# Growy Builds Circular and Autonomous Vertical Farms with Automated Robotics on AWS

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## Inspiration

- Caring for my mom's garden in her absence

## Situation

- Traditional farms require manual labor
- Farming is a low-margin business hence cost efficiency is needed at every stage(Production, packaging, innovation)

## Task

- To build independent and automated farms
- To produce more economically profitable microgreens

## Action

- Robots equipped with cameras & Internet of Things (IoT) sensors monitor the plants by regularly taking photos and measuring aspects of plant health, such as water levels, nutrition, & growth.
- Uses AWS IoT Events—a fully managed service that makes it easy to detect and respond to events from IoT sensors and applications—to collect, store, and analyze more than 1 million data points a year
- Uses AWS Fargate and AWS Lambda, These are serverless, pay-as-you-go, event-driven compute services, helping it to keep its infrastructure management overheads low

## Result

- Reduces costs by using robots to tend to plants
- Manages more than 1 million IoT data points a year
- Focuses on innovative agriculture processes instead of IT maintenance
- Experiences reliable infrastructure to operate farms 24/7

Reference: https://aws.amazon.com/solutions/case-studies/growy-case-study/#:~:text=Growy%20uses%20AWS%20IoT%20Events,its%20infrastructure%20management%20overheads%20low.