

RESULT 2: OPEN PLATFORM FOR SHARING KNOWLEDGE

WP 1: Learning Environment for SMEs

CASE STUDIES DEVELOPMENT

APPLICATION OF COMBINATION OF SMART TECHNOLOGIES IN NUTSHELL

Part 1: General information for the enterprise

1. Wellnuts- Griva Virginia
2. Amfikleia Parnassos
3. Individual enterprise

Management

- a. Gender: Male / Female / Other
- b. Age: up to 35 / 36-45 / 46-55 / 56-65 / over 65
- c. Education: primary / secondary / higher

Farm size

- d. 30 acres, 540 trees

Part 2: Smart technologies used on the farm

- ***Agro- meteorological station***
- ***Disease forecasting software***
- ***Underground drip irrigation - automatic irrigationspraying with the use of an electronic variable dose manual***
- ***Soil sensor***

The data collected by the meteorological station and the soil and foliage sensors are used to draw up the irrigation programme So with the triple agro-meteorological cross, soil and foliar sensors and disease prediction software, we can have an automatic irrigation plan and targeted spraying and fertilization.

Part 3: Owners' satisfaction with the use of smart technologies Πόσο ικανοποιημένη είστε με την χρήση έξυπνων τεχνολογιών;

1. Utility assessment

Virginia Griva has at her disposal a nut farm at the foot of Parnassos, in the area of Amfiklia. She has been involved with the nut orchard for the last 20 years and recently has The post-harvest processes (drying, sorting by size and quality, packaging and storage) are carried out in a privately owned licensed laboratory that meets the requirements of hygiene and food safety. Virginia has been following the fourth industrial revolution from the beginning having adopted precision farming practices.

Virginia is satisfied with the use of precision farming technologies for a variety of reasons. Some of which can be summarized as follows:

- *more accurate picture in the field control,*
- *no assumptions, no predictions, the camera, better control, better crop yield prediction,*
- *better corrective action,*
- *savings on natural resources, energy, fuel, water, fertilizer, water,*
- *better crop yields*
- *less labour,*
- *reduction of the environmental footprint*
- *health protection as there is no need to be physically present in the field when spraying*

2. Observed difficulties and problems

The main difficulties observed relate to the lack of training in agronomy, the difficulty of finding cross-disciplinary material in Greek, and the fact that there are not enough sources for the use of data obtained from precision agriculture. Furthermore, in Greece there are not enough trained agronomists in the use of smart technologies.

3. Potential risks

Since the national aerostructure has taken over the maintenance of the station, the risk is limited due to good communication links.

Part 4: Financing the investment in smart technologies



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The initial capital provided by Virginia was equity participation, but in the process it was included in European programmes for innovations, farm improvement projects. The use of smart farming technologies contributed to the approval of the programmes.

Part 5: Future intentions towards smart technologies μελλοντικές δρασεις

Virginia is a strong supporter of smart farming technologies, as it has improved her quality of life and the quality and productivity of her nut farm. Her next investment she intends to be a drone.

Part 6: Some photos



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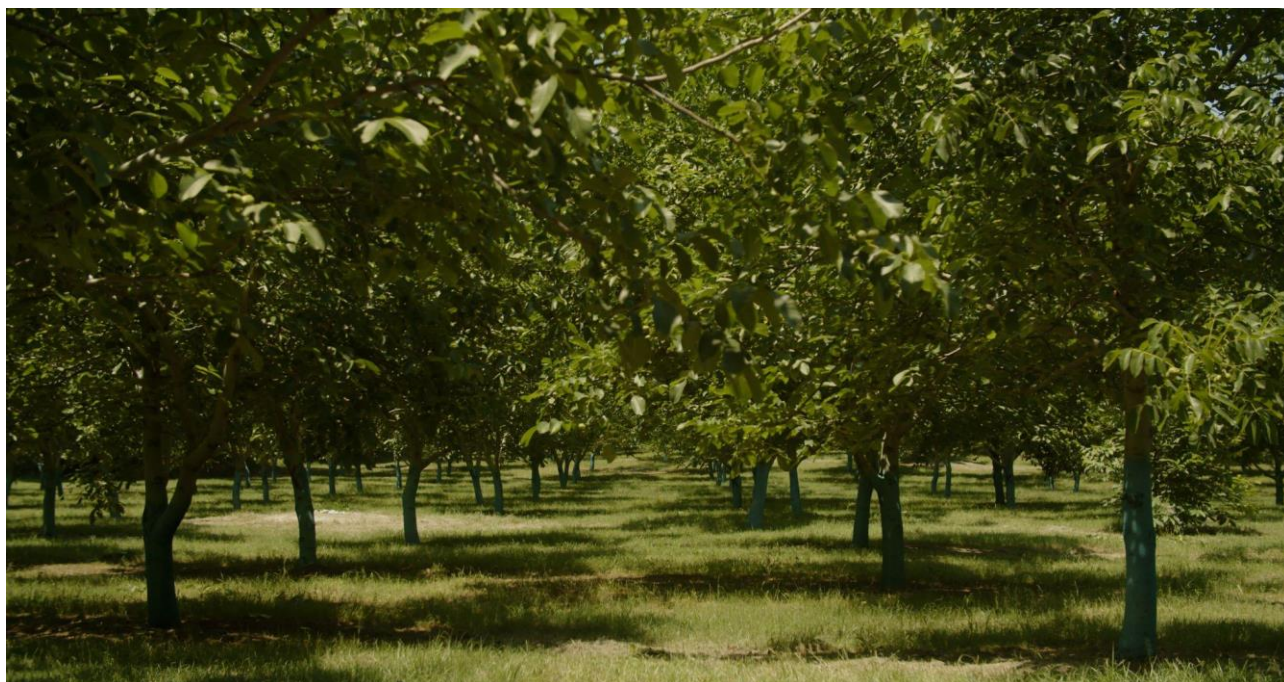
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