Product Description

We combine highly scalable production with unique consumer access, driven by an unmatched amount of data. We have designed a farm-to-fork process consisting of our proprietary indoor cultivation system ‘Dryponics’ and a smart retail solution for continuous last mile delivery of fresh produce. Our Dryponics system is a patented and resource saving fully automated cultivation method, producing fresh greens all year-round in a highly efficient and sustainable way. Through the use of automation, plant sensors, and climate control software, Dryponics is more efficient, compact, modular and controllable than existing solutions, delivering optimal plant growth recipes which constitute the database for a global farm network. Our technology can be applied independent from external conditions for global scalability, allowing to go to regions that are strongly prone to environmental stress or cities of high population density.

Market & Customer Segment

With a value proposition based on hyper-local production and hyper-local distribution, the addressable market share is also assessed at the local level. Our in-house market entry study shows that 370,000 tons/year of salad is consumed in Germany, while the consumption in Hamburg is 8,320 tons/year. Based on operating one standardized commercial Dryponics-based indoor vertical farm, we supply 120 tons/year or 4,000 salads per day – equating to a 1.6% market share in Hamburg. Targeting densely populated cities for the farm roll-out, we will have significant potential to grow the market share based on additional farms to reach a target 1-5% share of supply in large cities.

A strong trend has emerged towards convenience and fresh cut fruits and vegetables, driven by health conscious segments of the population with increasing purchasing power. The “local foods” category grew from €bn 1 in sales worldwide in 2005 to €bn 7 at the end of 2015. We have anchored the commercial exploitation of our pilot farm through close interaction with B2B end-users and partners for a retail offering. Leveraging a framework by the German Ministry BMUB, we define our core target groups as: Age: 25-50, female/male, higher income, children, performer, liberal-intellectual, eco-awareness, open minded, traveler, foodie.
Revenue Model

We have entered the market by selling hyper local greens to selected business segments, i.e. restaurants and cantinas. With our Harvest-On-Demand retail solution, our produce will always have superior taste to anything cut and cooled being able to harvest only seconds before consumption. Our first farm produces 120 tons of salad/year on 1,366m² generating €m 4.7/yr. With every crop cycle we gather data on every piece of the production providing us a large head start ahead of competitors.

Competition

Our closest competitors are AeroFarms - a high profile IVF company based on aeroponics, Bowery Farming that has an own IVF operating system and raised recently $m 7.5, and finally Plenty - a new player with a deepflow system and recent funding of $m 200+. All of these companies use aeroponic or hydroponics cultivation methods in their farm system and the key to why we have moats over our competitors is based on our patented Dyponics technology.

Compared to hydroponics or aeroponics, we use only 15% of the water other players use, making our farm lighter and enabling us to build farms with less CAPEX as we can nearly go into every real estate without adjusting the real estate. No other player is able to manage the climate as we do since we have a completely closed environment and manage it fully automatically leading to considerably lower OPEX. With full climate control and perfect plant recipes we can grow globally by managing the farms from the HQ, while no local experts are needed. With every crop cycle we gather data on every piece of the production providing us a large head start ahead of competitors.
Team Description

We work on a model based on a strong cross-generational core team and activating a virtual organization of leading researchers and international specialist SMEs. Co-founder and CEO Mark Korzilius holds a BSc in Business from the EBS (DE) and comes with significant experience as serial entrepreneur in the food supply chain industry. Mark founded the fast casual restaurant chain Vapiano in 2002, taking the company to 170+ restaurants in 30 countries. His co-founder and CMO is Isabel Molitor who is responsible for marketing and sales. Isabel holds a BSc in Business from the EBS (DE) and a MSc in Global Affairs from NYU (US). Daniel Scholten, our COO, is a former manager at 3M New Ventures in Latin America, and partner at the VC firm LittleRock. He holds an MBA from the Rotterdam School of Management (NL). Dr. Prashanth Garapati is our Green Manager holding a Ph.D. in Plant Biology from Max Planck Institute. Our core team is complemented by mechatronic technicians and agronomists.

Growth

We have anchored the commercial exploitation of our pilot farm through close interaction with B2B end-users and partners for a retail offering. We have secured the support from Google HQ Germany, Volkswagen and Tim Mälzer’s restaurants and the TM-brand for trials and market feedback first. Today, the headquarter of Google in Germany is one of our customers that is getting daily salad deliveries for their 400+ staff canteen in Hamburg. A distribution of our salads to restaurants has started with Tim Mälzer and deliveries to Volkswagen’s main showroom restaurant in Berlin offers significant exposure and access to the market in Berlin.

We successfully set-up and operate our pilot farm, and started harvesting about 100kg/day. We have the software for our plant recipes and measuring the environmental data in the farm house. We have been granted our patent for Dryponics in October 2017. We are set for global growth through high and predictable scalability while being profitable on the farm level. Our current revenue model is based on output/m2 while each farm will be cash flow positive on its own. Thus, with technology and customer proof we focus now on perfecting technological details and stick to our global expansion plan. We will increase our number of farms from one in 2017 to three in 2019 with a 18% EBITDA margin which is predicted to increase to 28% in 2021. Despite our lean production setup there is significant potential to further reduce opex and capex.