

# **Mass and custom insoles production**

## **Final Capstone Project**

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## **1.Introduction and Problem statement: Including executive summary**

Foot health is a prevalent issue that affects many individuals globally and in Ukraine specifically, given the significant amount of time spent standing or walking daily. Up to 87% of people experience foot discomfort or deformities at some point in their lives due to various factors such as age, overweight, injuries, or certain conditions like diabetes. These foot issues can significantly impact the quality of life, and addressing them often requires personalized orthopedic solutions.

Historically, the production of orthopedic insoles has been labor-intensive and lacked scalability. Diagnostics had to be performed in-person and the manufacture of insoles was primarily manual, leading to high costs and inefficiencies. Technological advances have introduced solutions such as 3D CAD CAM technology, enabling accurate, efficient foot diagnostics, and personalized insole production. However, such technology is still novel in Ukraine.

Our startup aims to address this gap, introducing modern, automated orthopedic insole production to the Ukrainian market. We intend to provide both mass-produced and custom-made orthopedic insoles, offering accessible, efficient, and cost-effective solutions to those suffering from foot discomfort or deformities. This venture represents a significant step forward in improving foot health and the overall quality of life for Ukrainians.

## **2.Introduction: vision / mission / goals**

Today's Ukrainian insole market is dominated by outdated practices and technology, leading to a less efficient production process and suboptimal products. Current producers rely on traditional techniques and rigid designs that often require long lead times and uncomfortable insoles. Our project ProStopoo - aims to revolutionize this market with modern 3D scanning technology installed in our chain of 20 store, eliminating the need to visit a doctor and significantly reducing production time.

We envision ProStopoo as the Ukrainian market leader in custom and mass-produced insoles. Our mission is to simplify the diagnostic and consultation process, ensuring quality and affordability for our customers. ProStopoo is not just an orthopedic insole producer, we are supporters of foot health, aims to change lives and make foot care affordable and easy for everyone.

Our goal is to leverage our existing retail chain of medical stores and introduce this innovative product. We plan to expand our cooperation with pharmacy chains, orthopedic salons, and shoe stores in the future. Committed to delivering high-quality, affordable orthopedic insoles, we use advanced 3D scanning technology to tailor insoles to each customer's unique needs, providing optimal support, comfort and significant reduction in foot and limb pain.

Join us as we strive to make every step pain-free and comfortable.

### **3. Diagnostics: Business and Operating analysis**

#### **3.1. External analysis (PESTEL)**

##### **Political environment in Ukraine**

In 2023, despite the continuation of the war, the economy may avoid falling. The NBU predicts that real GDP will grow by 0.3% this year. This is a small increase, but it will indicate the resilience of the economy in the face of difficult challenges.

With the end of the active phase of hostilities, the Ukrainian economy will return to steady growth. Thus, the NBU expects that in 2024-2025 the real GDP of Ukraine will grow by 4-6% every year. This will be facilitated by a gradual increase in domestic demand, including thanks to the return of Ukrainians from abroad, the restart of enterprises in the de-occupied territories, and the full recovery of Black Sea ports. Accelerated European integration and projects for the reconstruction of Ukraine, which the NBU does not yet take into account in its forecasts, can significantly speed up the post-war recovery of Ukraine.

##### **Economic Environment**

In 2023, a slight increase in real GDP is expected - by 0.3%. Economic recovery at the end of 2022 was interrupted due to increased energy terror from Russia. At the same time, thanks to better results in the third quarter and rapid adaptation of business and population to new conditions, the estimate of the drop in real GDP in 2022 has been improved to 30.3%. The economy will gradually return to sustainable growth: up to 4.1% in 2024 and 6.4% in 2025.

All groups of goods and services rose in price in Ukraine. Thus, in February 2023, compared to February 2022, consumer prices increased by 24.9%. Transport services rose in price the most - by 33.6%. Prices for food and non-alcoholic beverages also increased significantly - by 31.8%.

A number of items rose in price by more than 20%. In particular:

- household appliances and current home maintenance - by 27.9%;
- alcoholic beverages, tobacco products - by 22.4%;
- restaurants and hotels - by 23%;
- **health care – by 20.2%.**

Various goods and services increased in price by 19.3%. Recreation and culture - by 16.4%.

As of February 2023, 1,218 healthcare facilities in Ukraine were damaged. In particular, 540 hospitals were partially destroyed, and 173 were completely destroyed. Medical facilities in the Kharkiv region, in Donetsk, Luhansk, Mykolaiv and Kherson suffered the greatest destruction due to active hostilities.

With the installation of kiosks for foot scanning and diagnosis, we give people the opportunity to learn about foot problems absolutely free of charge, without making an appointment with a doctor.

### **Social Environment. War in Ukraine**

Over the past year, the unemployment rate increased from 9.8% to 25.8%, according to the NBU. This is the result of the destruction of enterprises, a decrease in the economic activity of businesses in conditions of high risks and the forced migration of millions of Ukrainians. Salary cuts by some businesses and last year's high inflation also led to a drop in real incomes of Ukrainians. In late 2022, the labor

market began to recover, but this recovery slowed following a series of large-scale Russian attacks on energy infrastructure.

### **Technological Environment**

The company uses the latest foot scanning technology and CAD/CAM insole manufacturing.

The technology is the most modern of the existing ones, it allows to detect foot deformations as correctly as possible, and to manufacture insoles that for 100% will fit the needs of a specific person. 3D CAD/CAM system scanners are also installed in stores, which allows you to scan the foot not as a flat image.

### **Environmental**

Since we will have waste from EVA blocks for the production of insoles, we plan to send it for processing. Or use the remaining materials for the production of other products. It can be a constructor or toys for children.

### **Legal Environment**

Orthopedic insoles are medical products. In order to implement it on the market, we developed technical documentation, and received a sanitary and hygienic certificates of products.

### **Macro**

Foot Orthotic Insoles Market size was valued at **USD 3.49 Billion in 2021** and is projected to reach **USD 6.15 Billion by 2029**, growing at a **CAGR of 6.6%** from 2022 to 2029.



### 3.2. Internal analysis (SWOT)

We utilized SWOT analysis to evaluate the significant internal and external factors that impact the Company's performance. This involved identifying the principal strengths, weaknesses, opportunities, and threats of the organization.

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>● low price</li> <li>● own network of stores</li> <li>● Innovational scanning technology</li> <li>● lead time is 2 days</li> <li>● shops located near diagnostics centers and hospitals</li> <li>● custom design</li> <li>● diagnostics in 5 min</li> <li>● don't need to make an appointment for a scan in advance</li> <li>● less space for diagnostics compare to doctor space</li> <li>● fast and free delivery to the bench of Nova Poshta</li> </ul>	<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>● growing market of insoles</li> <li>● partnership with influencers (bloggers, orthopedics etc)</li> <li>● partnership with pharmacies, orthopedic shops etc.</li> </ul>
<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>● limited machine capacity for manufacturing</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>● war in Ukraine</li> <li>● decreasing of population</li> </ul>

<ul style="list-style-type: none"> <li>● scanners placed only in 20 shops</li> <li>● low brand awareness</li> </ul>	<ul style="list-style-type: none"> <li>● decreasing of GDP</li> </ul>
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Table 3.1. SWOT analysis.

### Strengths

- low price;
- own network of stores;
- innovational scanning technology;
- lead time is 2 days;
- shops located near diagnostics centers and hospitals;
- custom design;
- diagnostics in 5 min;
- don't need to make an appointment for a scan in advance;
- less space for diagnostics compare to doctor space;
- fast and free delivery to the bench of Nova Poshta.

### Weaknesses

- limited machine capacity for manufacturing;
- scanners placed only in 20 shops;
- low brand awareness.

### Opportunities

- growing market of insoles;
- partnership with influencers (bloggers, orthopedics etc);
- partnership with pharmacies, orthopedic shops etc.

### **Threats**

- war in Ukraine;
- decreasing of population;
- decreasing of GDP.

### **3.3. Analysis of Business Model based on Canvas**

The target market of individual or mass insoles in Ukraine are customers with foot problems, flat feet, the elderly, pregnant women and families.

#### **Problem:**

- Long time of insole production
- Prior appointment with the doctor
- Rigid frame and uncomfortable insole
- High price - old equipment

#### **Existing alternatives**

- Orthopedic shoes
- Half insoles, supinators, tapes
- Ankle and knee braces

#### **Key activities**

- Marketing
- Sales
- Individual insoles
- Training of sales manager

#### **Key resources**

- Kiosks for 3D scanning
- Production machine

- Raw materials

### **Key propositions**

- Free scanning
- Free diagnostics
- A wide range of top coverage
- Low price
- **Speed**

### **Customer relationships**

- Consultation of doctor by phone
- Trained by seller in the store

### **Customer segments**

- Mothers with children
- Diabetics
- Elderly
- People with large shoe sizes
- Overweight people
- Athletes
- Pregnant women

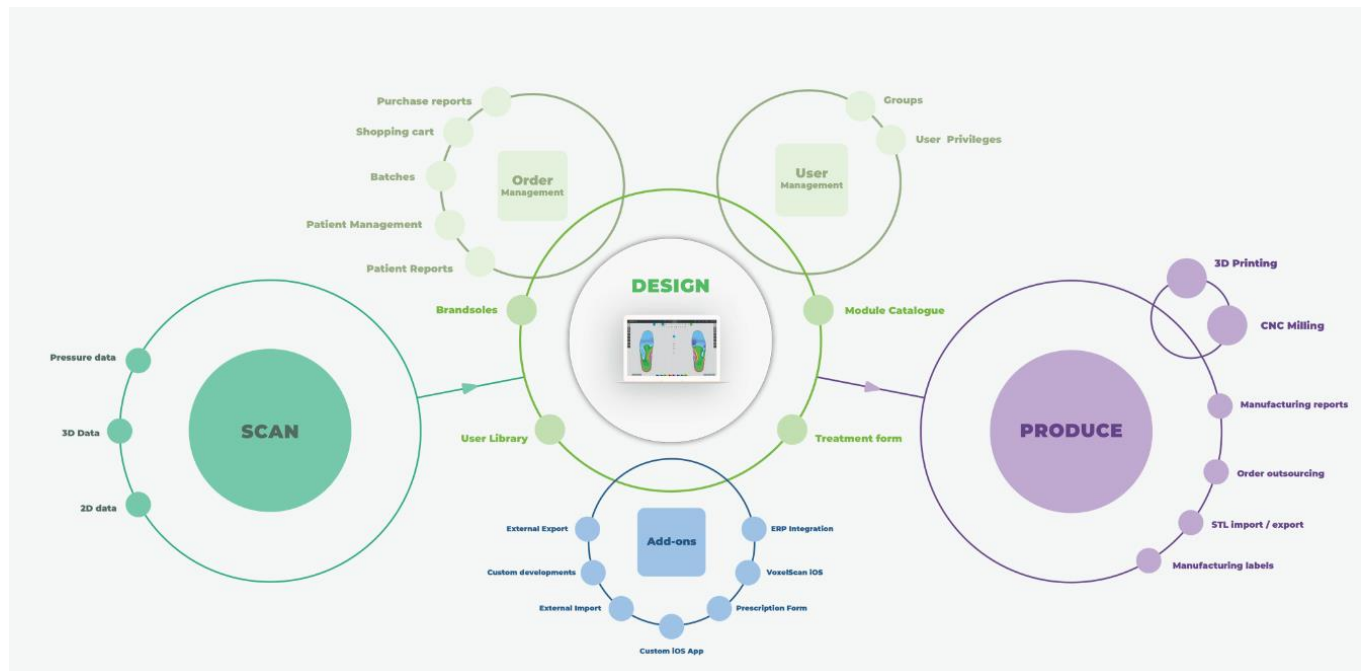
### **Cost Structure**

- Marketing and advertising
- Variable cost: raw materials
- Equipment
- Packaging
- Fixed cost: salary, other operating cost

### Revenue Streams

- Sales from mass production
- Sales from individual production

### 3.5. Manufacturing



### 3.6. Customers' need (-s) Definition

Customers' needs in the insole market can be divided into three categories: functional, social, and emotional.

**Functional needs** focus on the practicality and functionality of the insoles, such as if they solve a specific foot problem or suit the customer's lifestyle and footwear. For example, a customer may choose an insole for sports or everyday use, or a custom insole for more severe foot conditions.

**Social needs** relate to financial aspects. While custom insoles provide better fit and function, they are more expensive. Therefore, customers' financial status can influence their choice, with sellers offering more affordable mass-produced insoles as alternatives.

**Emotional needs** involve the customer's interaction with the brand and the buying process. The appearance of our diagnostic kiosk can attract customers, stimulating curiosity and leading them to use the scanning service and potentially order an insole. This emotional engagement can also be fostered during the consultation process, where the option of a mass-produced insole can be introduced.

## **4. Diagnostics: Market analysis**

### **4.1. Market overview**

According to World Population Review, the 20 largest cities in Ukraine house roughly 35% of the country's total population. Thus, about 35% of the urban population of Ukraine lives in these cities.

Taking a total urban population as 24.84 million (69% of 36 million), the estimated population in these 20 cities would be around 8.69 million. Assuming a foot problem prevalence of 20-25%, we have a target market of approximately 1.74 to 2.17 million potential customers in these cities.

To reach our sales goal of 600 insoles per month (7,200 per year), the calculations will be as follows:

$7,200 \text{ insoles per year} / 1.74 \text{ million potential customers} = 0.00414$ , or 0.414% of the potential market.

Therefore, even if we manage to attract only 0.414% of the potential market in these cities, we will be able to reach our sales goal.

We also expect repeat purchases as the average life of an insole is about six months. By providing high-quality products, excellent customer service, and free follow-up foot diagnostics, we aim to ensure customer retention and increase customer lifetime value.

In light of these refined calculations and our comprehensive customer retention strategy, we remain strongly confident in ProStopoo's ability to sell over 600 insoles per month and offer a profitable investment opportunity.

#### 4.1.1. Historical data for 4 years of insoles sales from own chain of stores **Ridni Medtehnika**

Sales of insoles in our own chain of shops.

2019	2020	2021	2022
6832 pairs	6722 pairs	8930 pairs	10690 pairs

There are several players on the market who are manufacture mass-produced insoles from a theme-formed material or prefab shape insoles.



Example.

- **Ortos** - chain of 12 shops - own brand Alkom
- **Ortop** - chain of 8 shops - own brand FootCare
- **Med-Magazin** - chain of 28 shops - own brand Vitamed, distributor of german insoles Pedag and Medi.
- **ORTO SMART** - chain of 44 shops - distributor of turkish insoles Ortenza



- **Ortomedica** - chain of 30 shops - own brand Ortofix, distributor of turkish insoles Aurafix
- **Ortocomfort** - chain of 6 shops

Our chain - 50 shops - own brand Prostopoo, distributor of turkish insoles Vatiteks and israel Uriel.

#### 4.2. VRIO analysis

<b>Internal resource</b>	<b>Valuable</b>	<b>Rare</b>	<b>Inimitable</b>	<b>Owned</b>	<b>Competitive advantage</b>
Own network of stores	Yes	No	Yes	No	2
Sets for diagnostics	Yes	Yes	Yes	Yes	4
Lead time in 2 days	Yes	Yes	Yes	No	3
Flexible and fast diagnostic process	Yes	Yes	Yes	Yes	4
Quality materials	Yes	No	No	NO	1
Diagnostics for free	Yes	Yes	Yes	Yes	4
Accurate 3D diagnostics	Yes	No	Yes	No	2

The main competitive advantages of the product may be derived from VRIO analysis:

- Own network of stores - sales channel with 50 stores.
- Sets (kiosks) for diagnostics - unique equipment for 3D scanning of the foot
- Lead time in 2 days - fast order receipt and production in 2 days.
- Flexible and fast diagnostic process - no need to make an appointment, scanning service in 10 minutes
- Quality materials - a wide selection of material for individual insoles..
- Diagnostics for free.
- Accurate 3D diagnostics.

### **4.3. Historical market analysis worldwide**

Historically, from 2016 to 2020, use of insoles increased at around 2,5% CAGR, wherein, developed countries such as the U.S., Germany, Italy, and Spain held significant share in the global market.

Global expenditure on footwear and apparel has been increasing tremendously over the past few years. Central as well as Eastern European countries have spent the highest amount on clothing and footwear globally.

In 2020, insoles used in therapeutic application accounted for over 12% of global market share. Increasing foot diseases among millennials such as flat foot, and severe leg and ankle pain owing to reduction in bone density, has been one of the prime reasons for such a market share in past, and is expected to continue over the next 10 years.

Considering these statistics, the market for insoles is forecast to expand at a healthy CAGR of more than 7% through 2031.

#### **4.4. Forecast for 10 years worldwide statistics**

The global demand for insoles enjoyed year-on-year (YoY) growth of 4,8% in 2021, to total around 13 Bn insoles pairs. The foam soles segment grew 5,7% to top 5 Bn pairs, while the sports segment surged by 7,6% to close in on 3 Bn pairs.

By value, projected over 7% CAGR for insoles sales during 2021-2031, with market valuation reaching 70 Bn USD in 2031. In terms of volume, demand is expected to increase at close to 6% CAGR over the same period.

#### **4.5. Overview of competitors and substitute products or service**

The industry's Ukrainian competitive environment, as well as the key players' profiles, were also explored.

- Orto-Line
- Ortop
- Med-Magazin
- Ortosalon
- Ortocomfort
- Ortomedica
- Ustilka
- Active center

**Custom production insoles:**

Company	Location	Prices	Price for diagnostic	Production method	Diadnostics	Production terms
medtechnika.com.ua	50 shops - own brand Prostopoo	15-25 €	For free	CAD CAM	Computer, 3D scanner	2 working days
ortos.ua	12 shops - own brand Alkom	49,5-86,25 €	10 €	CAD CAM	Computer, 2D scanner	7 working days
ortop.ua	8 shops - own brand FootCare	13,1 €	10 €	Thermomodeling		15-25 min
med-magazin.ua	28 shops - own brand Vitamed, distributor of german insoles Pedag and Medi	54,75 €	11,25 €	CAD CAM Thermomodeling	Computer, 3D scanner	7-14 working days

ortosalon.ua	44 shops - distributor of turkish insoles Ortenza	24,75 €	-	Thermomodeling	-	20-40 min
ortocomfort.ua	6 shops	62,25 €	7,5 €	CAD CAM	Computer, plantoscopy	
ortomedica.ua	30 shops - own brand Ortofix, distributor of turkish insoles Aurafix	62,5-86,25 €	25 €	CAD CAM	Computer, plantoscopy 3D scanner	7-14 working days

**Mass production insoles:**

<b>Company</b>	<b>Univers al</b>	<b>Premi um</b>	<b>Sport</b>	<b>Childre n`s</b>	<b>Diabetic</b>	<b>Super heavy</b>	<b>Teenag ers</b>	<b>Produc tion metho d</b>
Medtechnik a.com.ua  brand Prostopoo	€15	€20	€15	€15	€15	€20	€15	CAD CAM
Ortos.ua  brand LUCKY STEP	€17.5	€19	€19.5	€24	-	-	€15	Thermo modeli ng
Ortomedica. ua  brand Ortofix	€18.75	€31	€18.75	€12.25		€24.75	€12.25	Thermo modeli ng

The market has been highly competitive and key player's are involved in various organic and inorganic strategies to strengthen their market position and customer base.

In contrast to global trends, where world-famous players and brands are present in the markets for the manufacture and sale of individual insoles, there are almost no national players in the Ukrainian market for the production of individual insoles - most players are regional, due to the technological impossibility of scaling.

Global competitive environment. Key players:

- Superfeet Worldwide Inc.
- Ottobock
- Scholl's
- Powerstep (Stable Step LLC)
- Algeo Ltd.
- Hanger Inc.
- Foot Science International
- Create O & P
- Bauerfeind AG. Birkenstock digital GmbH
- Ottobock SE & Co. KGaA
- Groupe Gorgé
- DOLA – Digital Orthotics Laboratories Australia.

#### **4.6. Segmentation**

1. Individuals with Medical Conditions: According to research data, 87% of the population suffers from various foot diseases.
  - a. More than 45% of adults in the world suffer from flat feet alone, from 40% to 60% of the population of Ukraine are prone to flat feet. Individuals with plantar fasciitis, flat feet, bunions, hammertoes, or other foot conditions can cause discomfort or pain. Orthopedic insoles play a crucial role in the treatment of these conditions, offering much-needed relief and support for those affected by them.
  - b. Valgus deformity of the foot is more common in women. According to statistics - 90% of women suffer from the disease.
  - c. People with Systemic Conditions: Those with diabetes or arthritis, for instance, often experience foot complications and may require specially designed insoles to alleviate symptoms and enhance foot health. Estimated total number of diabetic patients in Ukraine - 3,500,000 people.
2. Workers on Their Feet: Workers in sectors that require prolonged standing or walking, like healthcare, military personnel, retail, and construction, comprise a significant segment.
3. Parents with Young Children: Given the rise in remote work and study, children's reduced physical activity can lead to foot issues. Targeting health-conscious parents, we'll promote our insoles as preventative measures to support their children's healthy foot development amid their limited physical



activity. In 2023, UNICEF data shows that the population under age 18 in Ukraine is 6,779,991.

4. **Older Adults:** As of 2022, about 18% of Ukraine's population was aged 65 or older. This percentage is expected to grow in the coming years, indicating a sizable and expanding market segment. While we recognize that many older adults may face financial constraints that make the purchase of orthopedic insoles challenging, we believe there's an opportunity in reaching out to their children who are interested in their parent's health and well-being. In our promotional efforts, we plan to focus on communicating the health benefits and value of our insoles to these caring children, emphasizing how our products can enhance the comfort and quality of life for their elderly parents.
5. **Athletes and Regular Exercisers:** According to the World Health Organization, about 70% of adults regularly participate in some form of physical activity. While not everyone in this segment may require orthopedic insoles, there are many who can benefit greatly from their use.
6. **Health-Conscious Consumers:** This segment is increasing as more people prioritize wellness and preventative health measures. Market research firms suggest that the global health and wellness market is experiencing robust growth.

## 5. Planning: Marketing and Sales

### 5.1. Description of marketing mix Product, Pricing, Placement, Process, People, Physical Evidence, Promotion

#### 5.1.1. Product

- Free diagnostic service using 3d scanning technology is available in 20 stores in different sites of Ukraine.
- Company will produce 8 types of orthopedic insoles:
  - Individual
  - For mass market:
    - Universal
    - Premium
    - Sport
    - Children's
    - For people with diabetes
    - For Teenagers
    - Overweight



### 5.1.2. Price

The foot scanning and diagnostic process is for free.

The prices of different types of insoles are shown in the table below:

<b>Universal</b>	€15
<b>Premium</b>	€20
<b>Sport</b>	€15
<b>Children`s</b>	€15
<b>Diabetic</b>	€15
<b>Teenagers</b>	€15
<b>Super heavy</b>	€20
<b>Individuals</b>	€25

### 5.1.3. Placement

Sales channels are different for individual and mass production insoles.

Mass insoles will be sold through the next sales channels:

- Own website
- Pharmacies
- Footwear stores
- Supermarkets
- Hospitals/Clinics
- 3-party marketplaces (Rosetka, OLX, etc.)

- Own stores (50 stores in 20 cities of Ukraine)
- Social media (Instagram, TikTok, Facebook)

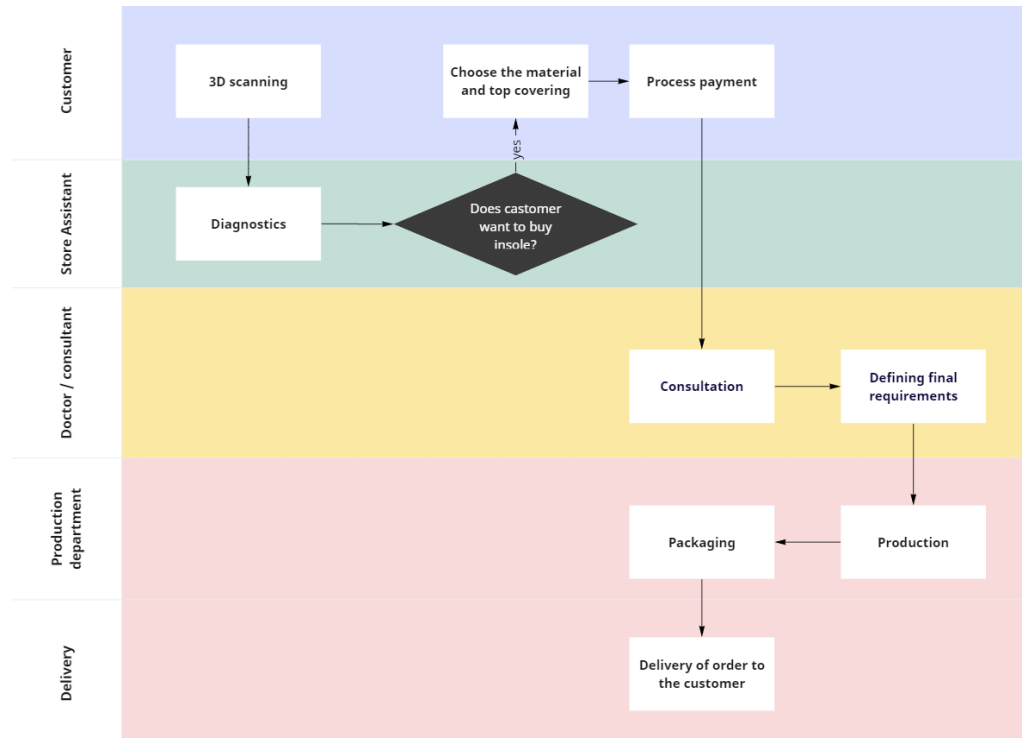
Individual insoles will be sold through the stores with 3d scanners.

- At the first stage of the project launch, 20 stores will be equipped with scanners.

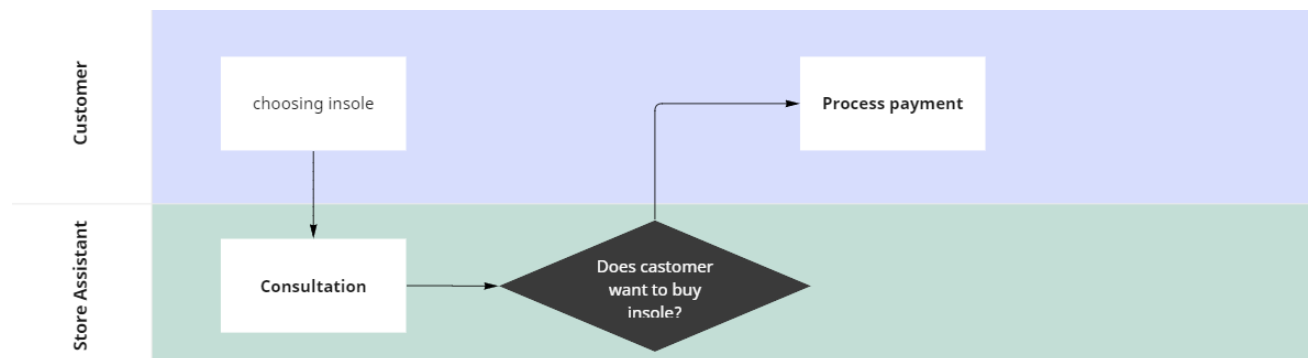
### 5.1.4. Process

#### 5.1.4.1. Process diagram

##### Custom made insoles



##### Mass insoles



#### **5.1.4.2. Process description**

For mass insoles:

- Production type: manufacturing to availability.  
We will create a stock for every type of insoles and the most popular sizes.
- Purchasing: customers will buy mass insoles in offline stores or online.

For individual insoles:

- Production type: manufacturing to order
- Purchasing:

Ordering of individual insole will have the next process:

- Foot scanning in the one of the 20 offline stores
- Doctor will receive the 3D model of foot and make a diagnosis
- Online consultation.  
Doctor will contact with customer by phone, make consultation, sale and fulfill an order information
- After completing the order, production will receive the 3d model of foot and produce the insole. It will take up to one day.
- After that, customers will receive the insole through the Post service.

#### **5.1.5. People**

The next workers will be involved in the sales of our products:

- Production master/Insole maker. Will produce the insoles.
- Physiotherapist (doctor). Will consult, conduct diagnostics and design the insole
- Product Owner. Will control the processes.

- Team of sales managers in stores. Will recommend buying the insole and consulate with a 3D scanner.
- Marketing specialist. Will be responsible for advertising, branding and positioning.

With the help of our physiotherapists (doctor) and marketers, we will create instructions for the consultation and sale process. After that, we will conduct a series of workshops to train our sales team in each store.

#### **5.1.5. Physical Evidence**

- Production machines
- 3D scanners
- Raw materials for the production
- Unique software

#### **5.1.6. Promotion**

- Banners in stores
- Recommendations by the sales manager in stores
- Collaborations with influencers
- Digital marketing
- Sales promotion

Marketing strategy encompasses various channels, both digital and traditional, as outlined below:

1. **Digital Marketing:** Prostopoo will prioritize SEO to boost organic web traffic. We'll use social media for product promotion, customer engagement, and foot health education. An email marketing strategy will feature new products and foot care tips. Lastly, we'll utilize Google Ads and Social Media Ads targeting foot health-related keywords.
2. **Partnership Marketing:** We plan to form partnerships with healthcare professionals and influencers who can recommend our products. Collaborations with fitness centers and sports clubs will also be pursued, given the benefits our insoles provide to athletes and gym-goers.
3. **Offline Marketing:** We'll initiate regular in-store promotions, partake in local community events to increase brand visibility.
4. **Referral Program and Customer engagement:** We will implement a referral program that rewards customers for referring friends and family (For example: Get a 10% discount on your friend's first insoles and enjoy a 15% discount on your second purchase).
5. **Customer Reviews:** Customers will be encouraged to leave reviews on our website and Google My Business listing.

Strategies will be regularly reviewed and adjusted based on performance and market changes.

At the picture below you can see the examples of our banners and fliers for a promotion.



**PROSTOPOO**

ЗАМОВ СВОЮ  
**ІНДИВІДУАЛЬНУ**  
УСТІЛКУ

- 3D ДІАГНОСТИКА - 5 ХВИЛИН
- ВИГОТОВЛЕННЯ - 24 ГОДИНИ

ПОКРИТТЯ

РОЗВАНТАЖЕННЯ  
СТОПИ

ОСНОВА EVA

**БЕЗКОШТОВНО:**

- 3D СКАНУВАННЯ,
- ДІАГНОСТИКА,
- КОНСУЛЬТАЦІЯ ФІЗИЧНОГО ТЕРАПЕВТА

СКАНУЄМО

МОДЕЛЮЄМО

ВИГОТОВЛЯЄМО

**ТУТ**

ВИГОТОВЛЯЮТЬ  
**ІНДИВІДУАЛЬНІ**  
УСТІЛКИ

- ДОРΟΣЛИМ
- ДІТЯМ
- СПОРТСМЕНАМ
- ДІАБЕТИКАМ

**БЕЗКОШТОВНО:**

ДІАГНОСТИКА  
3D-СКАНУВАННЯ  
**5 ХВИЛИН**

АДРЕС МАГАЗИНУ  
ТУТ

ВИГОТОВЛЕННЯ  
УСТІЛОК РІЗНИХ  
РОМІРІВ ЗА  
**24 ГОДИНИ**

**PROSTOPOO** WWW.MEDTECHNIKA.COM.UA

**ВИДИ ДЕФОРМАЦІЇ СТОПИ**

**БУДОВА ТА ФУНКЦІЯ СТОПИ**

Ступень підлоги

Плантарний нерв

Підп'яток

Ступа є важке утворення пружного (випуклого) характеру (є кістковою опорою тіла, витримує його вагу і переважає під час стрибків та різкого повороту).

**П'ЯТКОВИЙ ШТОРА**

Є регульоване збільшення сили натиску на поверхні підошви (плантарної фасції) відносно області зменшеної сили натиску (наприклад, кісточки Ахіллової сухожилля). Сприяє утворенню різких бочок у задньому відділі стопи, особливо стопи та при ходьбі.

**ЧИМ ЖЕ НЕБЕЗПЕЧНА ПЛОСКОСТОПІСТЬ?**

Поздовжня та поперечна плоскостопість викликає:

- біль у стопах та суглобах нижньої кінцівки;
- ряд функціональних змін у хребті та суглобах верхньої кінцівки;
- перебіг тази, формування остеоартрозу.

**СТУПЕНЬ ПОВЕРХНЬОЇ ПЛОСКОСТОПІСТІ**

ДІТЯ

3-4 роки 5 років 10 років

ДОРОСЛІ

**СТУПЕНЬ ПОПЕРЕЧНОЇ ПЛОСКОСТОПІСТІ**

ВІДБИТОК СКЕЛЕТІНЬ

**ДІАБЕТИЧНА СТОПА**

«Діабетична стопа» - ускладнення цукрового діабету у вигляді особливого утворення.

Стопа через порушення кровообігу викликає:

- глибокі та швидкі форми кіл, надмірне утворення мозолів;
- глибоке утворення кіл та шкар.

Зниження чутливості шкіри в області підлоги стоп змінює форму стопи діабетична ампутація.

**ВАРУСНА ТА ВАЛЬГУСНА ДЕФОРМАЦІЯ СТОПИ**

ВАЛЬГУСНА ДЕФОРМАЦІЯ 1-ГО ПАЛЬЦЯ СТОПИ

ДЕФОРМАЦІЯ 2-5 ПАЛЬЦЯ СТОПИ

## 5.2. Sales strategy

### 5.2.1. General sales strategy

To successfully launch ProStopoo into the market, our sales strategy will be rooted in leveraging our unique value proposition, strategic partnerships, digital marketing efforts, and a focus on increasing the Lifetime Value (LTV) of our customers.

#### 1. Unique Value Proposition - 3D Scanning Technology:

Our state-of-the-art 3D foot scanning technology sets us apart in the market, offering a level of personalization and precision that competitors cannot match. The exclusivity of this service in our physical stores will be a strong incentive

for customers to visit. We'll provide free diagnostic services to attract first-time customers and encourage repeat visits.

2. **Building Trust - Education and Engagement:**

As a new brand, building trust with our potential customers will be crucial. We'll prioritize educating consumers on foot health and the advantages of our products through in-store consultations, online content, and community events. The goal is to position ProStopoo as a reliable, trusted source of foot health solutions.

3. **Partnerships:**

We'll form partnerships with healthcare professionals, pharmacies, supermarkets, hospitals/clinics, fitness centers, and footwear stores to extend our reach. These partners can recommend our products to their clients, giving us credibility and access to a wider customer base.

4. **Digital Marketing:**

We'll use digital channels to drive awareness and generate online sales for our standard insoles. This includes SEO, social media marketing, email newsletters, and online advertisements.

5. **Cross-Selling and Up-Selling:**

During the free 3D foot scan and diagnostics, we can educate customers about the different types of insoles we offer, encouraging them to buy products that best suit their needs. The personalized customer experience and superior product quality will promote up-selling and cross-selling opportunities.

6. **Repeat Sales Strategy:**

Considering that the average time to replace an insole is approximately 6 months, we will implement a reminder system to notify customers when it's

nearing time to replace their insoles. This ensures that customers are getting the most from our product and promotes repeat sales.

**7. Multiple Product Variations:**

We'll offer a variety of insoles catered to different footwear (athletic shoes, formal shoes, casual shoes, etc.), encouraging customers to purchase multiple products from us, increasing the overall LTV.

**8. Bundling and Discounts:**

We could introduce discounts on the purchase of multiple insoles. These pricing strategies can incentivize customers to buy more than one insole at a time.

**9. Loyalty and Referral Programs:**

Implementing a loyalty program that rewards repeat purchases can enhance customer retention, driving a higher LTV. A referral program will reward existing customers for bringing in new customers, helping to grow our customer base rapidly.

**10. Ongoing Foot Health Monitoring:**

We will promote the availability of free repeated foot diagnostics. This not only provides reassurance and demonstrates the value of our insoles, but it also serves as a touchpoint to re-engage existing customers, share new products, and discuss their progress.

**11. Follow-up Strategy:**

After a purchase, we'll follow up with customers to ensure their satisfaction and encourage online reviews. This aids in customer retention and helps build a positive online reputation.

By continually reviewing and adjusting our sales strategy based on performance and market feedback, we can remain customer-centric and continue to meet the needs of our target segments effectively.

### **5.2.2. Quality Control of In-Store Insoles Sales Process by Consultants**

We place great importance on maintaining and enhancing the quality of our in-store insoles sales process, which is facilitated through our chain of 20 offline stores. Our primary goal is to ensure customer satisfaction while driving sales growth. To achieve this, we have developed a comprehensive Quality Control plan specifically tailored for our consultants.

#### **Key Components of the Quality Control Plan:**

##### **1. Standardize Quality Criteria:**

- Establish clear quality criteria for insoles sales, including factors such as product knowledge, customer engagement, personalized recommendations, and customer satisfaction.
- Develop guidelines and benchmarks to measure and assess the quality of the sales process.

##### **2. Regular Training and Skill Development:**

- Conduct ongoing training sessions to enhance consultants' product knowledge, sales techniques, and customer engagement skills.
- Provide specific training modules on topics such as foot health, understanding customer needs, and effective communication.

##### **3. Implement Quality Checkpoints:**

- Introduce checkpoints at various stages of the sales process to ensure adherence to quality standards.

- Assign experienced team members or supervisors to conduct periodic reviews and evaluations of sales interactions.
- Assess consultants' compliance with the sales process, their ability to address customer concerns, and their overall professionalism.

#### 4. Mystery Shopping and Customer Feedback:

- Establish a mystery shopping program to evaluate the in-store sales process anonymously.
- Use mystery shoppers to assess the consultants' performance, adherence to quality standards, and the overall customer experience.
- Regularly collect customer feedback through surveys or follow-up calls to gain insights into their satisfaction levels and identify areas for improvement.

#### 5. Performance Tracking and Analysis:

- Implement a system to track and analyze key performance indicators (KPIs) related to insoles sales.
- Monitor metrics such as conversion rates, customer feedback scores, and sales targets to assess overall performance.
- Utilize data analysis to identify trends, areas of improvement, and opportunities for training and development.

#### 6. Continuous Improvement Initiatives:

- Foster a culture of continuous improvement by encouraging consultants to provide suggestions and insights for enhancing the sales process.
- Regularly review feedback and incorporate actionable insights into training programs and process refinements.

- Share success stories and best practices to inspire and motivate consultants to strive for excellence.

7. Performance Recognition and Rewards:

- Implement a recognition program to acknowledge and reward consultants who consistently deliver high-quality sales experiences.
- Recognize outstanding performance based on quality criteria, customer feedback, and sales achievements.
- Provide incentives, bonuses, or other rewards as incentives for maintaining and improving the quality of the sales process.

8. Regular Communication and Feedback:

- Maintain open lines of communication with consultants to address any concerns, provide feedback, and offer support.
- Conduct regular team meetings, workshops, or individual coaching sessions to discuss performance, share updates, and provide constructive feedback.

9. Collaboration and Knowledge Sharing:

- Encourage collaboration and knowledge sharing among consultants through regular team meetings.
- Facilitate the exchange of best practices, successful sales techniques, and customer service strategies.
- Encourage peer-to-peer mentoring and coaching to foster a supportive learning environment.

By implementing this future plan, we will ensure the quality of the in-store insoles sales process, deliver exceptional customer experiences, and drive business

growth. Through continuous training, performance monitoring, and a focus on customer satisfaction, our team will excel in providing personalized recommendations and achieving sales targets while upholding high standards of professionalism and quality.

### **5.2.3. Instructions of the sales process in offline store**

To ensure a smooth and effective sales process in our offline stores, it is crucial for our consultants to have clear instructions and guidelines. Below, we have outlined the general steps of this process:

#### **1. Customer Engagement:**

- Greet customers warmly as they enter the store and make them feel welcome.
- Engage in friendly conversation to understand their needs and requirements.
- Offer assistance and provide information about the benefits of ProStopoo insoles.

#### **2. 3D Foot Scanning:**

- Introduce customers to the state-of-the-art 3D foot scanning technology.
- Explain how the scanning process works and its benefits in providing personalized and precise insole recommendations.
- Conduct a thorough 3D foot scan for each customer to gather data on their foot shape and structure.

#### **3. In-Store Consultation:**

- Provide an in-depth consultation on the customer's foot health and address any concerns or questions they may have.
- Demonstrate how the recommended ProStopoo insoles will address their specific foot issues and improve comfort.

- Offer comparisons with competitor products to showcase the superiority of ProStopoo insoles.

#### **4. Insole Recommendation:**

- Analyze the results of the 3D foot scan to identify the customer's specific foot issues and requirements.

- Recommend suitable ProStopoo insoles based on the customer's foot type, lifestyle, and activities.

- Explain the features and benefits of the recommended insoles, emphasizing their ability to alleviate pain, provide support, and improve overall foot health.

#### **5. Customization Options:**

- Highlight the option for custom-made insoles tailored specifically to the customer's foot shape and needs.

- Explain the additional benefits of custom insoles, such as enhanced comfort and better alignment.

- Provide information on the customization process, including materials used and turnaround time.

#### **6. Pricing and Packages:**

- Present pricing options for both standard and custom ProStopoo insoles.

- Explain the value and benefits associated with each pricing tier.

- Offer package deals or discounts for multiple purchases or additional accessories, such as shoe inserts or foot care products.

#### **7. Closing the Sale:**

- Address any remaining questions or concerns the customer may have.

- Reiterate the benefits and advantages of choosing ProStopoo insoles.



- Assist the customer in making a decision and guide them through the purchase process.

- Process the sale, including payment, and provide a receipt or proof of purchase.

### **8. Follow-Up and Customer Relationship Management:**

- Collect customer contact information for future communication and marketing purposes.

- Follow up with customers after their purchase to ensure satisfaction and address any post-sale issues.

- Maintain a database of customer information to personalize future interactions and provide targeted marketing campaigns.

### **5.3. Pricing strategy**

Given ProStopoo's unique advantages, our pricing strategy will be structured around several key factors to maintain competitiveness, attract a broad range of customers, and ensure business profitability.

1. **Cost-Based Pricing for Custom Insoles:** Thanks to our advanced production techniques, we can offer superior quality orthopedic insoles at prices lower than those of our competitors. This undercuts the competition while reinforcing the perception of value among our customers.
2. **Free 3D Scanning and Diagnostics:** The offer of complimentary 3D scanning and diagnostics is a key differentiator for ProStopoo. We will emphasize this no-cost, high-value service in our marketing to attract customers. Although these services are free, they add perceived value to our products and can justify our pricing for the custom insoles.

3. **Competitive Pricing for Mass-Produced Insoles:** For our range of standard insoles, we will use a competitive pricing strategy. We will set our prices in line with, or slightly lower than, the average market price to attract cost-conscious customers. These insoles will cater to a variety of needs, including everyday wear, sports, children's, diabetic, and insoles for overweight individuals.
4. **Premium Pricing for Specialized Insoles:** For specialized insoles (e.g., for diabetics, overweight individuals), we could consider a premium pricing strategy. These products offer unique benefits to specific customer segments and may justify a higher price point.
5. **Volume Discounts & Bundling:** To encourage customers to purchase more than one insole (such as for different types of shoes), we could offer volume discounts or bundle deals. This strategy not only increases the average order value but also boosts customer satisfaction as they feel they're getting more value for their money.
6. **Dynamic Pricing:** We will regularly review and adjust our pricing based on market trends, cost changes, and feedback from customers. This will ensure that our pricing remains competitive and in line with customer expectations.

Overall, our pricing strategy will be a blend of cost-based, competitive, and premium pricing, depending on the product type. By balancing affordability and perceived value, we aim to attract and retain a wide range of customers while also maintaining a healthy profit margin.

## 5.4. Sales plan

### 5.4.1. Pricing plan

After analysis of the pricing strategy of our competitors in each product segment, we defined our prices for each product.

We also assume the annual price growth rate of 16%.

The pricing data is presented in the table below:

	Units	2023	2024	2025	2026	2027	2028
<b>Universal</b>	€	15.00	17.40	20.18	23.41	27.16	31.51
<b>Premium</b>	€	20.00	23.20	26.91	31.22	36.21	42.01
<b>Sport</b>	€	15.00	17.40	20.18	23.41	27.16	31.51
<b>Children's</b>	€	15.00	17.40	20.18	23.41	27.16	31.51
<b>Diabetic</b>	€	15.00	17.40	20.18	23.41	27.16	31.51
<b>Teenagers</b>	€	15.00	17.40	20.18	23.41	27.16	31.51
<b>Super heavy</b>	€	20.00	23.20	26.91	31.22	36.21	42.01
<b>Individual</b>	€	25.00	29.00	33.64	39.02	45.27	52.51
<b>Growth rate</b>			<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>	<b>1.16</b>

### 5.4.2. Break even analysis

According to our assumptions of pricing and sales distribution by products, we can calculate the break even point.

For each product we calculate the variable expenses per unit.

Variable expenses include:

- Raw materials
- Delivery costs

Fixed expenses include:

Salary for:

- Product Manager
- Doctor
- Production master (insolemaker)
- Marketing specialist

Marketing costs

Electricity costs

Total fixed costs are €2,800.

The formula for calculating Break-even point for multiple products is:

Break even point (in units) = Fixed Expenses / (Weighted Average selling price - Weighted Average variable cost)

Our calculations is shown in the table below:

Break Even Analysis for Multi Products

Product	Universal	Premium	Sport	Children's	Diabetic	Teenagers	Super heavy	Individual
Sale/ Unit	€15.00	€20.00	€15.00	€15.00	€15.00	€15.00	€20.00	€25.00
Variable Expenses/ Unit	€5.38	€5.39	€4.95	€4.45	€9.91	€4.64	€6.69	€5.38
Expected Sale	40.00%	10%	10%	5%	5%	5%	5%	20%
Unit Should Be Sold	92	23	23	11	11	11	11	46
Break-Even Point (Dollars)	€1,376.65	€458.88	€344.16	€172.08	€172.08	€172.08	€229.44	€1,147.21
Variable Expenses	€493.76	€123.67	€113.57	€51.05	€113.69	€53.23	€76.75	€246.88
Contribution to average selling price	€6.00	€2.00	€1.50	€0.75	€0.75	€0.75	€1.00	€5.00
Contribution to average variable expenses	€2.15	€0.54	€0.50	€0.22	€0.50	€0.23	€0.33	€1.08

Weighted Average Selling Price	€17.75
Weighted Average Variable Expenses	€5.55
Fixed Expenses/ Month	€2,800.00
Break-Even Point	229

Verification	
Sales (BEP)	€4,072.60
Total Variable Expense	€1,272.60
Contribution Margin	€2,800.00
Net Operating Income	€0.00

Table 5.4. Break even calculation.

As we can see, to achieve break even point we need to sell 225 units per month, which is almost twice lower than our expected sales plan.

### 5.4.3. Break even analysis for an NPV of zero

The breakeven point with an NPV of zero indicates the level of sales where we cover all costs and neither make a profit nor incur a loss. It's critical as it defines the minimum sales we need for our project to be financially viable. It gives us a tangible measure of when we can expect our business to begin turning a profit, which directly impacts our return on investment.

#### Calculations of the breakeven volume for an NPV of zero

Variables	Values
Price	€17.75
Variable Cost per Unit	€5.55
Fixed Costs	€168,000
Initial Investment	€267,640
Discount Rate	25%
Project Life (Years)	5
Sales Volume (Total sold units)	<b>21922</b>
Avg Sales Volume per month	<b>365</b>

Year	Cash Flows
0	-€267,640
1	€99,521
2	€99,521
3	€99,521
4	€99,521
5	€99,521
<b>NPV</b>	<b>€0.00</b>

Table 5.4.3. Calculations of Break even analysis for an NPV of zero

Based on our detailed calculations and market analysis, we project that we can achieve a breakeven point with a Net Present Value (NPV) of zero by selling an average of 365 insoles per month. This sales target is quite achievable, given the potential market volume in the cities where we plan to operate. This volume also provides room for growth and profitability beyond the breakeven point, positioning our startup for sustainable success in the orthopedic insoles market.

#### 5.4.4. Sales forecasting at 5 years

According to the company's forecast, sales will have the following distribution by product:

	<b>Units</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
<b>Universal</b>	%	40%	40%	40%	40%	40%	40%
<b>Premium</b>	%	10%	10%	10%	10%	10%	10%
<b>Sport</b>	%	10%	10%	10%	10%	10%	10%
<b>Children's</b>	%	5%	5%	5%	5%	5%	5%
<b>Diabetic</b>	%	5%	5%	5%	5%	5%	5%
<b>Teenagers</b>	%	5%	5%	5%	5%	5%	5%
<b>Super heavy</b>	%	5%	5%	5%	5%	5%	5%
<b>Individual</b>	%	20%	20%	20%	20%	20%	20%

For revenue stream calculation purposes, the average price of a product is calculated as the product of the unit price for each model and the sales frequency of that model.

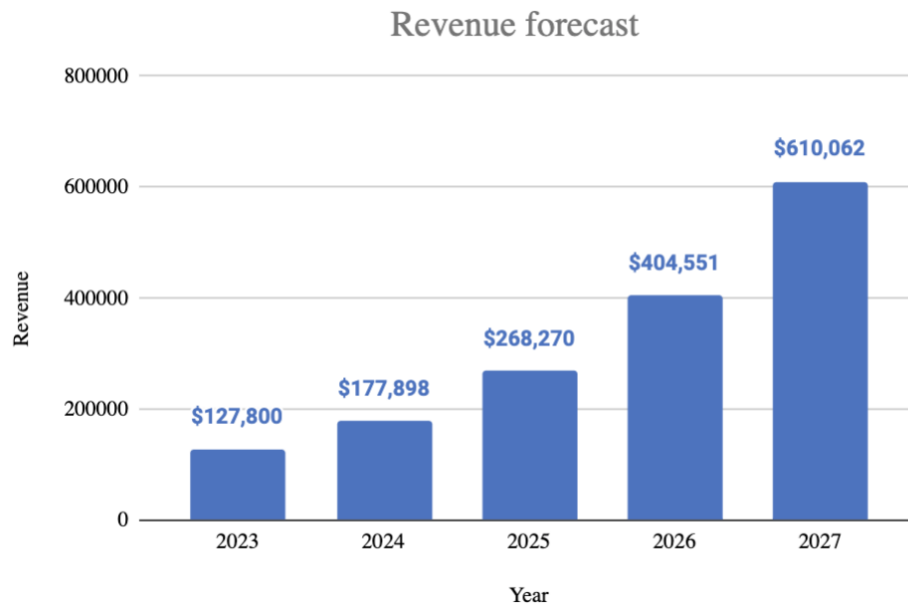
	<b>Units</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
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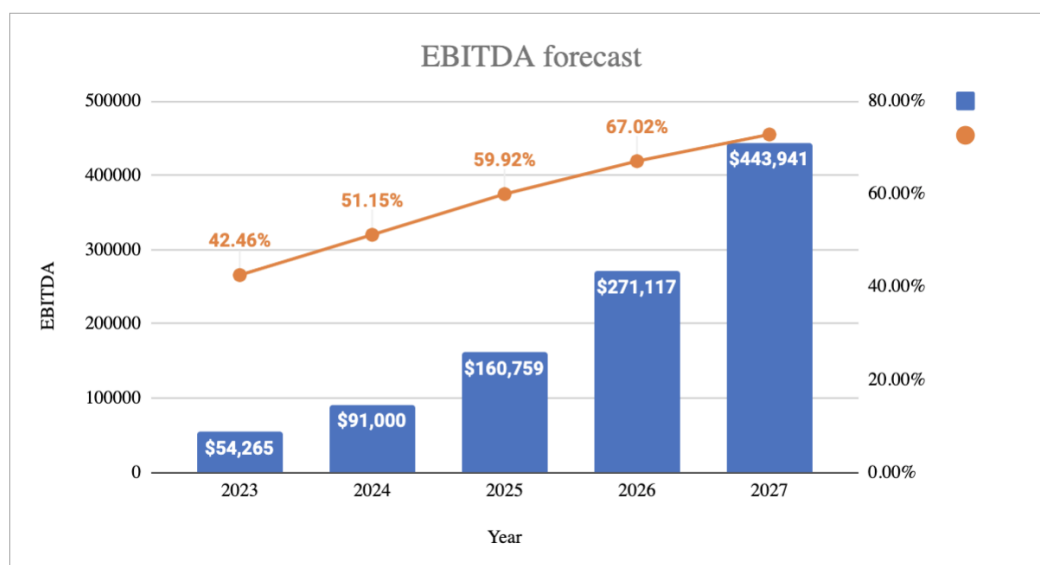
**Revenue forecast**

	<b>Units</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Universal	€	€43,200	€60,134	€90,683	€136,749	€206,218	€310,977
Premium	€	€14,400	€20,045	€30,228	€45,583	€68,739	€103,659
Sport	€	€10,800	€15,034	€22,671	€34,187	€51,555	€77,744
Children's	€	€5,400	€7,517	€11,335	€17,094	€25,777	€38,872
Diabetic	€	€5,400	€7,517	€11,335	€17,094	€25,777	€38,872
Teenagers	€	€5,400	€7,517	€11,335	€17,094	€25,777	€38,872
Super heavy	€	€7,200	€10,022	€15,114	€22,792	€34,370	€51,830
Individual	€	€36,000	€50,112	€75,569	€113,958	€171,849	€259,148
<b>Total</b>	<b>€</b>	<b>€127,800</b>	<b>€177,898</b>	<b>€268,270</b>	<b>€404,551</b>	<b>€610,062</b>	<b>€919,974</b>



**Ebitda forecast**

	Units	2023	2024	2025	2026	2027	2028
Revenue	€	€127,800	€177,898	€268,270	€404,551	€610,062	€919,974
COGS	€	€39,935	€47,922	€62,298	€80,988	€105,284	€136,869
Operatin							
Excences	€	€33,600	€38,976	€45,212	€52,446	€60,837	€70,571
D&A Expense	€	€0	€0	€0	€0	€0	€0
<b>EBITDA</b>	€	<b>€54,265</b>	<b>€91,000</b>	<b>€160,759</b>	<b>€271,117</b>	<b>€443,941</b>	<b>€712,533</b>
EBITDA margin	€	42.46%	51.15%	59.92%	67.02%	72.77%	77.45%
Depreciation	€	€0.00	€0.00	€0.00	€0.00	€0.00	€0.00
EBIT	€	€54,265	€91,000	€160,759	€271,117	€443,941	€712,533





## 6. Planning: Financials

### 6.1. Financing requirements summary

The total amount of financing required to start the business is €267640.

<b>Total financing required</b>	€	267640
<b>CapEx</b>	€	264210
Office equipment	€	1805
Furniture	€	1625
Capital structure		
Equity financing	%	100%
Equity financing	€	267640

Table 6.1. Total financing required.

The full part of financing required will be provided as equity financing.

## 6.2. Inventory planning

**Formula of Inventory for our company:**

**Inventory = raw materials + work-in-progress (WIP) + finished goods**

Given that the manufacturing process takes a maximum of three hours to transform raw materials into completed products, we posit that the work-in-progress (WIP) value is near negligible when calculating inventory (WIP  $\approx 0$ ).

For standardized insoles, we are going to apply a "From Production to Availability" inventory management approach. This suggests that we need to have stocks of goods in each store.

Lets calculate the required stock of goods:

- In each of the 50 stores, all 7 models of standardized insoles will be presented.
- Each model will be presented in 11 sizes.
- The required safety stock for each standard size is 3 pcs.
- Also in the main warehouse, we will keep a weekly stock of finished products for each model, in accordance with our general sales plan. From the main warehouse, deliveries will be made to retail stores 2 times a week.

Calculations of the level of required reserves in units and in monetary terms can be seen in Table 6.2.1.

This calculation is done in our assumption of sales distribution by products. The level of needed inventory can be optimized after receiving the real sales data.

### **Finished Goods calculation**

<b>Amount of stores</b>	50
<b>Minimum safety stock for each size of model per store</b>	3
<b>Replenishment time (days)</b>	4
<b>Amount of sizes</b>	11

Model	Expected		Inventory		
	Safety stock	sales per week	level (units)	Cost of goods	Inventory level (€)
<b>Universal</b>	1650	60	1710	€5.38	€9,199.80
<b>Premium</b>	1650	15	1665	€5.39	€8,974.35
<b>Sport</b>	1650	15	1665	€4.95	€8,241.75
<b>Children's</b>	1650	8	1658	€4.45	€7,378.10
<b>Diabetic</b>	1650	8	1658	€9.91	€16,430.78
<b>Teenagers</b>	1650	8	1658	€4.64	€7,693.12
<b>Super heavy</b>	1650	8	1658	€6.69	€11,092.02
<b>Total</b>	<b>11550</b>	<b>122</b>	<b>11672</b>		<b>€69,009.92</b>

Table 6.2.1. Inventory level of finished goods.

Our replenishment period for raw materials extends to three months. Therefore, it's crucial for us to maintain an inventory of raw materials sufficient for three months of sales forecasts. Additionally, to buffer against unexpected demand fluctuations or supply disruptions, we also keep a safety stock, which is an extra 40% of the calculated inventory requirement. The calculations of inventory for raw materials is given in a table Table 6.2.2.

### Raw materials

<b>Period of replenishment of the raw materials</b>	3 month
-----------------------------------------------------	---------

<b>Safety stock</b>	40%
---------------------	-----

Model	Inventory				
	Safety stock		level (units)	Cost of goods	of Inventory level of raw material(€)
<b>Universal</b>	288	720	1008	€5.38	€5,423.04
<b>Premium</b>	72	180	252	€5.39	€1,358.28
<b>Sport</b>	72	180	252	€4.95	€1,247.40
<b>Children's</b>	38.4	96	134.4	€4.45	€598.08
<b>Diabetic</b>	38.4	96	134.4	€9.91	€1,331.90
<b>Teenagers</b>	38.4	96	134.4	€4.64	€623.62
<b>Super heavy</b>	38.4	96	134.4	€6.69	€899.14



<b>Individual</b>	144	360	504	€5.38	€2,711.52
<b>Total</b>	<b>585.6</b>	<b>1464</b>	<b>2049.6</b>		<b>€11,481.46</b>

Table 6.2.2. Inventory level of raw materials.

The approximated total level of inventory is **€80,491**.

### 6.3. P&L, BS, CF

PROFIT & LOSS STATEMENT		Year				
		Units	1	2	3	4
Sales	€	127,800.00	177,897.60	268,269.58	404,550.53	610,062.20
COGS	€	(39,934.80)	(55,589.24)	(83,828.58)	(126,413.49)	(190,631.55)
Gross Profit	€	87,865.20	122,308.36	184,441.00	278,137.03	419,430.65
Gross Profit Margin	%	68.75%	68.75%	68.75%	68.75%	68.75%
Operating Expenses	€	(33,600.00)	(38,976.00)	(45,212.16)	(52,446.11)	(60,837.48)
Operating Profit	€	54,265.20	83,332.36	139,228.84	225,690.93	358,593.17
Operating margin	%	42.46%	46.84%	51.90%	55.79%	58.78%
Depreciation / Amortization	€	(26,975.97)	(26,975.97)	(26,975.97)	(26,975.97)	(26,975.97)
EBIT	€	27,289.23	56,356.39	112,252.87	198,714.96	331,617.19
EBIT margin	%	21.35%	31.68%	41.84%	49.12%	54.36%
Interest Expenses	€	0	0	0	0	0
Earning before taxes (EBT)	€	27,289.23	56,356.39	112,252.87	198,714.96	331,617.19
EBT margin	%	21.35%	31.68%	41.84%	49.12%	54.36%
Tax rate	%	18%	18%	18%	18%	18%
Taxes	€	(4,912.06)	(10,144.15)	(20,205.52)	(35,768.69)	(59,691.09)
Net income from operating activities	€	22,377.17	46,212.24	92,047.36	162,946.27	271,926.10
Net income margin	%	17.51%	25.98%	34.31%	40.28%	44.57%

Table 6.3.1. Profit & Loss statement

By the conclusion of 2027, our Net Income margin is projected to be 44.57%.

Balance Sheet	Year					
	0	1	2	3	4	5
<b>Assets</b>						
<b>Current Assets</b>						
Cash&cash						
equivalence	32,360	743	73,743	192,427	381,839	679,970
Accounts Receivable		1,278	1,779	2,683	4,046	6,101
Inventory		80,491	80,491	80,491	80,491	80,491
Other current assets	-	-	-	-	-	-
Prepaid expences	-	-	-	-	-	-
<b>Total Current Assets</b>	<b>32,360</b>	<b>82,512</b>	<b>156,013</b>	<b>275,602</b>	<b>466,375</b>	<b>766,562</b>

**Property & Equipme**

**nt**

Fixed assets	267,640	267,640	267,640	267,640	267,640	267,640
Accumulated						
depreciation	0	(26,976)	(53,952)	(80,928)	(107,904)	(134,880)
<b>Total Assets</b>	<b>300,000</b>	<b>323,176</b>	<b>369,701</b>	<b>462,313</b>	<b>626,111</b>	<b>899,322</b>

**Liabilities &**

**Shareholder's**

**Equity**

**Current Liabilities**

Accounts Payable		799	1,112	1,677	2,528	3,813
<b>Total Current Liabilities</b>	<b>0</b>	<b>799</b>	<b>1,112</b>	<b>1,677</b>	<b>2,528</b>	<b>3,813</b>
Long Term Debt	0	0	0	0	0	0
Other Long Term Liabilities	0	0	0	0	0	0
<b>Total Liabilities</b>	<b>0</b>	<b>799</b>	<b>1,112</b>	<b>1,677</b>	<b>2,528</b>	<b>3,813</b>
<b>Owner's Equity</b>						
Equity Capital	300,000	300,000	300,000	300,000	300,000	300,000
Retained Earnings		22,377	68,589	160,637	323,583	595,509
<b>Total Owner's Equity</b>	<b>300,000</b>	<b>322,377</b>	<b>368,589</b>	<b>460,637</b>	<b>623,583</b>	<b>895,509</b>
<b>Total Liabilities &amp; Owner's Equity</b>	<b>300,000</b>	<b>323,176</b>	<b>369,701</b>	<b>462,313</b>	<b>626,111</b>	<b>899,322</b>
<b>Balance check</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(0)</b>

Table 6.3.2. Balance sheet statement

Our business model operates on a comprehensive production cycle, leading to a consistent inventory and substantial investments in Property, Plant, and Equipment (PPE). We plan to distribute our products via our own store network and website. Consequently, we anticipate maintaining minimal accounts receivable, estimated at

1% of total revenue. Similarly, we foresee our accounts payable to be around 2% of the Cost of Goods Sold (COGS).

<b>Statement of Cashflows</b>	Unit	Y0	Y1	Y2	Y3	Y4	Y5	
Net income	€		0	22,377.17	46,212.24	92,047.36	162,946.27	271,926.10
Operating activities	€							
Depreciation/Amortization	€		0	26,975.97	26,975.97	26,975.97	26,975.97	26,975.97
change in accounts receivable	€		0	(1,278.00)	(500.98)	(903.72)	(1,362.81)	(2,055.12)
change in accounts payable	€		0	798.70	313.09	564.79	851.70	1,284.36
change in inventory	€		0	(80,491.38)	0.00	0.00	0.00	0.00
<b>Cashflow from operating activities</b>			0	(31,617.54)	73,000.32	118,684.39	189,411.13	298,131.32
Investing activities								
Financing activities								
CAPEX	€		(267,639.72)					
<b>Investing Cash Flow</b>	€		(267,639.72)					
Financing Activities								
Dividends								
Equity financing	€		300,000					
<b>Cashflow from financing activities</b>	€		300000	0	0	0	0	0
<b>Net Cash Flow</b>	€		32,360.28	(31,617.54)	73,000.32	118,684.39	189,411.13	298,131.32

Table 6.3.3. Cashflow statement

Our net cash flow, despite starting at €(31,617.54), increases significantly each year, reaching €298,131.32 by Year 5. This growth indicates operational success and robust cash surplus generation.

As we move forward, we will maintain a focus on optimizing our operations, efficiently managing our working capital, and carefully controlling our expenses to ensure the sustainability of this positive cash flow trend.

#### 6.4. Project evaluation

The evaluation of our project, encompassing the Net Present Value (NPV), Internal Rate of Return (IRR), and Payback (PB) period, is presented below.

Years	Units	Period 0	Y1	Y2	Y3	Y4	Y5
<b>CapEx</b>	€	-€267,640					
Cashflow	€		€54,265	€83,332	€139,229	€225,691	€358,593
Project CF	€	-€267,640	€54,265	€83,332	€139,229	€225,691	€358,593
Cumulative cashflow	€	-€267,640	-€213,375	-€130,042	€9,187	€234,878	€593,471
<b>Discount rate (WACC)</b>	%	25.00%					
<b>PB (payback period)</b>	years	3.35					
Year		0	1	2	3	4	5
DCF (Discounted cashflow)	€	-€267,640	€43,412	€53,333	€71,285	€92,443	€117,504
Cumulative DCF	€	-€267,640	-€224,228	-€170,895	-€99,610	-€7,167	€110,337
DPBP	years	5.06					
Sum of DCF	€	€110,337					
<b>NPV</b>	€	<b>€110,337</b>					
<b>IRR</b>	%	<b>38%</b>					

Table 6.4.1. Project evaluation.

According to our computations:

- The Net Present Value (NPV) is positive,
- The Internal Rate of Return (IRR) stands at 38% over the 5-year period,
- The Payback period is 3.35 years,
- The Discounted payback period extends to 5.06 years.

Given these results, we believe this signifies a promising investment opportunity.

## **7. Implementation: Resources required for project implementation including team**

### **Team:**

- Project Manager: Responsible for overall project coordination, planning, and execution.
- Physiotherapist (doctor): Specialist in 3D scanning technology, design, manufacturing processes, and quality control.
- Insole maker: Skilled technician, milling machine operator.
- Marketing: Experienced in developing marketing strategies, branding, and customer engagement.
- CEO: Responsible for financial planning, budgeting, and cost management.

### **Facility and Equipment:**

- Production Facility: A suitable location with sufficient space for manufacturing, storage, and administrative functions.
- 3D Scanning Equipment: High-quality 3D scanners capable of capturing accurate foot measurements and contours.
- Computer-Aided Design (CAD) Software: Software tools for designing customized insoles based on 3D scan data.
- Computer-Aided Manufacturing (CAM) Software: Software tools for optimizing and controlling the manufacturing processes.
- Manufacturing Equipment: Machinery, tools, and workstations for material cutting, shaping, assembly, finishing, and packaging.



- Quality Control Equipment: Instruments and devices for quality inspections, dimensional checks, and durability testing.

**Raw Materials:**

- Foams: High-quality foam materials (EVA blocks) suitable for orthopedic insole production.
- Fabrics: Materials for covering and lining the insoles, providing comfort and durability.
- Adhesives: Specialized adhesives for bonding different components of the insoles.
- Additional Materials: Any specialized materials required for specific customization features or orthopedic requirements.

**Skilled Workforce:**

- 3D Scanning - Sales consultants in 20 stores: Personnel experienced in operating 3D scanning equipment.
- Physiotherapist (doctor): Professionals knowledgeable about foot anatomy, biomechanics, and orthopedic conditions. Experts in quality assurance and quality control methodologies.
- Insole maker: Skilled personnel for operating manufacturing equipment, conducting quality control checks, and maintaining production efficiency.
- Marketing and Sales Team: Professionals with expertise in marketing strategies, branding, sales, and customer support.

**Supplier Relationships:**

**Reliable Suppliers:** Establish relationships with suppliers of high-quality raw materials, including foams, fabrics, adhesives, and any specialized materials required.

**Service Providers:** Identify and collaborate with external service providers, such as logistics partners (Nova Poshta) for transportation and delivery of finished products.

**Financial Resources:**

**Funding:** Obtain necessary capital through investments to cover initial setup costs, equipment procurement, workforce salaries, and operational expenses during the project implementation phase.

**8. Implementation: Implementation plan including risk assessment**

**8.1.1. Implementation Plan:**

**Goal:** We're committed to providing high-quality, affordable orthopedic insoles. We're utilizing cutting-edge 3D scanning technology to create custom and mass

production insoles perfectly tailored to the unique contours of each individual's foot, providing optimal support, comfort, and a significant reduction in foot and lower limb pain.

**Project Initiation:**

- a. Forming a project team consisting of a CEO, project manager, physiotherapist (doctor), insole maker, marketing professionals and sales consultants from our retail chain.
- b. Conduct a kick-off meeting to communicate project objectives, deliverables, timelines, and roles and responsibilities.

**Facility Setup:**

- a. Defining and providing centralized production with sufficient space for orthopedic insole production processes, storage, administrative areas and quality control.
- b. Creation of a centralized manufacturing plant with the necessary infrastructure, including workstations, production equipment, storage facilities, security facilities and engineering communications.

**Technology Procurement and Setup:**

- a. Research and selection suitable 3D scanning technology that meets the requirements for capturing precise foot measurements and contours.
- b. Purchase 3D scanning equipment for each store within our retail chain.
- c. Installation and calibration of 3D scanning equipment in each store according to manufacturer guidelines, ensuring optimal performance and accuracy.

**Raw Material Sourcing:**

- a. Identifying and establishing relationships with reliable suppliers of high-quality raw materials, including foams, fabrics, adhesives, and any specialized materials required for orthopedic insole production.
- b. Ensure that the sourced materials meet industry standards and comply with regulatory requirements.

**Customization Process Development:**

- a. Define a workflow for capturing foot measurements using 3D scanning technology in each store, transferring scan data to the centralized production facility, generating custom insole designs, and transferring designs back to the respective stores.
- c. Develop and validate algorithms and software for generating accurate and personalized insole designs based on individual foot contours.

**Mass Production Process Design:**

- a. Develop a technological process for mass production in centralized production, using efficient production technologies and equipment for large-scale production of orthopedic insoles.
- b. Determination of the stages of material cutting, shaping, assembly, finishing, and packaging in the centralized production facility.
- c. Establishing quality control checkpoints to ensure the accuracy, fit, and comfort of the mass-produced orthopedic insoles in the centralized production facility.

**Workforce Recruitment and Training:**

- a. Determination and selection of skilled personnel for the centralized production facility.
- b. Providing comprehensive training programs to familiarize the workforce with the use of 3D scanning equipment, software, manufacturing processes, quality standards, and safety protocols.

**Quality Control and Assurance:**

- a. Implementation of a reliable quality control system at centralized production to control and assess the quality of orthopedic insoles at various stages of production.
- b. Carrying out visual inspection, dimensional checks and durability testing to ensure the insoles meet the required standards.
- c. Documenting and tracking quality metrics to identify trends, deviations, and areas for continuous improvement in the centralized production facility.

**Marketing and Sales Strategy:**

- a. Development of a marketing plan to increase awareness and create demand for custom and mass-produced orthopedic insoles manufactured using 3D scanning technology.
- b. Using scanning equipment in 20 stores to provide foot scanning services and promote the customization process for custom insoles.
- c. Promoting the availability of mass-produced insoles in our retail stores and collaboration with chains of pharmacies, orthopedic salons, and shoe stores to expand distribution channels.
- d. Initiating marketing campaigns leading up to the product launch. This includes setting up the website and online sales channels, SEO, running ads, and coordinating with partners for promotional activities.

**Distribution and Customer Support:**

- a. Establishing an efficient distribution system to deliver both custom and mass-produced orthopedic insoles to our retail stores.
- b. Training store consultants to provide customer support, including assistance with scanning, fitting, inquiries, and concerns related to orthopedic insoles.

**Performance Monitoring and Evaluation:**

- a. Continuously monitor and evaluate the effectiveness of centralized production facilities, in-store scanning equipment, production processes, quality control measures, customer satisfaction and financial performance.
- b. Implementation of regular audits, inspections, and performance reviews to identify areas of improvement and take corrective actions.

**Continuous Improvement and Expansion:**

- a. Fostering a culture of continuous improvement by encouraging feedback from employees, customers, and stakeholders.
- b. Exploring opportunities for expansion by opening additional centralized production facilities or partnering with other retail chains, orthopedic salons, and shoe stores.

**Project Closure:**

- a. Conducting a thorough project evaluation to assess the achievement of project goals, objectives, and deliverables.
- b. Delegate ongoing operations to appropriate departments or personnel within the centralized production facility and stores, ensuring smooth continuity of production and customer support.
- d. Regular review of key performance indicators (KPIs) such as sales, customer feedback, and website traffic.

### 8.1.2. Project roadmap

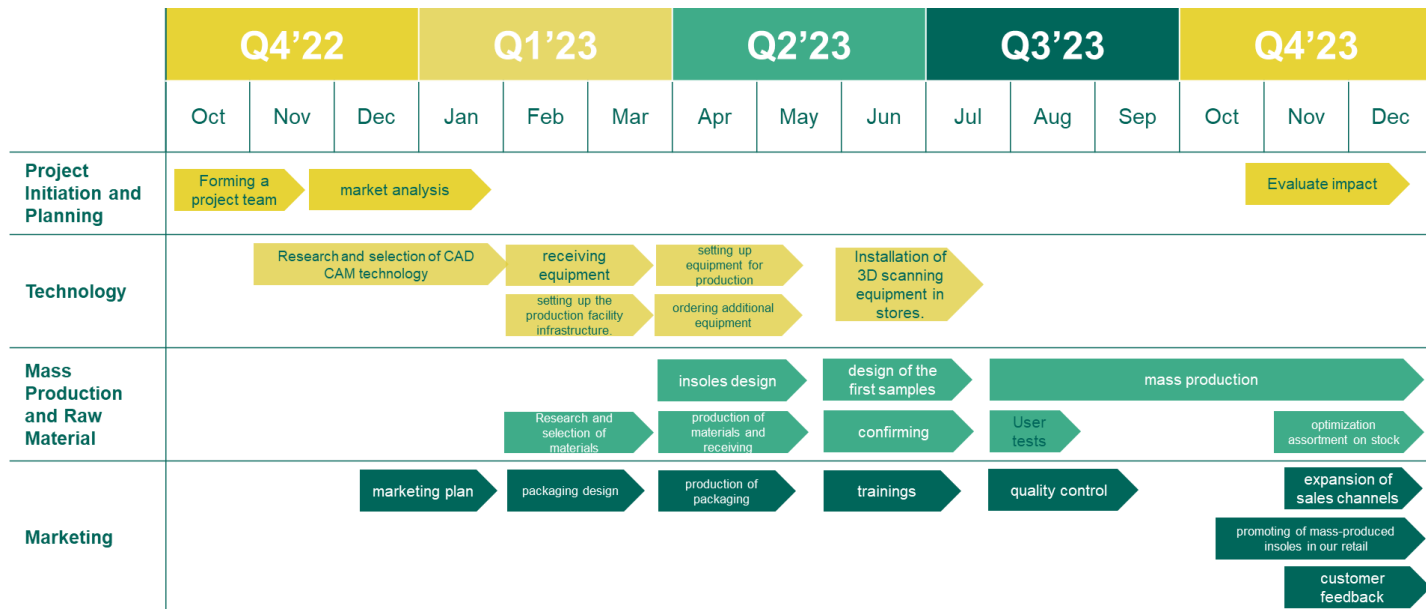


Table 8.1.2. Project roadmap.

### 8.2. Risk Assessment:

#### 1. Production

#### Risks:

Production delays or issues with the 3D scanning technology could derail the launch timeline. Mitigate this with rigorous testing and quality control checks, and have contingency plans in place for potential issues.

**2. Infrastructure**

**Risks:**

Store setup delays or inadequate staff training could impact the customer experience. Plan for enough lead time in store setup and invest in comprehensive staff training to mitigate these risks.

**3. Marketing**

**Risks:**

Poor marketing execution could lead to low awareness and sales. Hire experienced marketing professionals, monitor campaign performance closely, and be prepared to adjust tactics as needed.

**4. Customer**

**Service**

**Risks:**

Negative customer experiences could harm brand reputation. Implement a strong customer service policy, train staff in customer relations, and actively seek and respond to customer feedback.

**5. Risks Related to the Russian-Ukrainian War:**

a. Electricity

**Disruption:**

Given the ongoing Russian-Ukrainian war, there's a heightened risk of electricity disruptions due to potential Russian bombings on energy infrastructure. Mitigate this risk with backup power supplies, business interruption insurance, and multiple production locations where feasible.

b. Equipment Failure Due to Voltage Drop:

Sudden drops in voltage resulting from these disruptions could lead to equipment failure. Mitigate this risk by installing surge protectors and conducting regular equipment maintenance.

**6. Supply**

**Chain**

**Risks:**

There's a risk that supplies of raw materials needed for insole production could



be delayed. Diversify suppliers, keep safety stock, place advance orders, negotiate long-term contracts, research alternative materials, and communicate transparently with customers to manage this risk.

**Risk register**

<b>Risk</b>	<b>Likelihood</b>	<b>Impact</b>	<b>Mitigation</b>
Technical Issues with 3D Scanning Equipment	Medium	High	Conducting thorough research and selecting reliable and reputable suppliers of 3D scanning equipment. Implementation of regular maintenance and calibration schedules. Technical support.
Supply Chain Disruptions for Raw Materials	Low	High	Diversification of raw material suppliers and preservation of alternative sources. Establishing strong relationships with suppliers and monitoring their performance. Maintaining a safe supply of critical raw materials.
Quality Control and Assurance Issues	Moderate	High	Implementation of complex processes of quality control and inspection at all stages of production. Regular training of the production team on quality standards. Conducting frequent audits and

			inspections to identify and address any quality issues.
Production Delays and Capacity Constraints	Moderate	High	Conducting thorough capacity planning and assessment of production requirements. Investing in appropriate production equipment and resources. Implementation of an effective production planning and monitoring system. Development of a plan in case of unexpected growth in demand.
Market Acceptance and Competition	High	High	Conduct market research and analysis to understand customer needs and preferences. Development of a comprehensive marketing and sales strategy for product differentiation and targeting the right customer segments. Continuous monitoring and adaptation to market trends and competition.
Regulatory Compliance and Legal Issues	Low	High	Be aware of the relevant regulations and standards for orthopedic insole production. Establishing strict compliance procedures and ensuring compliance with

			legal requirements. Seek legal advice for advice and guidance to mitigate any potential legal risks.
Training and Skill Gaps	Medium	Medium	Development of comprehensive training programs for employees involved in the production process. Providing opportunities for ongoing training and upskilling to address any skills gaps. Foster a culture of continuous learning and improvement.
Financial Risks and Cost Overruns	Medium	High	Conducting thorough financial planning and analysis. Implementation of strict cost control measures. Regular control and revisions of project costs.
Staffing and Human Resources	Low	Medium	Development of a comprehensive strategy for recruitment and retention of personnel. Ensuring a sufficient level of personnel for the smooth operation of production. Providing competitive compensation packages and employee development opportunities. Developing a positive work culture to increase employee satisfaction

			and reduce staff turnover.
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## **9. Conclusion**

In this MBA Capstone project, we applied various strategic, marketing, and financial tools to establish a business plan for ProStopoo, a breakthrough startup offering orthopedic insoles.

Our market analysis, involving PESTEL and SWOT frameworks, identified industry dynamics, competition, and ProStopoo's positioning within this sphere. Utilizing the Business Model Canvas, we defined key business elements, elucidating our value creation and capture.

An encompassing marketing strategy was formulated through the 7Ps marketing mix model, ensuring a holistic approach to market engagement. VRIO analysis underscored our unique selling points, like our pioneering 3D scanning technology.

Financial analysis formed the concluding stage, determining ProStopoo's breakeven point, NPV, and IRR, providing insight into profitability and potential risks, notably the Russian-Ukrainian war and supply delays.

In summary, this project amalgamates the MBA program's learned concepts, confirming ProStopoo's viability and profitability, setting the stage for its future growth and success.

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