATIONS







# KEY PERFORMANCE INDICATORS

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## KPI'S



Partner satisfaction

Revenue through partnership

Conversion rate on marketing channels

Material Performance in testing periods

Customer Lifetime Value (average lifetime of products using the 3LC)

Amount of material returned after lifecycle