REBEL TECH

IS BUILDING DARK FACTORIES
FOR ELECTRONICS REPAIR
TO BECOME THE WORLD LEADER
IN REPAIR AUTOMATION

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THE PLAIN SLIDE

What?
We automate, scale and industrialize electronics repair, on the user side a web app makes it easy to book a repair.

Who?
We are two engineers and serial entrepreneurs with a background in supply logistics and manufacturing.

Market size?
$1.2 Trillion and growing at a CAGR of 7.6%

Stage?
MVP, paying users, no funding yet.

Go to market?
We start with smartphone repair, expand to repair more things wherever profitable.

Why now?
Cost of repair is increasing drastically, and the current chip shortage is making repair the only option.

Business model?
B2B and B2C, charge a fee for repair, partner with companies to offer warranty service for them.

Competition?
Fragmented market, small shops with 1-3 employees, no dominant name.

Defensibility?
Logistics and automation are hard!
We can patent custom machines that automate tasks.

Scalability?
Dark sites, humans with the help of industrial automation, think Amazon warehouses, scaling out model.

ELECTRONICS REPAIR IS TOO HARD AND TOO EXPENSIVE!

IT CAN COST UPWARDS OF €500 TO REPAIR A SMARTPHONE
OR REQUIRE SOLDERING TO REPLACE A BATTERY
THERE MUST BE A BETTER WAY

EVERY HOUR

7,907 SMARTPHONE SCREENS ARE BROKEN

€1.9 MILLIONS ARE SPENT ON REPAIRS

In the European Union alone

80%

Nearly 80 percent of consumers would rather repair their devices than replace them
Most who don't say it's because it's too complicated and/or expensive
We are here to fix that

Source EU research "ATTITUDES OF EUROPEANS TOWARDS WASTE MANAGEMENT AND RESOURCE EFFICIENCY"
https://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_388_en.pdf

10 X DEMAND

When Apple introduced their $29 battery replacement program, they expected to replace ~1M batteries
They ended up replacing over 11 Million batteries and could barely keep up with user demand.
People really want affordable repairs. ([Source](#))

THE SOLUTION - CENTRALIZATION, AUTOMATION, SCALE - B2B & B2C

User Side

- A web app makes it easy for users to access repair options, get a repair quote and send or bring their device in for repair
- We repair devices at drastically lower cost than our competitors
- Offer quick and easy B2B repairs for companies, warranty service for OEMs

Dark Sites

- We cut repair time and cost by up to 70% by scaling it to industrial levels and automating it - dark sites around the world
- High tech from the manufacturing world makes repairs drastically cheaper and faster
- We own the entire spare parts supply chain
- We centralize a fragmented industry under one roof

REBEL TECH VS COMPETITION PRICE COMPARISON

Apple store & competitors

Rebel Tech

- iPad Pro M1 €700
- iPhone 12 Pro Max €640
- iPhone 12 Pro €590
- iPhone 12 €476
- iPhone 11 Pro €590
- iPhone 11 €430
- iPhone XS €590
- iPhone 8 Plus €430
- iPhone 7 €346
- iPhone 6 €330

Increasing repair cost trend

€39 Flat Rate

**Individual repair time: 10min
VS conventional ~2h**

With our tech we can replace only the glass sheet on the display or back frame without even taking the device apart

Source:
https://support.apple.com/iphone/repair/service

MUCH MORE THAN JUST A SMARTPHONE REPAIR COMPANY

Start with smartphone glass repairs as go to market

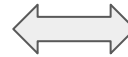Expand to repair other smartphone parts, batteries etc

Expand to other electronics repair, such as laptops etc

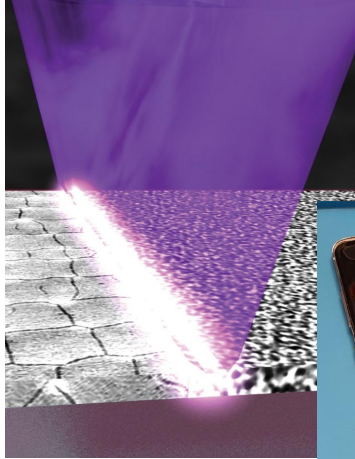Expand to repair more products, wherever profitable

Expand to more markets globally

Expand to repair more products, wherever profitable

THE GLOBAL REPAIR MARKET SIZE: $1261. 56 BILLION IN 2021 GROWING AT A CAGR OF 7. 6%. Source

TECH - 1 of 2 - EXCIMER LASER LARGE AREA LIFT OFF

Excimer laser under the microscope

Glass only repair example

- Bleeding edge laser technology allows easy and clean debonding of cover glass from OLED panel, making cracked screen repairs drastically cheaper.
- Scalable and easy to automate, can debond 10 devices in 60 seconds, bigger laser machine can do even more
- **Market changing technology**, drastically more efficient than anything else on the market
- This is just the beginning of our plans

In collaboration with **Fraunhofer ILT**

E-waste is the "fastest-growing waste stream in the world"

Every repair prevents a device ending up in a landfill and removes the need to manufacture a new device to take its place

THE COMPETITION

There are hundreds of small repair corner shops in Berlin alone, in some places in Europe there are some slightly bigger companies doing it, like www.ismash.com in the UK, mostly centered around retail, there is nobody doing in a post-retail world using dark sites.

There is no app where you can simply order a repair, have the device picked up and brought back, and no one who does it at a scale big enough to shake the market and affect the repair prices, and while I don't like comparisons to other startups, it's very much like the Taxi industry before Uber, it was there, small companies did it in every city, but it was fragmented, inefficient, inconvenient and expensive.

TRACTION

The most effortless customer acquisition ever

- Partnership with ByeWaste to list us in their App, advertise us to their rapidly growing user base of over 34k households, we do B2B2C repairs for them
- In talks with Oppo, world second largest smartphone OEM, to do warranty repairs for them in Europe
- Run a B2C trial, have a waiting list of devices people want repaired

WE ARE ENTREPRENEURS AND ENGINEERS WHO KNOW HOW TO DO THIS

Jack Aureliano De Santis - CEO
Ex Hardware CTO
Ex co-founder with
Rodolfo Rosini
Ex Special Forces, Afghanistan veteran
Co-Built first Android GSI, now used by **Google**

Hans Stam - CTO
Shipped 3M units at **Beats**
Lived in Shenzhen & worked on factory floors
Built automation robots for **Apple** at **Foxconn**
Ex **Microsoft** engineer

Gilles Toussaint - interim CMO
10 Years of marketing and sales leadership
experience in hyper growing companies
Previously co-founder at hardware startup
Soundbrenner

Marko Häckel - interim COO
Serial Entrepreneur
Public funding expert
Ex Director, Automated Driving at Bosch

Jack and Hans know each other for several years and everyone is Berlin based

BACKED BY

Mauro Rego - **Lead Designer at Google AI**
Responsible for UX, design, marketing materials and branding

Jeff Katz - **Advisor**
GP at 1.5 Ventures
Ex Principal Engineer at Daimler group
Founder of HARDWARE.CO accelerator
TechStars mentor

THE ROUND €250k

$100k from Voyagers fund
$25k from David Rowan
€30k from misc Angels

Doing a [SeedFAST](#)
€2m cap w/ 20% disc
UK Ltd. inc, SEIS available

- Go to market B2B with ByeWaste, followed by B2C in Berlin
- Hit €500k ARR in 2-3 months
- Raise Seed early spring 2022