

Growing Square Roots, the Future of Urban Farms

by Abhi Ramesh

The development of industrial agriculture and mass production of food has left some clear disadvantages in our diets, environment and dining experiences. Kimbal Musk, serial entrepreneur and restaurateur, is determined to restore America's connection with and love for natural food through his urban farm accelerator startup, Square Roots.

Food grown through conventional methods – especially leafy green vegetables – are not only prone to nutrient loss once frozen but often filled with pesticides and shipped across the nation for consumption. Musk's "real food" philosophy is focused on bringing trust back into the equation, or "knowing your farmer, and trusting where your food comes from" (Musk). He contends that locally grown food is the first step to restoring this trust and revolutionizing the food industry from the industrial farm paradigm.

Square Roots is leading the urban farming revolution by developing vertical farm units that inhabit shipping containers and utilizing advanced technology and techniques to grow food of higher quality and quantity than of conventional methods. Square Roots farms are vertical, allowing for much higher yield in a small area, where each container is equivalent to two acres of farmland (Overly). Square Roots farms are also filled with "proprietary hardware and software tools," including hydroponics and the iconic purple LED lighting (Square Roots). The lighting, in particular, is specifically designed to coax greens to grow fully and allows growing throughout the year, concepts unthinkable in tradition farms.

Square Roots has a clear, massive advantage over traditional farms evidenced by its continued local community support and plethora of positive press. Square Roots also has advantages over other startups hoping to take advantage of the urban farming trend through its unique next-gen farmer training program. Square Roots not only invests in technology but also in the farmer by hosting a competitive application process to become an Square Roots farmer, and then training successful candidates in both the hands-on and entrepreneurial aspect of the business. This method of implementing urban farms, by cultivating the local initiative within big cities such as NYC, will lead to greater success and develop an industry as well as a company.

Following the success of the first Square Roots project in Brooklyn, the company has the ambitious goal of expanding to 20 cities by the year 2020 (Xie). This expansion will require more capital investment than the current \$5.4 million raised by the company ("Farming Accelerator in Brooklyn Produces Entrepreneurs and Fresh Leafy Greens Year-Round"). It would be prudent to raise capital through a private placement round of corporate bonds. This will enable the company to raise money and grow without having the regulatory hassle of other forms of investment, as well as lower interest rates, but requires that an investment bank serves to help prepare the necessary bonds. Square Roots is uniquely qualified to find an investment bank and investors for this goal as it may utilize the full extent of Kimbal Musk's vast professional network.

Square Roots may also want to consider becoming registered as a Benefit Corporation while growing. The B-Corp designation will allow the company more flexibility in its fiduciary responsibility to investors and allow for more freedom with allocation of investment money. This freedom will allow Square Roots to balance growth and community impact with profits and not be held to the same profit standards of other companies.

To grow successfully, Square Roots should invest more in the success and longevity of farms rather than technology. The company already has a massive technological advantage in comparison to the competition but may encounter hurdles in developing successful urban farms in cities. In order to improve the stability of farms, Square Roots should hold on to the farmers longer than one year. The current next-gen training program only asks for a one-year commitment from the prospective farmers, and excessive turnover would create problems for investment and growth. Although Square Roots should still function as a farming accelerator and not a permanent operator of the farms, the training period should be increased to a few years, and the salary of farmer-entrepreneurs should be increased as well in order to ensure a longer-term commitment to the task.

Finally, with the goal of 20 cities in mind, Square Roots should consider international locations where urban farms may receive even more support than New York or Chicago. Year-round urban farming will be appealing to cities in Europe where agriculture is limited due to climate such as Helsinki, Finland. Other international options include high-population, developing areas where industrial farming never gained the same foothold as it has in the United States. Mumbai, India, as well as urban areas in Africa where agriculture is impractical, begin the list of areas ripe for urban farming.

Works Cited

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