# healthy made easy

**6** The first predictive mobile service for continuous glucose levels monitoring that adapts to every patient



## Financing requirement € 900 000

#### How we will use the funds

- Development of our technology
- Clinical investigation campaigns
- New recruits
- Marketing campaigns

#### **Financial forecast**

2019, Turnover : €1 400 000 2020, Turnover : €5 990 000

#### **Project overview**

Healsy develops the first predictive mobile service for continuous glucose levels monitoring that adapts to every patient's physiology and habits. Our service is designed to help patient with diabetes assess precisely their insulin doses and best way to raise their blood sugar to avoid short to long term complications.

#### Management team

**Stéphane BIDET** : CEO, MSc CS from UTC (Compiègne), 10 years of experience in web/mobile application design and business development.

**Nicolas CALECA** : CTO, MSc from Ecole Polytechnique, almost 10 years of experience in numerical simulation, mathematical modelling and large-scale technical project management.

#### **Labels and prizes**

Label **«Tomorrow's Healthcare»** from Scientipôle **X-Grant** price from Ecole Polytechnique Foundation **French Tech** Emergence grant Winners of **i-Lab 2017** contest Winners of SANOFI's **«Patient Innovation Challenge»** Hackathon's finalist **«To Better Live With Diabetes»** organized by French Social Security

### Healsy SAS

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#### **Customer pain points**

Patients with diabetes are always struggling to manage their blood glucose levels. To evaluate their sugar or insulin needs, they must process all the events and information that can have an impact on their glycaemia, such as past and current blood glucose levels, insulin injections, meal intakes, physical activities, emotional states, stress or fatigue, etc. The complexity of the process leads to errors and severe consequences (hypo/hyperglycaemia).

#### **Solution**

Our service is a decision support mobile application, which rely on a glyacemia predictive model calibrated on each patient, and perfectly integrated in the patient's environment. It offers the following features:

- Sync with off-the-shelf sensors;
- Show blood sugar variations hours ahead thanks to our algorithms;
- Alert on short/mid-term risks;
- Calculate the optimal insulin bolus or sugar intake, based on the patient's physiological state and past or current activities.

#### **Target market**

According to International Diabetes Federation, they were more than 415 million diabetic patients worldwide in 2015 - it is 1 adult out of 11 - of which 223 million were diagnosed. And they are expected to exceed 640 million by 2040. Market studies show that 144 million patients are equipped and willing to pay for an e-health application. This represents a 2 billion  $\in$  market per year, with a forecasted 54% market growth within the next 25 years.

#### Competitors

Our competitors are companies who develops:

- Connected logbooks that provide advices on treatment based on a classic but approximate approach: functional insulin therapy;
- Telemedicine applications that gather data and connect the patient with its doctor to make decision on treatment;
- Semi-automatic systems that regulate the insulin pump in stable phases of life (overnight), but need the patient to take back control on all the classic daily phases: meal, sport...

#### **Competitive advantage**

Our system is the only capable of adapting to each patient physiology as well as predicting blood glucose levels variations hours ahead, and therefore provides the most relevant advices on treatment: insulin dose, sugar intake. Moreover, our system does not rely on a pure machine learning approach, which would need an extreme amount of data for each patient. We use our own pharmacokinetics model calibrated on the patient to do the prediction.

#### **Business model**

Our service will be distributed on Google Play and the App Store as a freemium application, with a monthly subscription to have access to key functionalities. We will partner with healthcare insurance for distribution.



#### Why invest?

We are a multidisciplinary, complementary and experienced team. Our project answers patients' main needs, and it was designed with the help of patients association. We have the support of specialists to help us on all the technical aspects of our project: Montpellier hospital, Chartres Institute of Diabetology and Nutrition, Ecole Polytechnique and the French National Institute of Sport, Expertise, and Performance. The project is labelled as **«Future of Diabetology»** by experts, **so take action and be part of the future!** 

