INTELLECTUAL OUTPUT N. 1

"Pilot Course on Entrepreneruship Education in agraria sector""

Introduction

Pilot Course. Pilot Course is Intellectual Output n. 1 of the TEEN FARM project, and it's about Entrepreneurship Education in the agricultural sector, for Vocational Education and Training (VET). Although the project's mission was to identify Initial Vocational Education and Training paths, I -VET (EQF level 3-4) for the schools of the partnership, partners agreed to also draw up further modules for Continuing Vocational Education and Training , C-VET (EQF level 4-5).

MODULE	Eqf level [i]	I-VET light course	I-VET standard course	C-VET basic course	C-VET in-depth courses
Module n° 1: TO BE A FARMER (AN ENTREPRENEUR)	3		X	X	
Module n° 2: CREATIVITY AND INNOVATION	3		X	X	
Module n° 3: STRATEGY AND BUSINESS MODEL	3/4		X (Level 1)	X (Complete)	
Module n° 4: MARKET ANALYSIS AND MARKETING PLAN	3/4		X (Level 1)	X (Complete)	
Module n° 5: WEB SOCIAL MEDIA MARKETING	3/4		X (Level 1)	X (Complete)	
Module n° 6: DIGITAL TRANSFORMATION OF AGRICULTURE	4		In-depth study with teacher support	X	
Module n° 7: START UP FINANCING	4		In-depth study with teacher support	X	X
Module n° 8: RISK MANAGEMENT: insurance policies and mutual funds	4			X	X
Module n° 9: INNOVATION AND COOPERATION IN AGRICULTURAL SECTOR	4			X	X

Pilot Course is available, upon registration, online at:

- project platform, at http://www.incubtraining.org/
- platform of the CESAR leader at https://elearningcesar.com

This Report shows all modules (English version).

The evaluation. Entrepreneurship Education, as a key competence[1], is broad and multifaceted and, therefore, linked to a whole range of specific learning outcomes. Previous surveys, including 2016 *Eurydice report on Entrepreneurship Education at School in Europe*, show that entrepreneurship-related learning outcomes are still being developed in most European countries (according to the *Global entrepreneurship monitor*[2] , "*…entrepreneurship education at school is the weakest point among several factors that favor or not the development of entrepreneurship*..."). This means that, although some elements can be found in some levels of education, there is still a lack of an all-encompassing and coherent approach, including for the assessment of learning objectives.

However, TEEN FARM project, following the advice of the Report "*EntreComp into Action: get inspired, make it happen*[3]" ("..*identify the learning outcomes that suit your activity* .."), it wanted to identify Learning Outcomes, related to the target of the activity (I -VET - EQF level 3-4), and declining them according to the following scheme.

Modules*	Learning Objectives
Being an entrepreneur (mod.1)	● Being able to differentiate the "enterprise" concept as a project reality and "company" intended as an enterprise tool. ● Recognizing the definition of an entrepreneur: understanding specifically what characteristics are important for the formation of an entrepreneurial spirit and what the possible difficulties are. ● Knowing how to interpret the enterprise through the concept of multifunctionality: knowing the objectives of multifunctional agriculture, being able to identify opportunities in the combination of farmers' objectives and society's objectives. ● Knowing the concept of a business idea and its characteristics.
Creatività e innovazioni (mod.2)	• Riconoscere i propri punti di forza e debolezza. • Saper declinare le proprie conoscenze, trovando applicazioni e soluzioni creative, • Capacità relative al *problem solving*, anche nell'ambito di casi reali • Conoscere le definizioni e saper individuare le opportunità nelle diverse tipologie di innovazione (di prodotto, di processo, di marketing) • Conoscere le tipologie di innovazioni nel settore agroalimentare e nell'agribusiness

[1] https://ec.europa.eu/education/policies/school/key-competences-and-basic-skills_en

[2] Global Entrepreneurship Monitor: 2019/2020 Global Report. https://www.gemconsortium.org/report/gem-2019-2020-global-report

[3] https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-action-get-inspired-make-it-happen-user-guide-european-entrepreneurship-competence

Strategy and business models (mod.3)	• To know the definitions and objectives of strategic, operational and financial management. • To know how to orientate themselves in the planning of business activities and to know how to place the various types of management within the process. • To know the different types of strategies product-market, local, international and global. • Knowing the possible strategic business areas (cost leadership, product differentiation and niche marketing) and being able to recognise the advantages and disadvantages of possible market dynamics. • Orienting oneself among the different types of strategies and recognising the most suitable ones for different types of enterprises.
Market analysis (mod.4)	• To be familiar with the concept of vision and mission of a company and to be able to define a business idea according to these concepts. • Get to know the contents of the Business Model Canvas and develop your own business idea within it. • General knowledge of the local food market. • Orientation in the simplified analysis of competitors, in the segmentation of consumers, recognising their peculiarities and needs. • Knowing the contents of a Business Plan and being able to develop the contents schematically. • Developing critical thinking and implementing the contents learned from the different modules through the creation of a business idea.
Web Social media marketing (mod.5)	• Comprendere le diverse e nuove forme di comunicazione per il mercato e per il cliente • Comprendere i diversi approcci dell'imprenditore agricolo verso la comunicazione: forme passive e forme attive di interazione

Once the Learning Objectives were defined, and in order to identify an area of assessment, TEEN FARM was based only on the area linked to the skills[4], acquired by the students of the three partner schools after the administration of the "*Pilot Course on education to entrepreneurship in the agricultural sector* "and found by filling out tests on google forms. In each of the modules that follow, you will find tests that made the evaluation possible (the results of which are illustrated in Intellectual Output 3).

This report is the result of a project funded under the Erasmus Plus Program. The views and opinions expressed in this publication are the sole responsibility of the author and do not necessarily reflect the views of the European Commission.

[4] Evaluatation of learning outcomes divided into according to three categories: entrepreneurial attitudes (self-confidence and a sense of initiative); entrepreneurial skills (creativity, planning, financial literacy, managing resources, managing uncertainty/risk, teamwork); and entrepreneurial knowledge (how to assess opportunities, the role of entrepreneurs in society and entrepreneurial career options).


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Course on
«ENTREPRENEURSHIP
FOR NEW FARMERS»
Module n. 1
TO BE AN ENTREPRENEUR
CESAR
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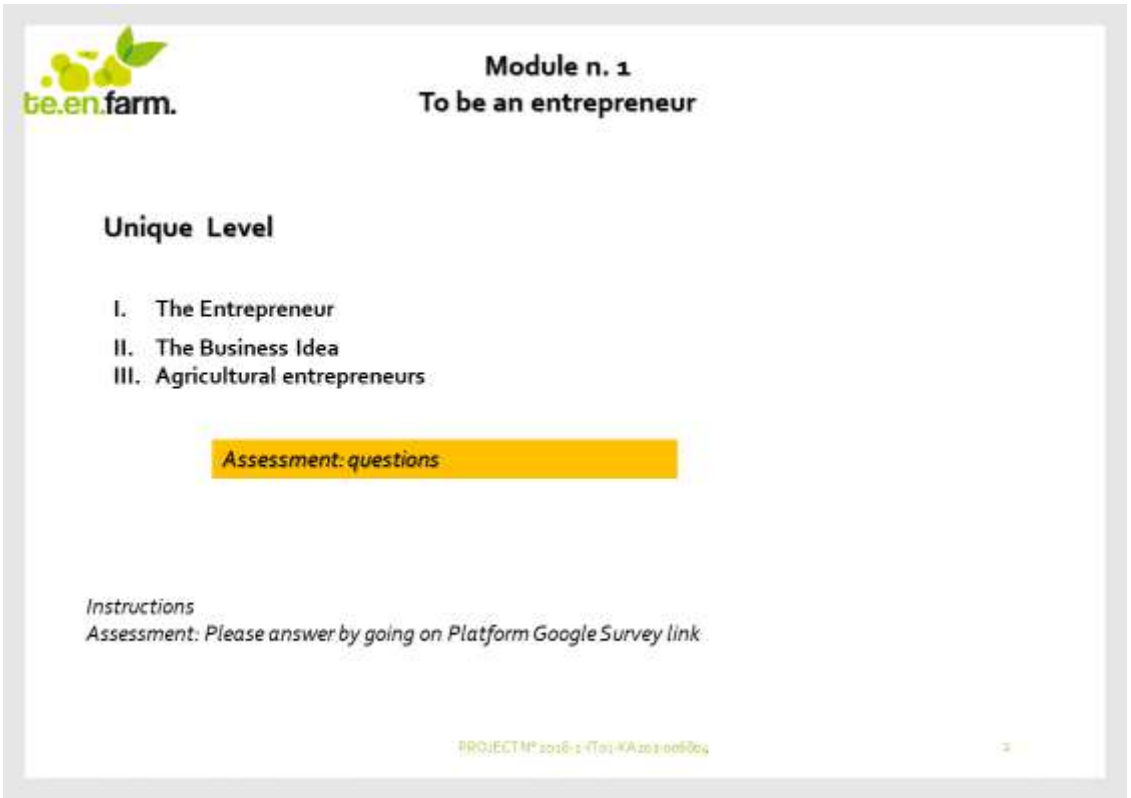
PROJECT N° 2018-1-IT01-KA202-006804
Erasmus+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Module n. 1
To be an entrepreneur
Unique Level
I. The Entrepreneur
II. The Business Idea
III. Agricultural entrepreneurs
Assessment: questions
Instructions
Assessment: Please answer by going on Platform Google Survey link
PROJECT N° 2018-1-IT01-KA202-006804

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The Entrepreneur

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I. **The Entrepreneur**
II. The Business Idea
III. Agricultural entrepreneurs

Let's start with some definition of entrepreneur

The one which creates a new business, facing the risk and uncertainty in order to make a profit and to grow by identifying opportunities and by the aggregation of resources to enable its use

(Zimmerer & Scarborough)

Entrepreneurs are innovators who use a process of changing the current situation of the existing products and services, to set up new products and new services

(www. econlib.org/library/Enc/Entrepreneurship.html)

KEY TAKEAWAYS

I. The Entrepreneur
II. The Business Idea
III. Agricultural entrepreneurs

So an entrepreneur is an individual who creates a new business, bearing most of the risks and enjoying most of the rewards. The entrepreneur is commonly seen as an innovator, a source of new ideas, goods, services, and business/or procedures

KEY WORDS

Mindset
Passion
Visualization
Innovation
Belief
Action

An overview of entrepreneurial skills

I. The Entrepreneur
II. The Business Idea
III. Agricultural entrepreneurs

This was Steve Jobs idea's.

What are the characteristics and skills needed to become entrepreneurs? Discuss about the entrecomp flowers...
What competences do you think are more important? Why?

Now you know who an entrepreneurs is !
There are five key questions you need to ask yourself...

I. **The Entrepreneur**
II. The Business Idea
III. Agricultural entrepreneurs

Why do I think my business idea is useful?

Who can my idea be useful for?

What skills do I have, why do I want to do business?

What do I want to do concretely?

In this way you are starting coming up your

Business idea...

7

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The Business Idea

The business idea

I. The Entrepreneur
II. **The Business Idea**
III. Agricultural entrepreneurs

The first step is formalizing a synthesis of the main characteristics of the entrepreneurial idea that one intends to realize

Questions to ask yourself

what is our mission?
who we are?
what do we expect from the realization of this initiative?
what needs do we want to satisfy?
Who are our customers?

An idea must be "different" from what is present on the market.
Being different can mean being innovative from the point of view of the product, or the market, or the product-market combination

Questions to be asked to evaluate the INNOVATION OF THE BUSINESS IDEA

→ How am I different from the others?

I. The Entrepreneur
II. **The Business Idea**
III. Agricultural entrepreneurs

Now you have an idea it is time to plan …

Developing the idea

To ensure that the formulation of the idea is not the result of pure creativity, but of a balanced meeting between subjective and objective factors, it is necessary for the entrepreneur to have a certain sensitivity to interpret the inputs of the external environment and to reconcile such signals between them

Questions to Ask - THE ENTITY OR THE ENTREPRENEUR GROUP

- → What is the professional profile of the entrepreneur and / or members
- → What are the work experiences of the entrepreneur and / or members
- → What are the strategic motivations
- → What are the expectations (relative to the project being formed)
- → The professional profiles of the sole entrepreneur and / or members alone are sufficient

THE BUSINESS IDEA IS SUCCESSFUL IF:

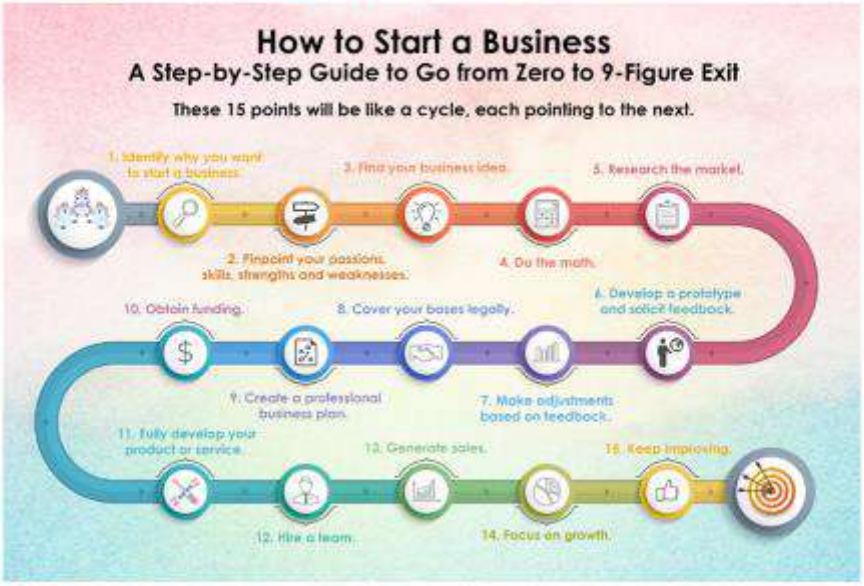
it is innovative	if it captures a change and intercepts a need expressed by the market, seizing the opportunity to do business
It is salable	if there is a potential buyer for the good / service you intend to produce, perhaps replacing it with the one currently purchased
It is competitive	If strategic choices - in the long run - are suitable for overcoming threats and taking advantage of the opportunities available
it is feasible	if the strategic choices - in the long term - are suitable to overcome the threats and to take advantage of the opportunities available
it is profitable	if the entrepreneurial initiative to be created will make it possible to earn

From the idea to the product or service

Questions to Ask - THE PRODUCT / SERVICE

- What products / services do you intend to offer?
- What are the physical characteristics of the products or how the service is delivered
- Which markets are meant to serve
- Which customers we address
- To satisfy what needs
- In which geographical area the product / service is intended to be placed
- What are the advantages of the product / service offered

Summing up



Agriculture entrepreneurs

Agriculture today

Agriculture is the most ancient economic activity of human beings, it's commonly identified as a traditional sector but agriculture embodies a strong dynamism and will have to face, within the next years, many relevant and rapid changes due to external factors that are changing even more rapidly

Agriculture is a sector playing a wider and wider role both economically and socially, a competitive, multifunctional, marked oriented, sustainable agriculture, based on quality, on knowledge, research and innovation, close to the consumer, providing job chances

https://www.youtube.com/watch?v=uAM4Si_WhDk

Let's give a look to a video prepared for the OECD Meeting of Agriculture Ministers 2016, highlighting some of the challenges and opportunities for the global agriculture sector in the future

Keyword: MULTIFUNCTIONALITY

The European model of agriculture is multi-functional by integrating the inter-related objectives of farmers and society in three main ways:

a) **Economic :** to provide consumers with secure and stable supplies of healthy quality food & non-food products and to develop the EU's competitive position on the internal and world market based on sustainable production methods;

b) **Ecological and territorial:** to safeguard and enhance the countryside and to provide environmental services valued by the public at large; to underpin the infrastructure to prevent depopulation in more remote and difficult areas;

c) **Social:** to contribute to reinforcing the economic and social cohesion Multi-functional agriculture, based on good farming practices, is therefore the most sustainable way to develop a competitive agricultural sector which also meets the wider expectations of society

New role of farmers in rural areas: let's see some examples

I. The Entrepreneur
II. The Business Idea
III. Agricultural entrepreneurs

Multifunctionality has a complex meaning including a variety of factors both economic and cultural

Restoring, preserving and enhancing ecosystems
Concern for animal welfare
Environmental protection
Short productive chains
Renewable energies
Green chemistry
Food chain organisation
Wellness services
Agro-tourist hospitality
Gastronomy
Social farming
E commerce
.....









Some entrepreneurs' stories

I. The Entrepreneur
II. The Business Idea
III. Agricultural entrepreneurs

Flying strawberries – that carry I.D.

Near central Milan Guglielmo's firm has photovoltaic solar panels heating his greenhouses where he keeps strawberries in a hydroponic lab suspended in mid-air. The produce (strawberries) is then carefully distributed throughout the city in the traditional mini-car/trike known as the "Ape". He produces jams, fruit juices, decorative plants and most importantly, his famous fruit salads and milk shakes made on the spot for curious passers-by and tourists. Quality certification and product tracing are of the highest priority using photos and QR codes that trace each individual strawberry along its production path

http://www.straberry.it/

Microalgae as a life-extending elixer

Veneto - Matteo Castioni Matteo's Spirulina and haematococcus microalgae are widely used in cosmetics and as diet supplements in low calory diets due to their being rich in minerals, proteins and natural anti-oxidants. Microalgae have recently been proven to serve as natural (E.U. approved) fertilizers and as a defence from fungi, bacteria and viruses in plants

https://www.alghitaly.it/blog/16_il-re-delle-alghe-e-matteo-castioni-di-alghitaly.html

Source: The Oscar Green Award is a prize given to young entrepreneurs in the agricultural sector by Coldiretti Giovani Impresa. The project aims at developing youth initiatives whether in agriculture or the food sector which have come onto the market thanks to the use sustainable and innovative business models.

Some entrepreneurs' stories

Kids and adults love these bread chips

Light, crunchy and in a great variety of flavours from plain to cheesy, you can help yourself to these chips even if you're watching your weight because they're light and easy to digest. That's Domenico D'ambrosio's secret of success in their long-running traditional family business. This brilliant idea came from the Altamura tradition of stripping away the bread crust from their buns which led to the "panatina" a fine extra-thin cracker made of durum wheat. This peculiar grain chip is made for all tastes, not to mention for those who have dietary demands or who are just simply watching their weight. It's as flavourful as a potato chip and can accompany your afternoon aperitif.

Bees that fight pollution

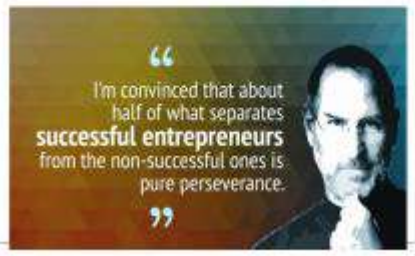
Salvatore Sorbo has put his bees and hives to good use in protecting our Earth in his "Dear Earth" project. *Dear Earth* bio-monitors the environment in the ravaged areas of the Neapolitan countryside through the innovative use of bees. In conjunction with the University of Naples and Molise beehives are transformed into biological monitoring stations, each of which can monitor up to 7 square kilometres measuring levels of pollution in the surrounding environment. The bees never complain, they feed on the local nectar, sample the water and take these back to their hives for monitoring.

Source: The Oscar Green Award is a prize given to young entrepreneurs in the agricultural sector by Coldiretti Giovani Impresa. The project aims at developing youth initiatives whether in agriculture or the food sector which have come onto the market thanks to the use sustainable and innovative business models.

An overview of new agricultural entrepreneurs skills

Some characteristics and skills needed to become entrepreneurs (not exhaustive list)

- ✓ Skills in human relations
- ✓ Ability to define objective
- ✓ Failure management
- ✓ Communication
- ✓ Want to outdo yourself
- ✓ Self-confidence calculated risk-taking
- ✓ Mental and physical energy
- ✓ Initiative
- ✓ Taking responsability
- ✓ To tolerate uncertainty
- ✓ Mental ability
- ✓ Technical skills
- ✓ Sense of numbers and money



Assessment

What Does the Word 'Entrepreneur' mean to You?

A. A person full of ideas and full of money who starts a business

B. A fearless person, focused on action and willingness to venture, surrounded with people who inspire, help, and challenge him to conquer what needs to get done

C. An innovator who creates a new business, bearing most of the risks and enjoying most of the rewards

Why is it so important to have a plan ?

A. Plan is important because it's the foundation to help you to follow your project objectives and achieve your ultimate goals. Having helps you stay focused, set goals and objectives, meet deadlines, measure success and debrief the entire project

B. Plan is useful to avoid confusion and a day-to-day business, you cant't change it because it is a literal roadmap for success

C. Organizing and planning help you get your work done accurately, avoiding costly mistakes

Multifunctional agriculture is ...

A. agriculture producing organic and biodynamic products

B. agriculture combining agricultural production and environment care with services to society: care farming, farm education, farm shops/short chain, agricultural daycare, agricultural nature management and agritourism..

C. producing multiple commodity and non-commodity goods to extend markets channels

Which sentence is right ?

A. Reality must to be adapted plan

B. Plan must to be adapted reality

C. Plan and reality must be studied together

Choose most important skills for entrepreneurs..

A. Technical skills, Failure management

B. Sense of humor and money

C. Sense of numbers and money, technical skills, failure management

Pilot course on «ENTREPRENEURSHIP FOR NEW FARMERS»

Module n° 2: «CREATIVITY AND INNOVATION»

PROJECT N° 2018-1-IT01-KA202-006804

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Module n. 2
Creativity and Innovation

Level Unique

I. Creativity

II. Innovation

III. Creative farming

IV. Innovation in agribusiness

Assessment: questions

Instructions
Assessment: Please answer by going on Platform Google Survey link

What is Creativity?

Creativity is defined as the "**development of a novel product, idea,** or **problem solution** that is of **value to the individual** and/or **the larger social group**".

Creativity can be found behind all innovations. Creativity is an attitude towards life that responds to problems in a fresh and novel way.

Creativity

Creativity is being conceptualized in various models.

The Four-C Model distinguishes four levels of creative magnitude and development (Kaufman & Beghetto, 2009).

- **mini-C creativity** consisting of the creativity inherent in learning processes; It could be a child learning to write a song.
- **little-C creativity** consisting of amateur, everyday creative activities; like creating a new recipe, teaching your dog a new trick or coming up with a new way to format a report for your company.
- **pro-C creativity** consisting of professional-level creativity; It might be someone who's composed music that is currently popular.
- **big-C creativity** consisting of eminent creativity; think Albert Einstein!

Creativity of products and Creativity of persons

I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

In terms of **products** achieved, creativity is understood as largely situation-dependent and spontaneous. "A product is creative when it is **(a) novel** and **(b) appropriate**. A novel product is original not predictable. The bigger the concept, and the more the product stimulates further work and ideas, the more the product is creative."- (Sternberg & Lubart).

Creativity of **persons** rather perceives creativity as a stable and enduring trait of individuals (Hennessey & Amabile, 2010).

CREATIVE PEOPLE

Creative people habitually:

a) **look for ways** to see problems that other people don't;
b) **take risks** that other people are afraid to take;
c) **have courage to defy** the crowd and stand up for their novel belie
d) **seek to overcome obstacles** and challenges (Sternberg, 2012).

Creativity

I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

The study of creativity of persons on the other hand relies on **experimental, case study** or **questionnaire-based** research designs.

Creativity of persons **depends on six distinct** but interrelated **resources**: **intellectual abilities** (incl. seeing problems in new ways):
knowledge (know enough about a field);
motivation (intrinsic, task-focused);
environment (supportive and rewarding for creative ideas);
a thinking style that gives preference to think in new ways
personality (incl. willingness to take sensible risks and o
obstacles) (Sternberg, 2012).

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Exercise your mind

Are you a creative thinker?

There are six eggs in the basket.

Six people each take one of the eggs

How can it be that one egg is left in the basket

Answer: The last person took the basket with the last egg still inside!

Evolution

Every problem that has been solved can be solved again in a better way.

Synthesis

Two or more existing ideas are combined into a third, new idea.

Reapplication

Look at something old in a new way.

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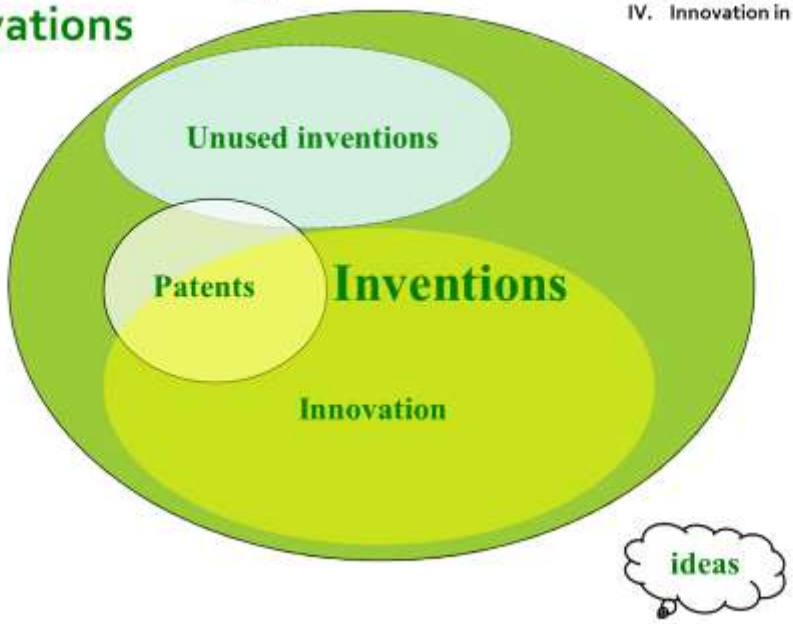
What is Innovation ?

"An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations."

Fundamental role of innovation

Innovation plays a key role in the growth of production and productivity. However, the knowledge and the understanding of processes underlying innovation is not easy because these processes themselves evolve very rapidly. In particular, it is now obvious that innovation does not only mean **product innovation**, resulting of an intense activity of Research and Development, but also (especially?) **Process innovations**, **Organizational innovations**, and **marketing innovations**.

Ideas, inventions, patents and innovations



Four types of innovation

Type of innovation	Characteristics
Product innovation	A good or service that is new or significantly improved. This includes significant improvements in technical specifications, components and materials, software in the product, user-friendliness or other functional characteristics.
Process innovation	A new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.
Marketing innovation	A new marketing method involving significant changes in product design and packaging, product placement and promotion, and/or in the pricing of goods and services.
Organisational innovation	A new organisational method involving changes in business practices, workplace organisation or external relations.

Creativity research in farming

I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

Farmers usually are immersed in a workplace that can be analyzed related to creativity of products and/or creativity of processes.

mini-C creativity consisting of the creativity inherent in learning processes at farm level for the farmer and the farming family, e.g. in **continuous contacts with consumers, other farmers,** as participant in **training courses** or when **watching TV documentaries on farming practices;**

little-C creativity consisting of everyday creative activities such as **finding spontaneous solutions** when confronting problems, **and simple trial-and-error experiments** (for ex: substituting resources, repairing, adapting);

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I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

pro-C creativity (professional level creativity), i.e. the constant **adaptation of farming practices** to seasonality, trends at the market, available labour at the farm, etc;

big-C creativity consisting of eminent creativity, that could be attributed to key persons to the development of conventional and organic farming;

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I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

A range of discussion points and questions about creativity

- How do current agricultural politics and market forces influence farmers' autonomy and self-determination?
- How do farmers' basic and advanced education, peer group interactions, product vending, consumer interaction, local community etc. promote or weaken feelings of competence?
- How can farmers' evaluation, such as in environmental or quality control systems, be shaped to confirm competence and increase intrinsic motivation rather than induce a sense of surveillance and thereby contribute to the opposite?
- How do family members, neighbors, peer farmers and the larger society value farmers' innovations and thus create a sense of connectedness?

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Creative Farming

I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

To cope with today's markets and economy, farmers are coming up with creative solutions to their problems, and they're building farms that suit their needs and the needs of their community. **Some examples..**

Chicken tractors – these lightweight structures are moveable and can be dragged across the pasture, offering the birds a chance to free-range while still providing the shelter and protection of a coop.

Urban agriculture – people are beginning to realize that farming and homesteading can take place anywhere, on any scale. Roof-top gardens and roof-top beehives are two examples of urban farming.

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Some examples

I. Creativity
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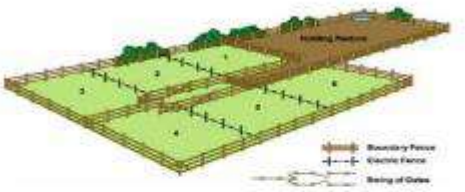
Rotational grazing – this is the process of moving livestock strategically from one paddock to another, allowing the vegetation in previously grazed pastures to regenerate.



Season extension – anything that allows the crop to be grown beyond it's typical cultivation season. This can include row covers, hoop-houses, cold-frames, mulches, and raised beds.

Vertical gardening – vertical growing of crops allows vegetable to grow upwards, therefore leaving space in your garden for other crops.

Conclusion

I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

Types of innovation in agribusiness 1/2

Business model innovation is a change in the concept of value creation. It is a process whereby a company introduces new technologies or enhancements that are designed to achieve both product differentiation and low cost.

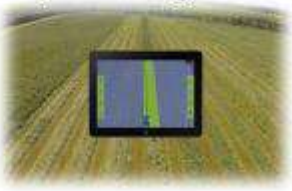
An example of such an innovation is the provision by the farmer's family of **a do-it-yourself service**. This innovation, on the one hand, shortens the supply chain and lowers implementation costs and, on the other, provides additional benefits for those interested in the proposal.

At a time when grain markets continue to strain row crop revenue potential, many farmers are taking steps to do all they can to maximize productivity and yields.

Types of innovation in agribusiness 2/2

Positional innovation is a type of marketing innovation aimed at changing how consumers perceive an organization's product offering. The Hagen Dazz Company introduces **adult-designated ice creams**. In addition to launching products on Valentine's Eve, the messages related to this proposal fundamentally point to the target market "Defining Love in a Delicious Way", "Sweet Adult Fun"

Radical innovation is based on fundamentally new knowledge and competence in the organization that introduces them. In agriculture, such innovations are relatively rare. Examples are precision agriculture, breeding and chemistry.



Incremental innovation such as putting a food product in a new packaging, small improvements in the technical means that provide benefits in terms of worker safety and comfort.

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I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

. Types of innovation in agribusiness

Product Innovation - an invention or innovation as a result of a gap in the current market. An idea to produce a product or service not currently available.
In agribusiness, product innovations are related to agricultural products and can be conditionally divided **into two groups**:

- **New agrarian products** - radical product innovations - these are products in the early stages of their life cycle, such as new and proven successful varieties and hybrids of plants, new breeds of animals; product innovation is a branded waffle coffee Cupffee

- **Improved agricultural products**- incremental (evolutionary) product innovations - the result of changes in materials or in the design of existing products. Ex: farm products with a modified design are fruits in a package with improved aesthetics or a label for the benefits of consumption.

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I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

. Types of innovation in agribusiness

Process Innovation - in agriculture, the **introduction of new plant varieties, chemicals, technical means** and **crop rotations** are typical examples of changes in the technological process, as they relate to **changes in technological operations** and **time for their realization**. Process innovation can be applied to **new, eco-friendly methods of energy supply** to the farm household, as well as **a new method of customer service**, such as self-service as a catering method, resource-saving changes in the processes involved in obtaining banking or insurance services from farmers and others.

. Types of innovation in agribusiness

Marketing innovation is associated with making significant **changes in marketing tactics, such as distribution, promotion, pricing,** and **product market positioning**. Examples of this type of innovation include the following: the use of substantially **different media or techniques for the promotion of agricultural products, the positioning for the first time of food or drink** in films or television programs, **changes in the direction of crop formation**. Some marketing innovations are also *process* (such as a change in the distribution process) or *product* (such as new product design). Particularly of marketing innovation is that it is always motivated by the desire to better respond to the needs of the target market (for example in order to increase sales, increase profitability, increase levels of satisfaction and or retain customers). Product and process innovation in agribusiness can also target other changes, such as reducing costs without changing prices or improving working conditions that do not affect product quality, etc.

Innovation in agriculture

The opportunities for **innovation in the agricultural sector are numerous**. Together with the traditional mechanical, chemical and organizational technical and technological innovations, **the agrarian entrepreneurship** applies biological innovations characteristic only for this activity.

Mechanical innovations help to increase yields and productivity. Most often they are related to the prevention of erosion and the impact of the soil cultivation technique used.

Chemical innovations contribute to improving soil productivity and increasing yields in agricultural production.

Organizational techno-technological innovations make it possible to save arable land and labor.

Which of these innovation groups will be developed and prioritized depends on the specific regional conditions. For example, if the entrepreneur seeks to save living labor and increase labor productivity, he applies for mechanical and biological innovations. It involves in the selection, testing and implementation of highly productive and disease-resistant varieties of crops and animal breeds.

In agriculture, innovative entrepreneurship is, in most cases, based on the innovation of processes in which the output is unchanged.

Organizational innovation is the introduction of a new organizational model in the business practice of the enterprise, workplace or external relationships, ie any change in the relationships of staff members within / outside the enterprise, as well as any change in the roles of those individuals who helps to achieve any economic, social or environmental goal.

Examples of organizational innovations are successful change in the system of education and training of personnel, introduction of a new quality management system, inclusion of the farmer in solidarity farming groups, inclusion in networks of centers of expertise and knowledge in agribusiness.

This type of innovation can lead to reduced administrative or transaction costs, improved job satisfaction, increased productivity and customer satisfaction, access to knowledge that is not described and cannot otherwise acquired through interaction between persons. Some innovations of this kind represent both process and marketing changes. For example, creating opportunities to shorten supply chains through new farmers' shops and online forms is an example of a combination of organizational and marketing innovation

The role of technological progress in innovation

Technological innovation in agriculture

Technological progress is transforming agriculture as it is we have known him in recent decades and he leads him to the future global economic order. Technologically, innovation in this area can be divided into three broad categories:

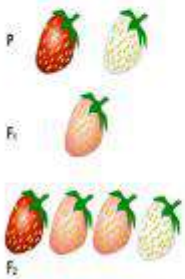
- digital
- bio-technological
- process

Area	Description	Radical innovation
Digital	Parallel development of hardware and software to create a qualitatively new agricultural system that relies of computing power and connectivity	Sensors Drones Big data Automation
Bio-technological	Scientific Techniques, this number is genetic engineering for modification of plants, animals and microorganisms	Genetic modifications and meat In vitro animal substitutes proteins
Processes	Innovative processes on the farms for overcoming the restrictions in productivity and environmental stability	Vertical farms Hydroponics and aquaponics Year-round production agriculture without tillage

I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

Summarizing in farming...

Digital Innovation

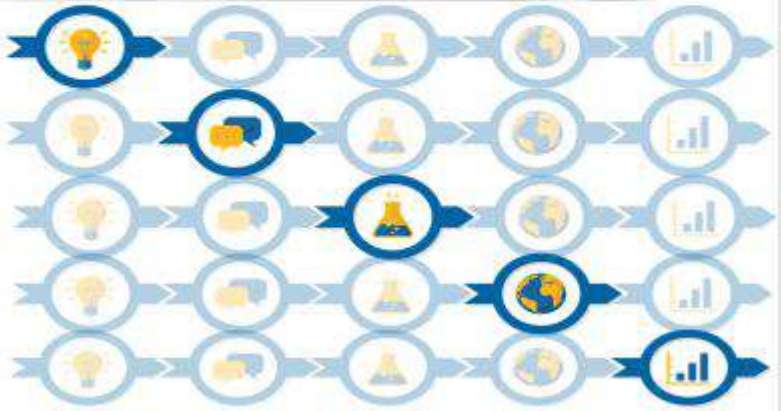


Bio-technological Innovation

Process Innovation

5 Stages of the Innovation Process

1. Idea Generation and Mobilization
2. Advocacy and Screening
3. Experimentation
4. Commercialization
5. Diffusion and Implementation



Entrepreneurial farmers' attitude towards Innovation

Introducing innovation requires decision making and decision making of actions. This assumes that the data we have is available turned into information leading to knowledge creation. The studies have identified **5 steps** to go through deciding to innovate. Each of them requires converting general information into specific information.

1. **Awareness:** Farmer knows that innovation exists, but not aware of the details. This is essentially a passive phase.
2. **Interest:** Farmer wants to get more information and asks if innovation can help him. He starts actively to look for information.
3. **Evaluation:** Farmer judges the innovation on the basis of the gathered information and trying to determine if it actually will impact on his work and how it will facilitate and improve it. This is the decisive phase.
4. **Experience / Check:** Farmer checks / tests the innovation to see if the really meets expectations, usually on a limited scale for experimental purposes. Often at this stage he uses every source of information which have some usefulness.
5. **Acceptance:** Farmer likes innovation and accepts it enthusiastically.

The time that farmers will go through the stages is individual and depends on the specific innovation, its complexity, cost and degree, which changes the current workflows.

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I. Creativity
II. Innovation
III. Creative farming
IV. Innovation in agribusiness

Types of farmers (recipients of innovation) by the speed of sustainability of innovation

Categories of recipients	Typical characteristics
Innovators	educated individuals with high resource status, a middle-aged risking
Early recipients	educated individuals with high resource status, well informed about innovation
Early majority	willingly follow others, perceive innovation as fashion
Late majority	skeptics who embrace innovation after most implementers (recipients)
Late recipients	conservatives, seniors who embrace the latest innovations and may refuse

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I. Creativity
II. Innovation
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Assessment

What is creativity and why is it important?

A. Being creative is giving life to your idea, making it worthwhile, living it
B. Managing to receive a loan
C. Ability to define a well-done Business Plan

Choose characteristics of Creative People

A. Fidelity with banks, take risks , seek to overcome obstacles
B. Look for ways, take risks , have courage to defy, seek to overcome obstacles
C. Capacity to convincing others

Choose which resources lead to creativity

A. Intellectual abilities, Budget knowledge
B. Intellectual abilities, Knowledge, Styles of thinking, Personality, Motivation, Environment
C. Personality, Motivation, Environment

Assessment

What is creativity and why is it important?

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Course on «ENTREPRENEURSHIP FOR NEW FARMERS»

Module n. 3 STRATEGY AND BUSINESS MODEL

PROJECT N° 2018-1-IT01-KA202-006804

Erasmus+

Module n. 3
Strategy and Business Plan

Unique Level

- **Business strategy** Prof. Dr. habil. Axel Poehls, University of Applied Sciences Neubrandenburg

Assessment: questions

Instructions
Assessment: Please answer by going on Platform Google Survey link

Strategic Management, Development of Business Strategies

Basic requirements:

- Clarity of the owner about the goals to be pursued
- Goals are not limited to monetary categories, i.e. profit and liquidity, but can cover a wide range of economic, cultural, political and social factors.
- Goals are derived from values and visions
- The more the goals reflect the most important values, the stronger the identification with the company's goals and finally with the strategic direction of the company.

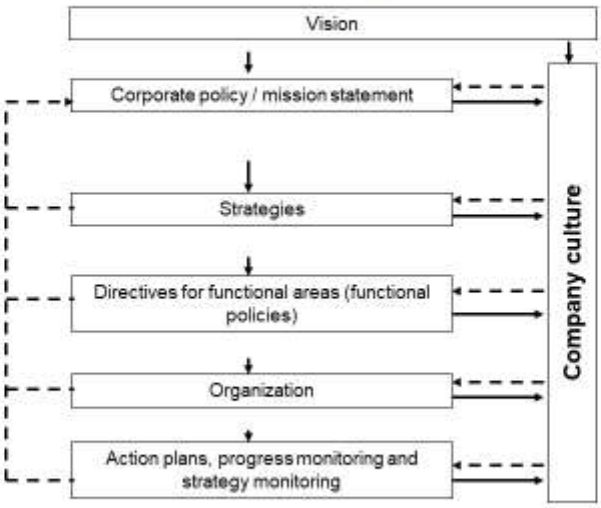
Strategic Management, Development of Business Strategies

- Strategic corporate governance requires precise **long-term goal-setting**. Precise in this case means, after weighing and critically examining feasibility and complementarity, goals in their hierarchical structure, i.e. based on overall objectives, to determine the intermediate and sub-goals.
- Developing corporate strategies means planning for the long term in advance, by which means, in which time stages, and by what means goals are to be realized in the company.
- Not a static task, but requires a **continuous review of operational results** and changing market conditions in order to make any corrections in strategic planning.

Figure 2.1: Management levels

Beldman et al. (2013) Supporting farmers in making strategic choices. http://rodica.bf.uni-lj.si/web/gov/pub/2013_Beldman_et_al_Supporting_farmers. (29.09.2019)

Vision-Mission Statement Strategy Culture

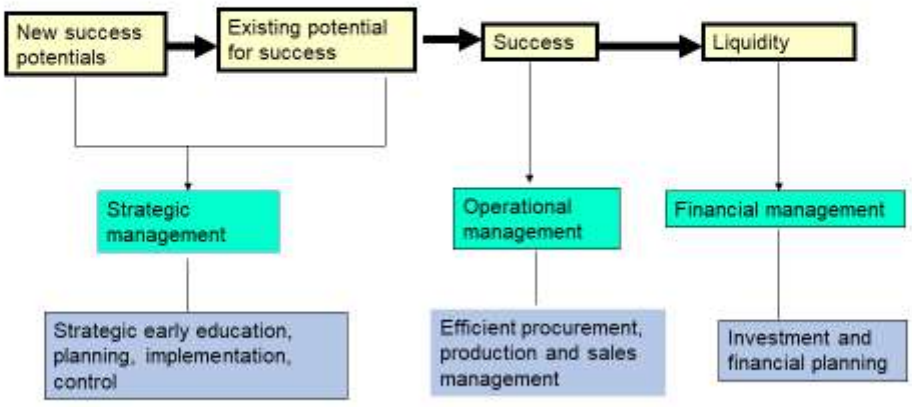


Tasks of Corporate Management

- **Strategic business management**	**Orientation basics**
o Securing future success potentials	User problems, new solution techniques, substitution time
o Securing the existing potential for success	Market positions, experience curve
o Securing structural liquidity	Capital structure, long-term financial planning
⇨ **Medium to long-term planning horizon**	
⇨ **High complexity**	
- **Operational business management**	**Orientation basics**
o Realization of ongoing success	Marketing mix, profit and loss account
o Realization of dispositive liquidity	Short-term financial planning, liquidity reserves
⇨ **Medium to long-term planning horizon**	
⇨ **Low complexity**	

Operational control variables (target system)

(after H. SATTLER, 1998)



Strategic Management, Development of Business Strategies

- However, it is usually less about correcting objectives than correcting strategic actions.
- In many agricultural companies, but obviously in too few, it is recognized that there are definitely strategic options for the development of companies to achieve specific goals.
- To systematize possible corporate strategies, the following two maps provide a classification framework (Map 1 map 2).
- This shows that the company first has to position itself in terms of its development direction.

Strategic Management, Development of Business Strategies

Corporate strategies

Growth Strategy [- Stabilization Strategy - Shrinking Strategy]

- product-market strategies; e.g.
- cost leadership
- quality leadership
- Local, national, international and global strategies
- Do-it-yourself, cooperation and acquisition strategies

MAP 1: Strategic types at the levels of the planning system (1) [Staehle, 2000]

Strategic Management, Development of Business Strategies

Business level

Business Unit Strategies:

Cost leadership; Product differentiation; Niche Strategy

Functional level strategies for:

Procurement; Production; Sales; Financing; Staff; Technology

MAP 2: Strategic types at the levels of the planning system (2) [Staehle, 2000]

Strategic Management, Development of Business Strategies

- It is important that the company, knowing its strengths and weaknesses and assessing market opportunities and risks compared to other successful agricultural companies, determines the product / market combinations for its products and services, medium and long term promise success.
- Many farms have the potential, for example, to pursue a diversification strategy, i.e. the extension of the production program to new production and service sectors to open up new sources of income
- In Germany, for example, farmers earn 10% of their income from the production of energy (wind, solar, biogas).

Strategic Management, Development of Business Strategies

- Company and market analyzes are the most important basis and prerequisite for the development of strategies and strategic controlling.
- The possible strategic orientations can be found, for example, in the Ansoff product / market matrix

		Markets	
		known	new
Products	known	market penetration	market development
	new	product development	diversification

Table: Product / market matrix (Ansoff)

Strategic Management, Development of Business Strategies

Analytical methods whose results are used for the development of corporate strategies in agricultural enterprises:

- SWOT (Strength / Weakness / Opportunity / Risk Analysis)
- Competitor analysis
- Analysis of the industry structure
- Product Life Cycle Analysis
- Potential and gap analysis
- Experience curve analysis
- Portfolio methods
- Scenario methods

Strategic Management, Development of Business Strategies

- **Strategic management** means leadership across the organization's individual organizational units at the executive level.
- **Operational management** means formulating goals and measures for the individual organizational units of the company, which are derived from the goals of the corporate strategies.
- Bank analysis indicates that executives in farms obviously have shortcomings in strategic thinking and action

Strategic Management, Development of Business Strategies

- The differentiation and integration of **Strategic and Operational Corporate Management** is a way of better analyzing and understanding the complex relationships in the company for the planned corporate development and the determined implementation of corporate goals.
- They help a work-based organization to link structures and strategies in such a way that a certain degree of security can be achieved in the coordinated action of the management staff.
- Uncertainties of the future development of the markets remain just as exist as imponderables in the enterprise development. In this respect, strategic corporate governance ostensibly should be understood as a specific way of thinking and not as a collection of methods and concepts!

Assessment

Strategic Management is when you...

A. You set short term goals
B. You set long-term goals
C. You set short and long-term goals

Which is the first level of Management reached normally?

A. Tactical
B. Strategic
C. Operational

Choose correct definition of Strategic Management

A. Leadership across the organization's individual organizational units
B. Capacity of formulating goals and measures
C. Capacity to obtain a loan

Choose correct definition of Operational Management

A. Capacity to do by yourself all steps of your production/service
B. Leadership across the organization's individual organizational units
C. Capacity of formulating goals and measures

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Module n. 4
Market Analysis and Marketing Plan

Level 1: Introduction

I. General information
II. Many analysis to do..
III. Business Canvas Model
IV. Business Plan

Assessment: questions

Level 2: Models and Maps (Pest, Porter, SWOT)

Assessment: questions

Instructions
Level 1: basic level of information to know for Teen Farm I VET students
Level 2: upgrade level for in depth
Assessment: Please answer by going on Platform Google Survey link

European agro-food market

11 million farms

300 000 enterprises in the food and drink industry

2.8 million enterprises within the food distribution and food service industry

500 million consumers

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....farmer is here...

I. General information
II. Many analysis to do..
III. Business Canvas Model
IV. Business Plan

MARKET ANALYSIS - Key elements

- How has it been the evolution and growth of the market?
- Stage of the Market Lifecycle
- Demand satisfaction degree?
- Market dimension
- What degree of concentration or geographical spread the market has?
- What degree of homogeneity does the market have?
- Which is the degree of product penetration in the market?
- The degree of penetration difficulty in the market?
- Costs and prices evolution ?

Each entreprise can be easily provided by a huge amount of data but which are the only functional information suitable to its own business canvas?

How to go from big data to smart data?

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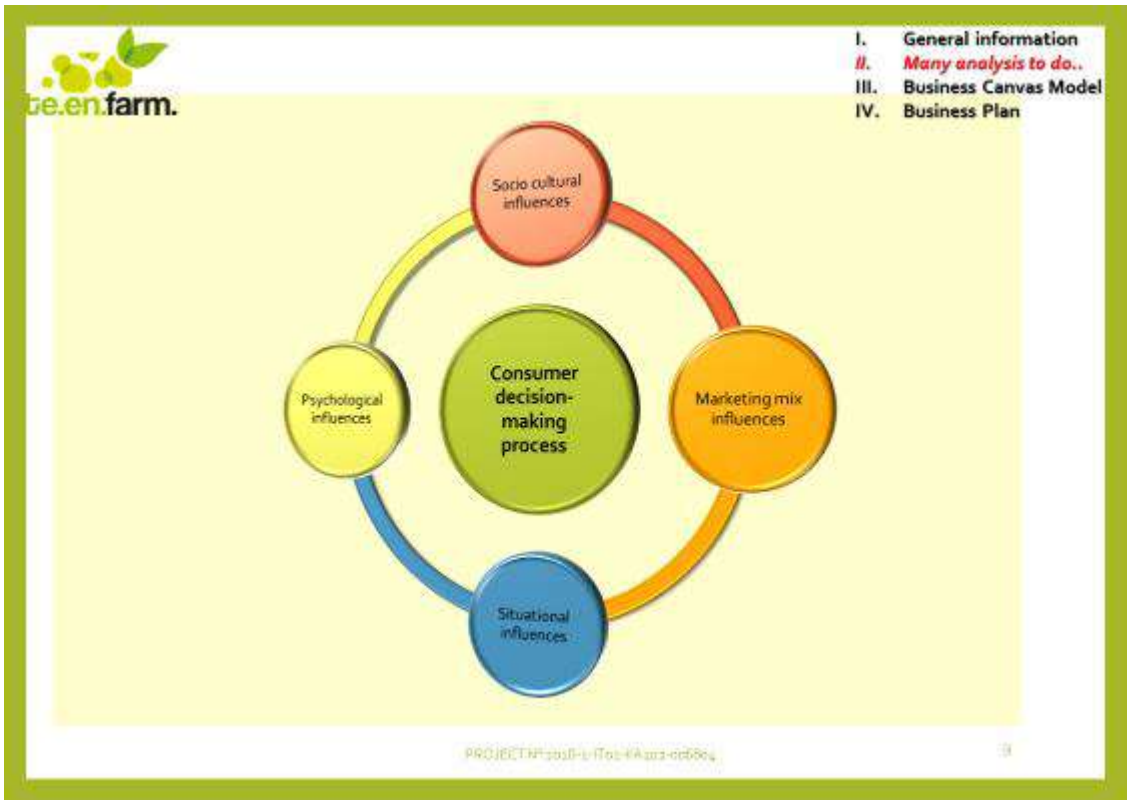
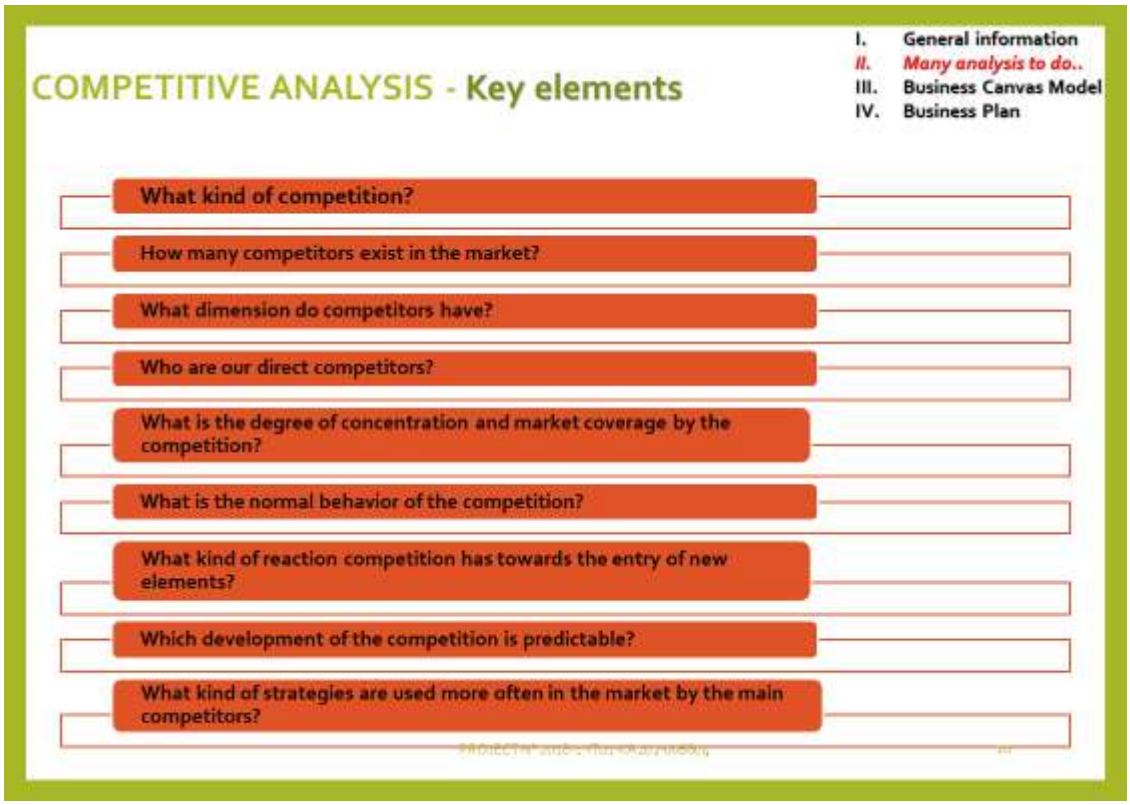
the main actor is.....
the **consumer**

CONSUMER ANALYSIS - Key elements

- Who is our customer? How can he be characterized?
- Behavior or socio-psychological characteristics?
- Who is buying?
- Who influences the purchase?
- What is the frequency of consumption and/or purchase?
- What needs, interests, desires and tastes satisfy?
- What parameters of choice and preference the buyer uses ?
- What kind of purchasing behavior the consumer/buyer has?
- What's the dimension of the consumer/buyer?


I. General information
II. Many analysis to do..
III. Business Canvas Model
IV. Business Plan
Socio cultural influences
Psychological influences
Consumer decision-making process
Marketing mix influences
Situational influences


I. General information
II. Many analysis to do..
III. Business Canvas Model
IV. Business Plan
COMPETITIVE ANALYSIS - Key elements
What kind of competition?
How many competitors exist in the market?
What dimension do competitors have?
Who are our direct competitors?
What is the degree of concentration and market coverage by the competition?
What is the normal behavior of the competition?
What kind of reaction competition has towards the entry of new elements?
Which development of the competition is predictable?
What kind of strategies are used more often in the market by the main competitors?

BUSINESS CANVAS MODELS HOW TO UNDERSTAND OUR CUSTOMERS

What do our customers need to solve their problems and how can we help them?

Which are the customers wishes and how can we help them to be up to their expectations?

Which is the best way to reach them?

How can we best adapt to their abits?

What kind of relationship do they expect we are going to establish?

For which worths are they ready to pay for?

I. General information
II. Many analysis to do..
III. Business Canvas Model
IV. Business Plan

5 STAGES IN THE CANVAS DESIGN

TO MOBILIZE

To prepare a design plan of a succesfull business model

LAY THE GROUND WORK

Put together all the elements for a succesfull business model Describe the reasons behind it

TOOLS

Business Model Canvas

TO UNDERSTAND

To look for and to analyze the main elements of business canvas

IMMERSION

Too plunge into a model business canvas , fundamental knoledges related to customers , to technology , to the environment. To collect the information, to interiew the experts, to study the potential customers to identify needs and problems

TOOLS

Business Model Canvas
Customer analysis
Value proposition canvas
Visual thinking

TO PLAN

To test and produce different opinions as regards business canvas and select the best

RESEARCH

To trasform the ideas and information in the previous stages into model canvas prototypes that can be tested and investigated. After an intense surveyselect the more suitable model canvas

TOOLS

Business Model Canvas
Visual thinking
Prototyping

TO IMPLEMENT

To implement on-site model canvas prototype

RUNNING

To implement the project of the suitable model

TOOLS

Business Model Canvas
Visual thinking
Value proposition canvas

TO MANAGE

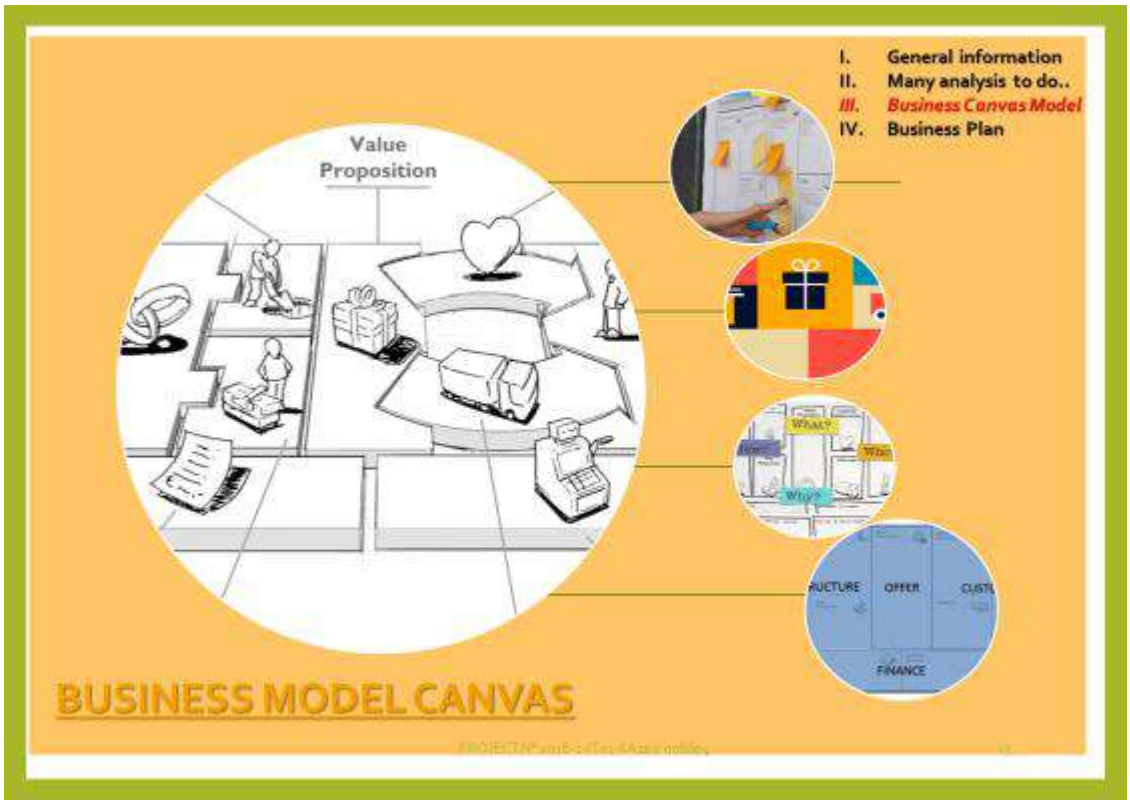
To fit and modify business model in reply to market reaction

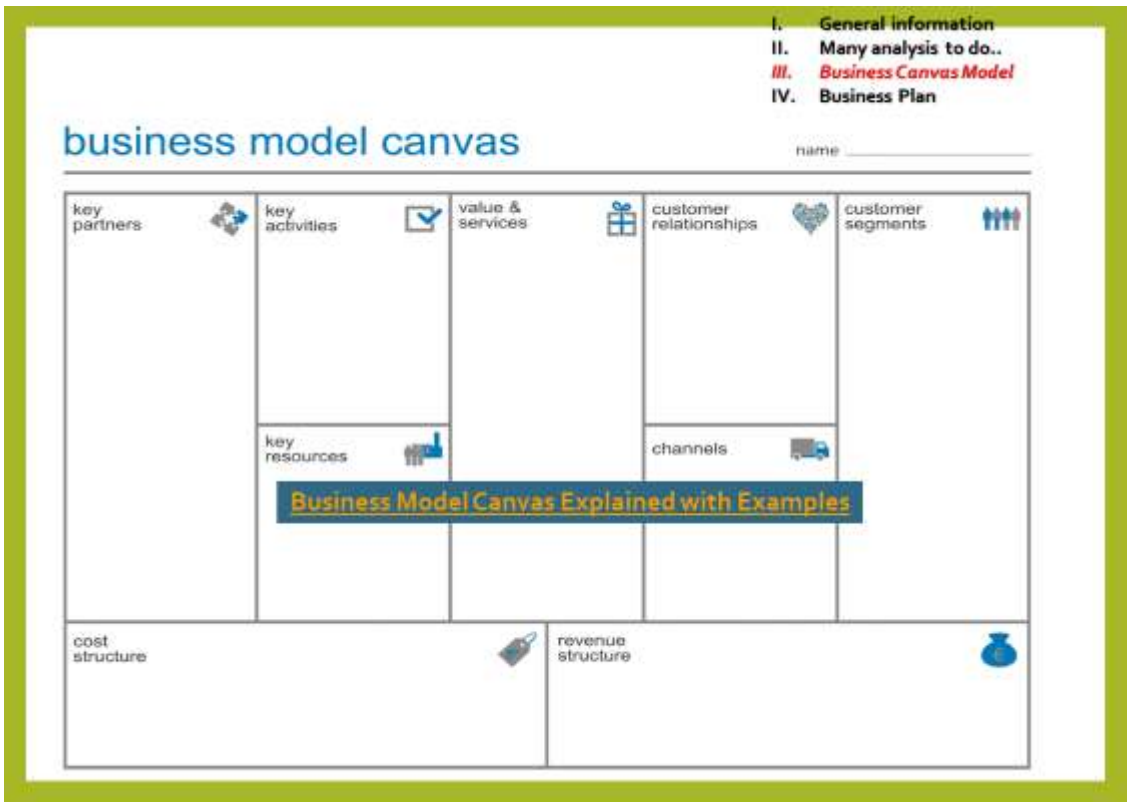
DEVELOPMENT

To arrange the management structure to supervise, evaluate, adapt and transform your business canvas all the time

TOOLS

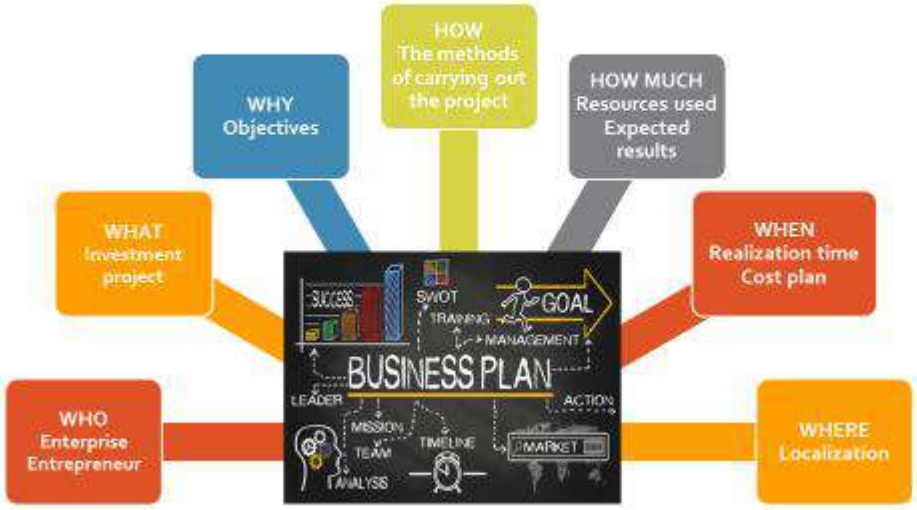
Business Model Canvas
Visual thinking
Value proposition canvas


I. General information
II. Many analysis to do..
III. Business Canvas Model
IV. Business Plan
Value Proposition
BUSINESS MODEL CANVAS


I. General information
II. Many analysis to do..
III. Business Canvas Model
IV. Business Plan
business model canvas
name
key partners
key activities
value & services
customer relationships
customer segments
key resources
channels
Business Model Canvas Explained with Examples
cost structure
revenue structure

BUSINESS PLAN ANSWERS to do..

I. General information
II. Many analysis to do..
III. Business Canvas Model
IV. Business Plan



BUSINESS PLAN: when to use

I. General information
II. Many analysis to do..
III. Business Canvas Model
IV. Business Plan

Assessment

How many consumers in food industry in EU are there?

A. Up to 300 millions
B. Up to 500 millions
C. Less than 280 millions

What is not a phase of a product's life cycle?

A. Introduction
B. Decline
C. Distribution

In the study of competition it is important to know

A. Production costs of the main competitors
B. Strategy used by the main competitors

Assessment

In consumer analysis it is not important to know

A. The person who buys
B. The subject that influences
C. The subject who delivers

Consumer purchase process is not affected by

A. Psychological and situational influences
B. Socio-cultural and marketing mix influences
C. Psychological and family

Business Model Canvas definition is

A. A dynamic representation of business
B. A tool to understand also customer needs
C. A tool to understand only customer needs

LEVEL 2: *upgrade level for in depth*

PEST MODEL

Highlight factors which influence a sector on cultural political economical social and technological front - **Case History: Winery evaluating start up of new production**

POLITICS

More emphasis on our sector whose strategic importance is increasing
Greater stringency and control
Restraint law on alcohol consumption
Increasing of sustainability measures
Planting rights legislation

ECONOMY

General reduction in the consumption
Fragmentation of the offer and difficulty inreaching critical mass
GDO and web increasing role
Financial matters encouraged by time to market lenght
Enhanced distinction between spending power and purchaising behaviou

SOCIETY and CULTURE

Wine reduce consumption
Consumer's trend
Centralità della questione ambientale
Environmental matter central role
Social networks increasing role
Low socializing aggregation
New influencers and specializing press

TECHNOLOGY

Ever more advanced winery and vine technologies
Use of smartphone tablet and other eans of instant communication
Web and social network role
Ruolo del web e dei social network

Porter Model: COMPETITIVE FORCES AT WORK

Model points out forces which affect a competitive system. These is established by the strenght and power carried out by customers, suppliers, new partners and replacement product- **Case History: Winery evaluating start up of new production**

SWOT ANALYSIS

Model points out strenghts, weaknesses, opportunities and threats

Case History: Winery evaluating start up of new production

INTERNAL ORIGIN (attributes of the organization)

STRENGHTS

Innovative product
Appreciation of the new product
Positive contribution of experiential marketing
Brand support
Possibility of savings by turning to traditional suppliers

WEAKNESSES

Increase labels = offer's fragmentation
Financial burden due to increased marketing expenses for the promotion of new products
Difficulty communicating new products
Difficulty in reaching reliable quality standards in first years of the harvest

EXTERNAL ORIGIN (attributes of the organization)

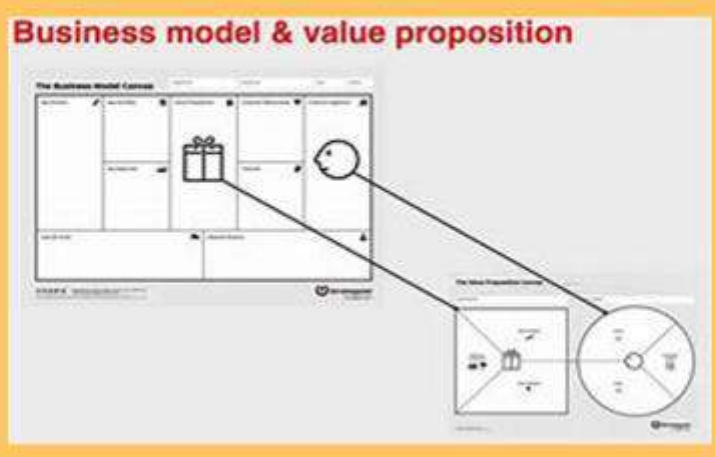
OPPORTUNITIES

Privileged insertion of new products in already acquired markets
Consolidate relationships with distributors / importers Increase in overall turnover
Value impact of the company brand on new products

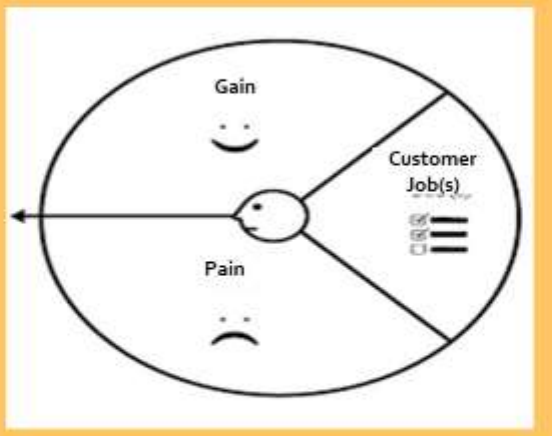
THREATS

Range increase perceived as market dispersion of value
Investments that take resources away from parent company
Offer fragmentation, weaker sales force
Regulatory restrictions that lengthen the time to market

Business model & value proposition



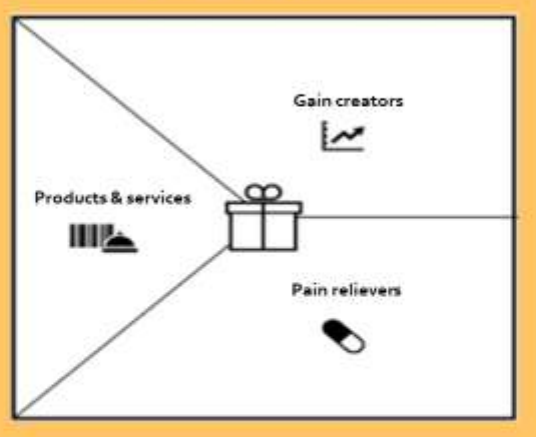
CUSTOMER MAP



Precisely define your customer profiles

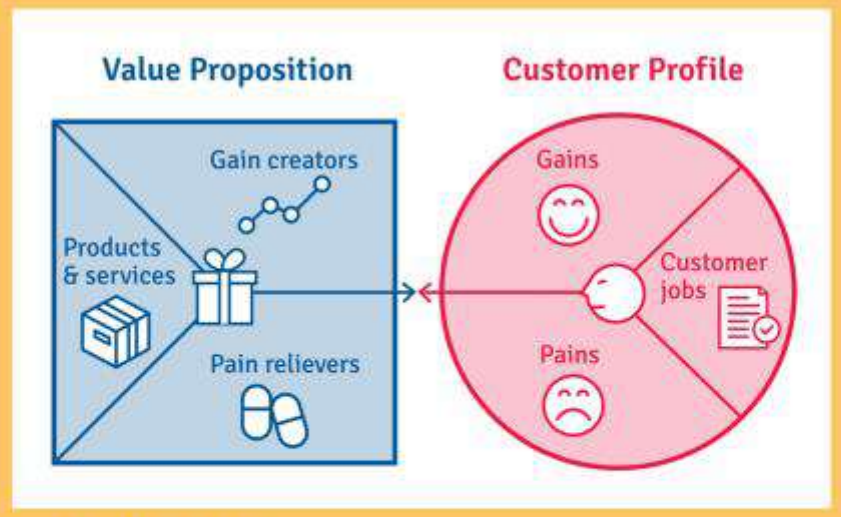
Identify your customer's major Jobs-to-be-done, the pains they face when trying to accomplish their Jobs-to-be-done and the gains they perceive by getting their jobs done.

VALUE MAP



Visualize the value you create

Define the most important components of your offering, how you relieve pain and create gains for your customers.



Achieve Product-Market fit

Adjust your Value Proposition based on the insights you gained from customer evidence and achieve Product-Market fit.

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IF ALL ABOVE MENTIONED THINGS ARE WELL DONE, THAT'S THE RESULT

CONSUMER

Purchase repetition

Cumulated Satisfaction

Value over time

SATISFACTION

CONFIDENCE

LOYALTY

FARMER

Assessment

Porter's forces are for analysis...

A - Of the market

B - Of the consumer

C - Of the competition

Which are the internal factors in the SWOT analysis?

A - Strength and weakness

B - Strength and threats

C - Opportunities and threats


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Course on «ENTREPRENEURSHIP FOR NEW FARMERS»
Module n° 5
«WEB MARKETING AND SOCIAL MEDIA COMMUNICATION»
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Module n. 5
Web marketing and social media communication
Level 1
1. What is web marketing
2. Web marketing benefits
3. Focus on Social media communication
Assessment: questions
Level 2
1. Focus on web marketing and social media tools
Assessment: questions
Instructions
Level 1: basic level of information to know for Teen Farm I VET students
Level 2: upgrade level for in depth
Assessment: Please answer by going on Platform Google Survey link

Level 1

1. What is web marketing

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1. What is web marketing

Web marketing is the use of a set of *unconventional tools, techniques and marketing methods** used to promote a brand and / or products and services **through the internet.**

*NB: **Vs *conventional*** tools: newspapers, radio television, direct mail, billboards, brochure

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1. What is web marketing

Web marketing supports, doesn't replace conventional tools.
INTEGRATION of different tools/channels is the key for success!

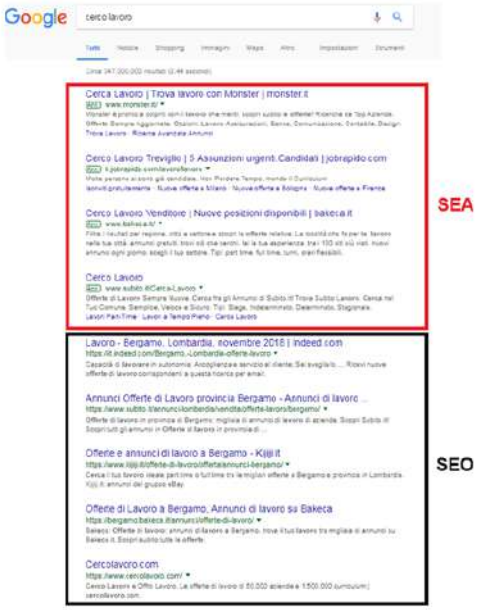
The purpose of web marketing is to attract potential customers and turn them into satisfied customers

Examples..

Display Advertising: banner advertisements, generally in websites where farmers' buyers are likely to visit.

Search Engine Advertising SEA: It is a paid marketing model to receive preferential ranking in a list of search results.

Search Engine Optimization SEO
A free and organic way for companies to improve their visibility on search engines.



1. What is web marketing

Social Media Marketing – It is the use of sites like Facebook and Twitter to connect with customers. Creating a *company profile* and engaging on social media has developed many small companies into thriving powerhouses.

Email Marketing – Creating emails about your product or service and then sending them to a base of prospects is one of the most widely used forms of web marketing. Email marketing is inexpensive and can be highly targeted.

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1. What is web marketing

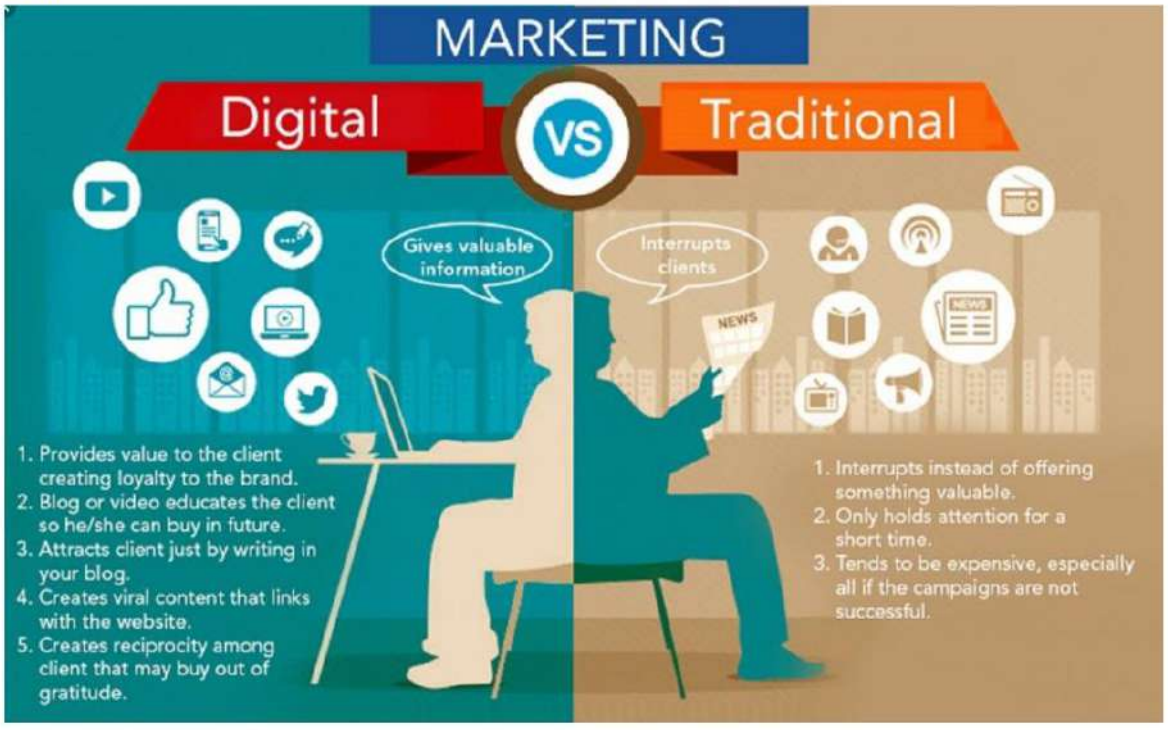
Content marketing
"**Content is king**": It's a strategic marketing approach focused on creating and distributing valuable, relevant, and consistent content to attract and retain a clearly defined audience — and, ultimately, to drive profitable customer action.

Referral Marketing – Using internet channels to encourage consumers to recommend products to their friends and families.

Affiliate Marketing – Working with other businesses to make it easier for consumers to shop for products online.

Video Marketing – Using web videos for promotional purposes.

2. Web marketing benefits



We spend more and more time on the internet, on search engines, on mobile and on websites.

Consumers will make their decisions more and more online.

Web marketing allows a business growth:

- Web marketing is in general **LESS EXPENSIVE** than a promotion via traditional media such as TV, radio, print media
- Web marketing is **FOCUSED:** it allows to target customers precisely not only on the basis of demographic and emotional characteristics, (interests, values, personal characteristics, etc.)
- Web marketing is **EASY TO ADAPT AND EDIT**: Advertising, banner ads, or other online campaigns can be tweaked and revised quickly. With preferences changing constantly, this is a big benefit.

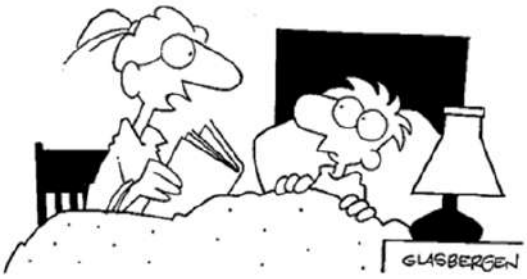
2. Web marketing benefits

- **Web marketing is MEASURABLE**: You can know how many visitors have clicked on a banner, which pages they have visited, how long they have been there and much more. So, entrepreneur can measure the Return On Investment (**ROI**) of its promotional campaign

- Web marketing allows to **REACH A BIGGER CONSUMERS' NUMBER:** traditional media have a localized distribution while internet marketing has a global spread. Customers not reached by traditional media can thus show interest in visiting a site and becoming customers.

2. Web marketing benefits

MOREOVER...
Web marketing builds RELATIONSHIPS



"Romeo and Juliet met online in a chat room. But their relationship ended tragically when Juliet's hard drive died."

Web marketing allows entrepreneur to create consumer confidence in their products and services and strengthen its brand **(BRAND AWARENESS)**

3. Focus on social media communication

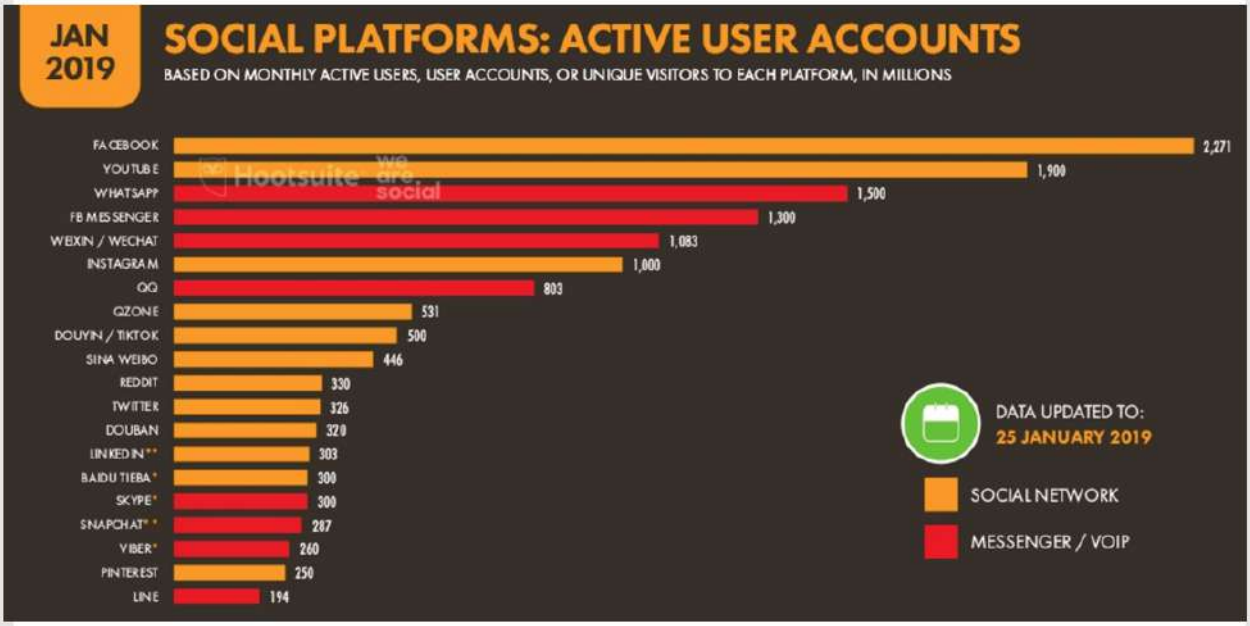
Social media marketing refers to the process of gaining traffic or attention through **social media** sites.

It is a form of internet marketing that exploits the ability of social media to generate interaction and social sharing in order to increase the visibility and notoriety of a brand.

It includes activities such as the promotion / sale of particular goods and services, or of themselves (Personal Branding), the generation of new business contacts (leads) and the increase in traffic to a brand's website.

Most useful Social Media platforms for marketing:

- Facebook
- Instagram
- Linkedin
- YouTube
- Twitter



3. Focus on social media

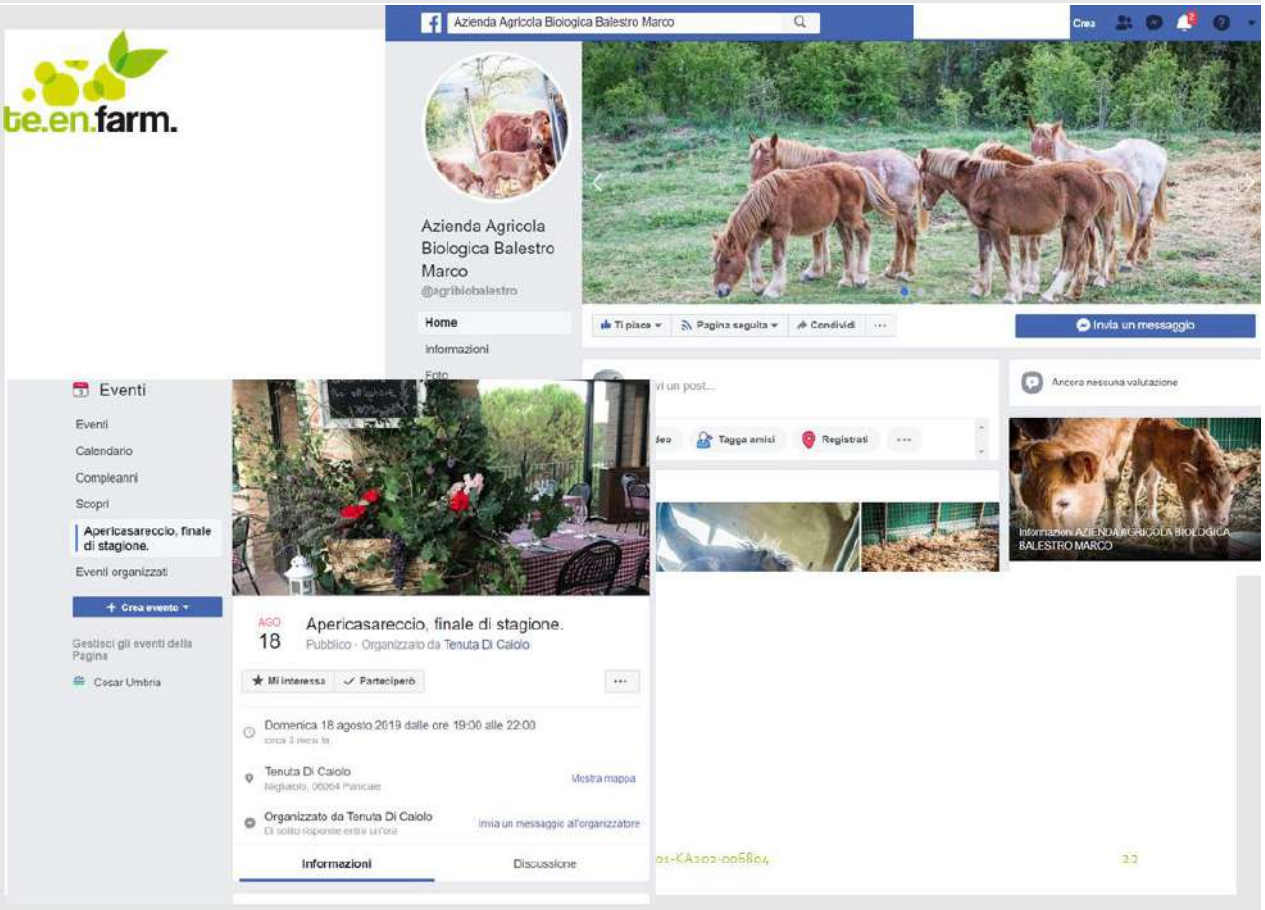
FACEBOOK

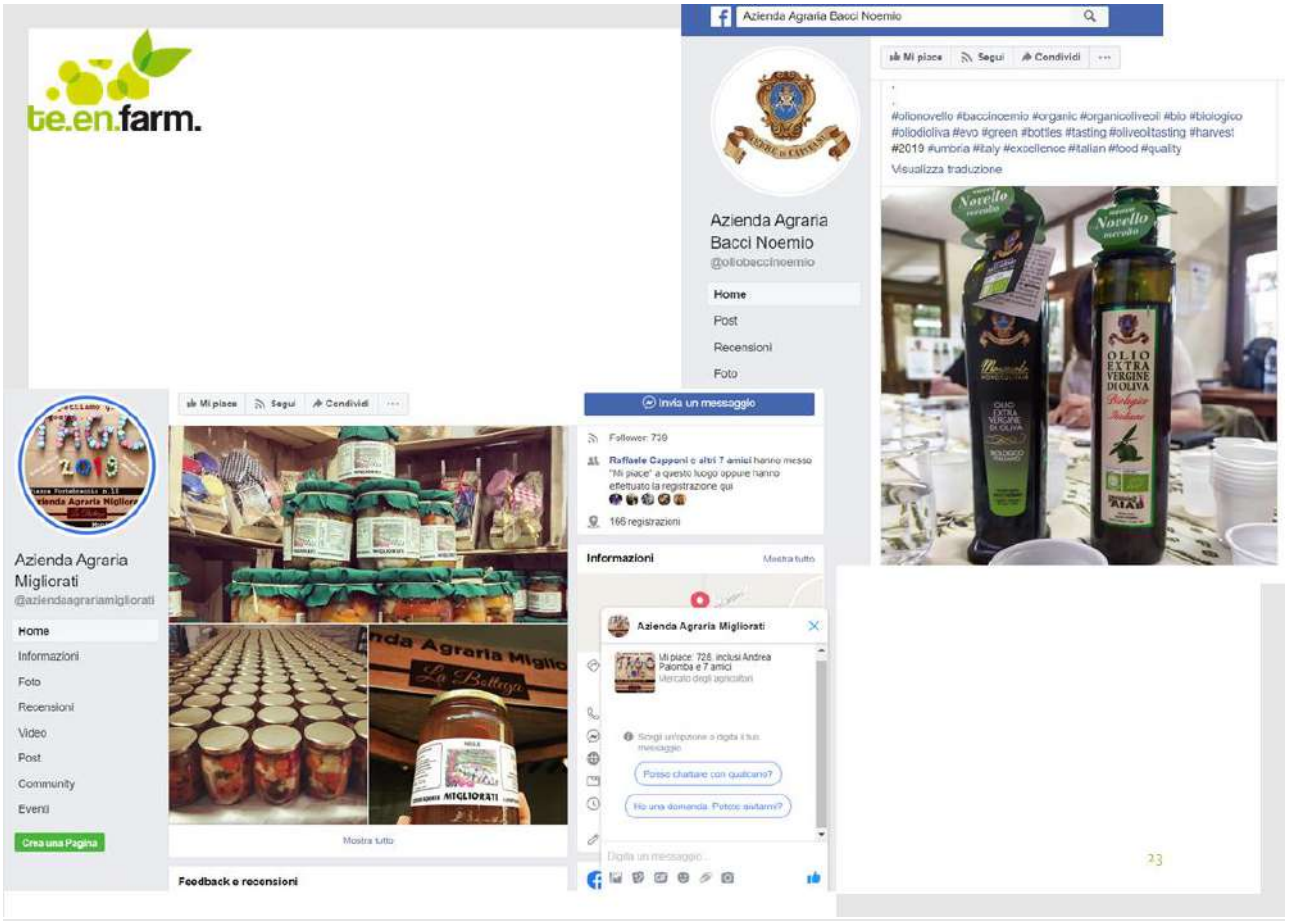
It is one of the largest social networks worldwide. With this social platform it is possible to identify precisely your target audience, create engagement starting from Facebook Groups, easily implement real advertising campaigns. The ability to integrate content in various formats into Facebook is endless and recently it is also possible by clicking on a special button to integrate Instagram content

INSTAGRAM

It is a photo sharing application for iPhone, Android and Windows platforms. Instagram stories are at the center of Instagram social media marketing. They are a way to share photos and videos with your followers that will no longer be visible after 24 hours.

On Instagram it is possible to post a "shoppable post" which includes a special tag that links the objects of the photo directly to the corresponding e-commerce.

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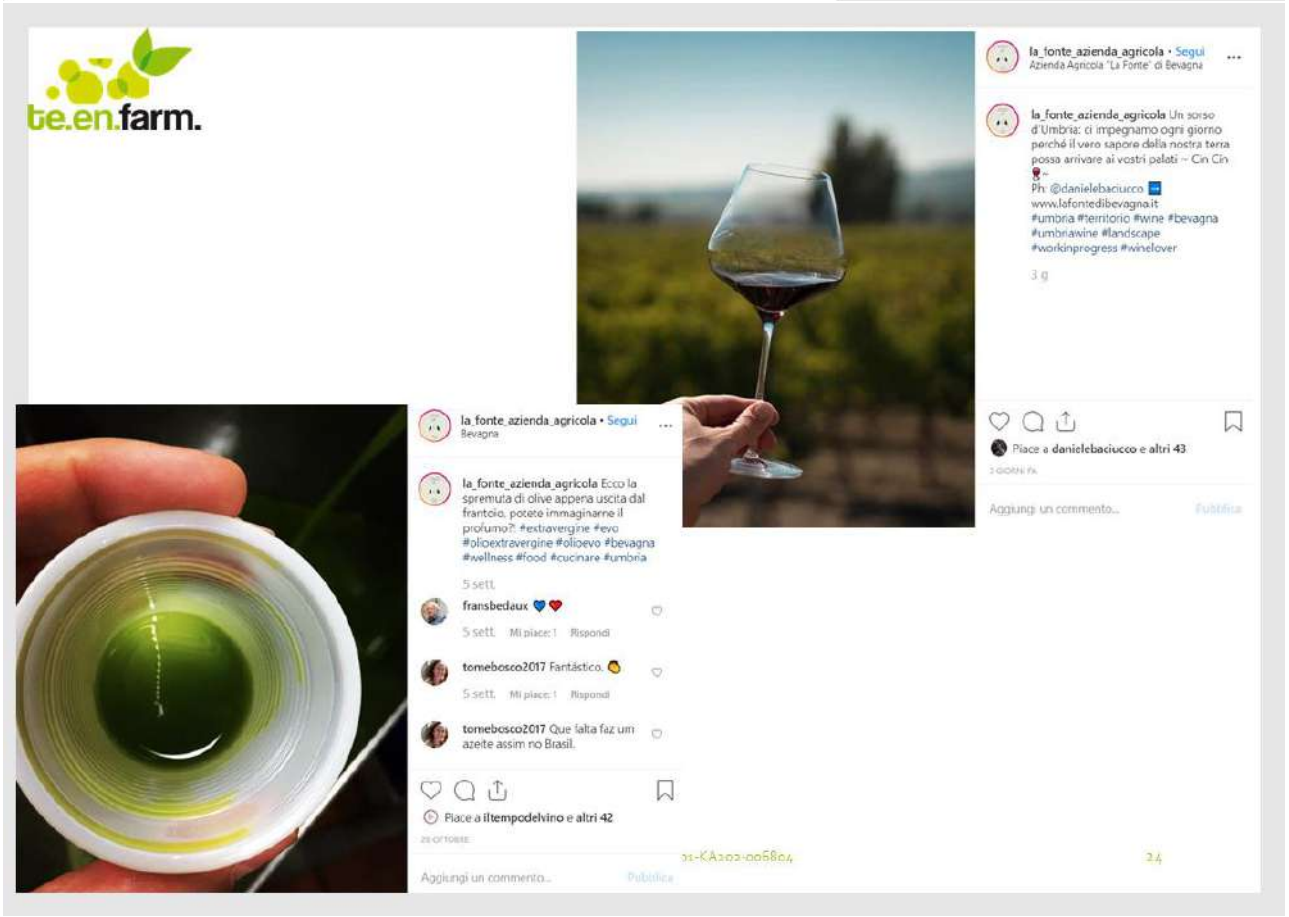
Azienda Agraria Bacci Noemio
Mi piace
Segui
Condividi
Azienda Agraria Bacci Noemio
@oliobaccinoemio
Home
Post
Recensioni
Foto
#olionovello #baccinoemio #organic #organicoliveoil #bio #biologico #oliodioliva #evo #green #bottles #tasting #oliveoiltasting #harvest #2019 #umbria #italy #excellence #italian #food #quality
Visualizza traduzione
Novello
OLIO EXTRA VERGINE DI OLIVA
Azienda Agraria Migliorati
@aziendaagrariamigliorati
Home
Informazioni
Foto
Recensioni
Video
Post
Community
Eventi
Crea una Pagina
Mi piace
Segui
Condividi
Mostra tutto
Feedback e recensioni
Invia un messaggio
Follower: 739
Raffaele Capponi e altri 7 amici hanno messo "Mi piace" a questo luogo oppure hanno effettuato la registrazione qui
166 registrazioni
Informazioni
Mostra tutto
Azienda Agraria Migliorati
Mi piace: 726, inclusi Andrea Palomba e 7 amici
Mercato degli agricoltori
Scegli un'opzione o digita il tuo messaggio
Posso chiamare con qualcuno?
Ho una domanda. Potete aiutarmi?
Digita un messaggio...
La Bottega
MIGLIORATI
23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la_fonte_azienda_agricola • Segui
Azienda Agricola "La Fonte" di Bevagna
la_fonte_azienda_agricola Un sorso d'Umbria: ci impegnamo ogni giorno perché il vero sapore della nostra terra possa arrivare ai vostri palati ~ Cin Cin ~
Ph: @danielebaciucco
www.lafontedibevagna.it
#umbria #territorio #wine #bevagna #umbriawine #landscape #workinprogress #winelover
3 g
Piace a danielebaciucco e altri 43
3 GIORNI FA
Aggiungi un commento...
Pubblica
la_fonte_azienda_agricola • Segui
Bevagna
la_fonte_azienda_agricola Ecco la spremuta di olive appena uscita dal frantoio, potete immaginarne il profumo?! #extravergine #evo #olioextravergine #olioevo #bevagna #wellness #food #cucinare #umbria
5 sett.
fransbedaux
5 sett. Mi piace: 1 Rispondi
tomebosco2017 Fantástico.
5 sett. Mi piace: 1 Rispondi
tomebosco2017 Que falta faz um azeite assim no Brasil.
Piace a iltempodelvino e altri 42
25 OTTOBRE
Aggiungi un commento...
Pubblica
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24

YouTube

It is a network where users publish video blogs, video ads and videos of various genres.
It is ideal for sharing medium-long term content.

TWITTER

It's a service that allows users to send 280 characters quickly via "Tweets". These are characterized by the presence in the text of the hashtag (a keyword preceded by the hash symbol #).
Twitter marketing is often used by companies to maintain contact with their customers, to promote their brands, products or services, and to get information from consumers.

LinkedIn

It is one of the best professional social platforms to connect with its collaborators' network (Linkedin groups) or with potential future employers.

Some Youtube Videos

Awesome Greenhouse Bell Pepper Farming: Youtube video to show how is the production

Go to the video

Go to the video

Documentary on young farmers winning "New Success Factors" competition in 2015

How to Grow Tomatoes in a Greenhouse

Go to the video

Assessment: questions

Questions

Web marketing is:

a) A set of unconventional tools and technics, using internet
b) A set of unconventional and conventional tools and technics, using internet and other traditional channels
c) An e-commerce web site

The purpose of web marketing is to:

a) Sell not-perishable products
b) Provide post-sales assistance
c) Attract people and turn them into satisfied customers

SEO is :

a) A free way to improve visibility on searh engines
b) A free way to gain the first place in a list of search results
c) A free way to sent promotional mails to customers

Questions

SEA means:

a) Search Engine Action
b) Search Engine Advertising
c) Search Engine Application

One of the benefit of web marketing is:

a) It is totally free of charge
b) It is easy to adapt and edit
c) It can completely replace traditional marketing tools

Most popular social media are:

a) Facebook and Google
b) Google and Twitter
c) Facebook and Youtube

Level 2

1. Focus on web marketing tools and social media communication

Display advertising

Display Advertising is a form of online advertising.
Is uses paid spaces within a content of interest of our potential customers, in which to promote a product / service. The most common formats it the

The banner aims to capture the attention of surfers who visit the contents of those pages and push them to interact with the ad itself. The banner can include different animation modes: GIF or JPEG images, flash animations, videos, etc.

The value of an advertising space take into account 2 kind of parameters:

1. **"Physical" parameters"**, such as: the adv positioning within the website; the time the online announcement remains; the dimensions; the format; the potential audience of the site

2. **KPI Key Performance Indicator**, that are based on the results actually obtained, that can be measured through specific indexes (for example, the click-through rate-CTR, the open rate) and volumes (visits, clicks, unique visitors, search volumes, sales, subscriptions, etc.)

NB: KPI are differente according to the adv purpose:

- For awareness campaign, we must consider index such as contacts, cost per contact or Cost per mille (CPM);
- For «direct response», we must consider CPC (cost per click), CPL (cost per lead) or CPA (cost per action).

Search Engine Advertising SEA

It is a paid marketing model to receive preferential ranking in a list of search results.

Parameters to evaluate the effectiveness of a SEA action:

- CPC (cost-per-click): is the part where the advertiser indicates how much he is willing to spend to get a click for a web page
- CPA (cost-per-acquisition): it calculates the acquisition cost, ie how much budget it was necessary to invest in order to obtain a particular marketing action (for example, signing up for a newsletter)
- CPM (cost-per-thousand): reflects the cost of obtaining 1,000 views

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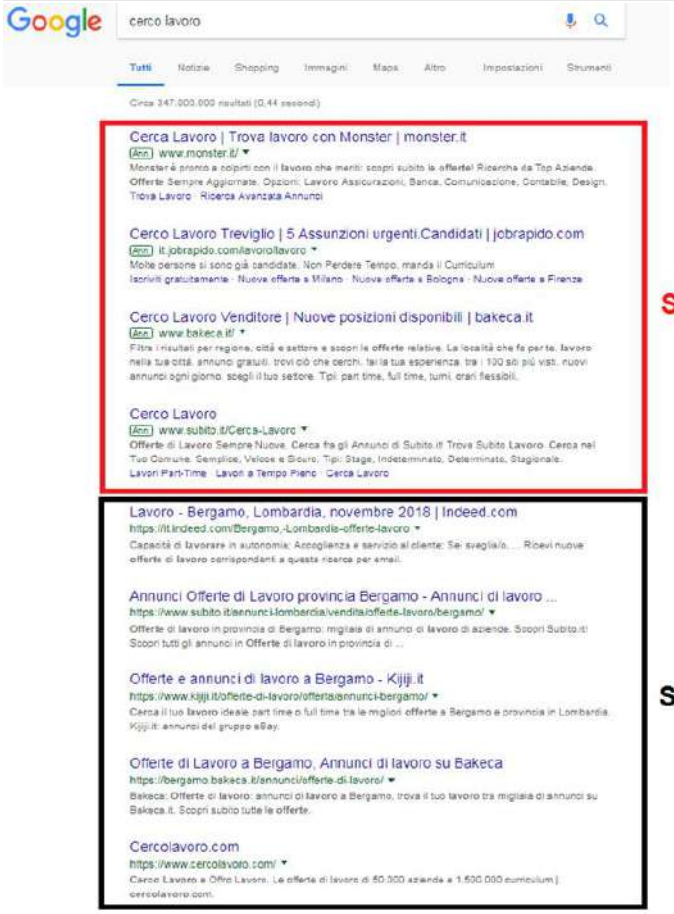
1. Focus

Be careful on

1. The choice of the **keywords** to bet on, which must be the most searched for the market in which a product / service wants to position
2. The creation of **content** must be able to capture the attention of the visitor, and convince him to click on the announcement
3. The decision of a **price** that you are willing to pay to buy the placement on a keyword (or keyword)



SEA

SEO

1. Focus

Search Engine Optimization SEO

A free and organic way for companies to improve their visibility on search engines.
It is a set of strategies and practices aimed at increasing the visibility of a website improving its position in the rankings of search engines, in non-paid results, called "pure" or "organic" results.

Some examples of practices:

- the optimization of the site structure
- the optimization of the HTML code
- the optimization of the textual contents
- the management of incoming and outgoing links

Social media communication

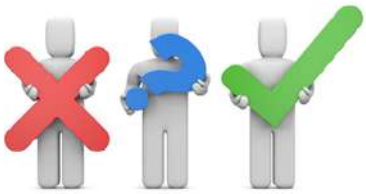
It is a form of internet marketing that exploits the ability of social media to generate interaction and social sharing in order to increase the visibility and notoriety of a brand.

It includes activities such as the promotion / sale of particular goods and services, or of themselves (Personal Branding), the generation of new business contacts (leads) and the increase in traffic to a brand's website.

A social media marketing strategy must also be planned taking into account the market in which the company operates (B2B or B2C), the decision-making phase of purchase (social consumer decision journey) in which the customer can possibly be found (research, consideration, decision).

Knowing the differences between the platforms and identifying the best ones to support company marketing objectives is fundamental.

Rules for a successful social media campaign



1) Social media marketing audit

Evaluation of farm's digital assets (blog, site, app, etc.), even in relation to the competition, in order to detect strengths and weaknesses of each social channel.

For example:

- *On which social platforms is the brand currently active?*
- *Which social networks bring more value?*
- *How much traffic to the website carries each social channel?*
- *What types of content do we post on the different channels? How frequently?*
- *Are we getting results from investing in social media advertising?*

2) Definition of social media marketing goals

Definition of objectives and results that we want to achieve (leads, employee retention, increase in sales, brand awareness).
These goals must take into account the overall communication and marketing strategy.
Goals must be **S.M.A.R.T**: Specific Measurable Achievable Realistic Time-related.

3) Identification of the target audience

You need to know exactly your target audience so that the message is effective.
Developing typical customer profiles) is essential for the development of a social media marketing strategy.
The collection and analysis of data on the web or from surveys allow to achieve a high profile of the typical customer.
Once the audience is defined, through Listening activities, they can understand on which social platforms the customer (real or potential) is present..

4) Creation of a social media content strategy

- Choice of contents and images to be published based on the type of social media;
- Definition of topics, keywords, links, etc.
- Definition of a social media marketing calendar

NB Usually, about 80% of posts must be used to inform or entertain their audience, while the remaining 20% to promote the brand

5) Choice of social media marketing platform

6) Measurement and testing

It is necessary to analyze the social media marketing strategies implemented to understand its effectiveness.
As part of a social media marketing strategy it must be decided which metrics or KPIs to use to verify whether the set goals have been achieved.

Assessment

In Social media content strategy, it's more important to

a) Define images to use
b) Define a calendar
c) Define calendar and images

Pilot course on Module n° 6: «DIGITAL FARMING»

Erasmus+

Module n. 6
Digital farming

Level 1: DIGITAL FARMING

1. **Precision Farming**
2. **DSS**

Assessment: questions

Level 2. In depth contents

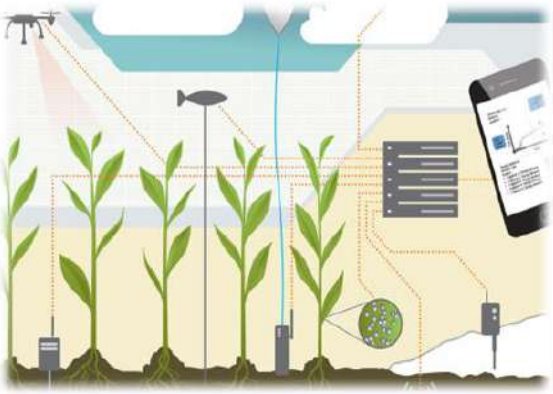
1. **Digital farming**
2. **Future of farming**

Assessment: questions

Instructions
Level 1: basic level of information to know for Teen Farm target group students
Level 2: upgrade level to deepen information
Assessment: Plaese go to Google Survey on platform

The digital transformation of agriculture

The digital transformation of agriculture with elements of robotics, artificial intelligence, big data, the Internet of things, and the growing use of broadband digital communications, sensor-driven mechanisms, microprocessors and cloud-based IT systems will inevitably be part of the agri-food chain over the next five to ten years.



What is the difference between precision, digital and smart farming?

From drones to satellite images and sensor technology, the agricultural industry is changing in a remarkable way. Technological innovations are reshaping the way farming is done. Modernization of agriculture and the use of digital technology have caused new concepts to emerge such as **precision farming**, **digital farming** and **smart farming**. These terms, despite often used interchangeably, have a subtle difference in

Precision farming

Precision farming and **precision agriculture** are generally regarded as the same thing. However, the term precision agriculture, often abbreviated PA, is more widely used.

PA definitions:

- "a technology-enabled approach to farming management that **observes, measures,** and **analyzes** the needs **of individual fields and crops**".
- "a modern farming management concept using digital techniques to monitor and **optimize** agricultural production processes".

Precision farming through efficiently matching fertilizer application with actual soil nutrient needs. The color indicates soil nutrient demand based on satellite and other data from field sensors and farmer knowledge

The key point here is optimization. Instead of applying equal amount of fertilizers over an entire field, precision agriculture involves measuring the within-field soil variations and adapting the fertilizer strategy accordingly. This leads to optimized fertilizer usage, saving costs and reducing the environmental impact.

Precision farming

Which products fall into the precision agriculture category?

- Sowing management - control of sections and norm;
- Spraying and fertilizing management - control of sections and norm;
- Scanning the nitrogen reserves of the plants;
- Yield mapping;
- Soil analyzes;
- Management of data from the above operations in software;
- Performing subsequent treatments (sowing, fertilizing, spraying) with variable rates of application.

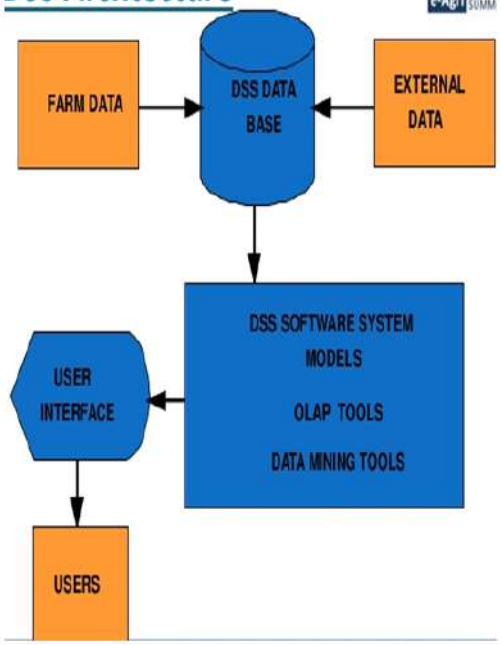
What will all this help us with? Precision Farming improves the accuracy of operations and allows the managing of in-field (or in-herd) variations. The objective is to give each plant (or animal) exactly what it needs to grow optimally, with the aim to improve the agronomic output while reducing the input (=producing 'more with less').

Tractor with nitrogen sensor and fertiliser spreader. A plant sensor mounted at the front of the tractor measures the wheat's nitrogen requirements and adjusts the fertiliser application rate by the spreader mounted at the rear of the tractor.

PRECISION FARMING:
DECISION SUPPORT SYSTEMS (DSS) What are DSS?

WHAT IS DSS FOR AGRICULTURE? Agricultural decision support systems (AgriDSS) are **information technology (IT) resources that are designed to help farmers tackle complex problems in crop production**, utilizing the best available data and knowledge about scientifically-sound best practices. These technological systems, support precision agriculture or smart farming approach, which can reduce labour and fertilizer inputs, minimize negative environmental impacts, and also increase yields. Agricultural decision support systems can incorporate inputs on climate, water, genetic, energy, landscape, human, and economic resources, and ideally provide an analysis of how these factors work together in influencing productivity. Companies offer mobile interfaces on smartphones and tablets, that are easy to handle and can be used in real time, directly on the field. Such developments allow more farmers to use DSS, since, at the end of the day, they are the final recipients and users of new technologies which will revolutionize agriculture

DSS Archtecture



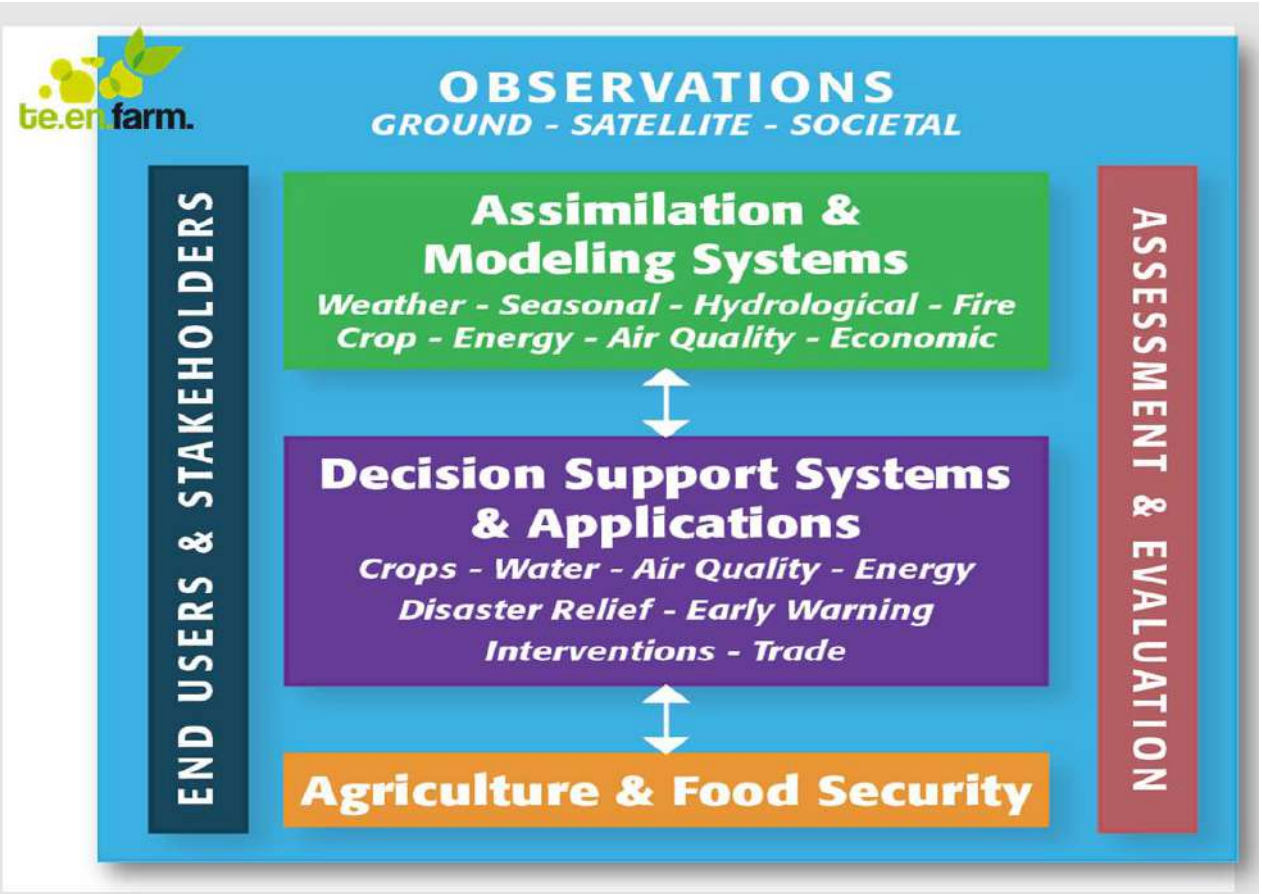
Process From Data inputs through analysis, modeling and information outputs into decisions

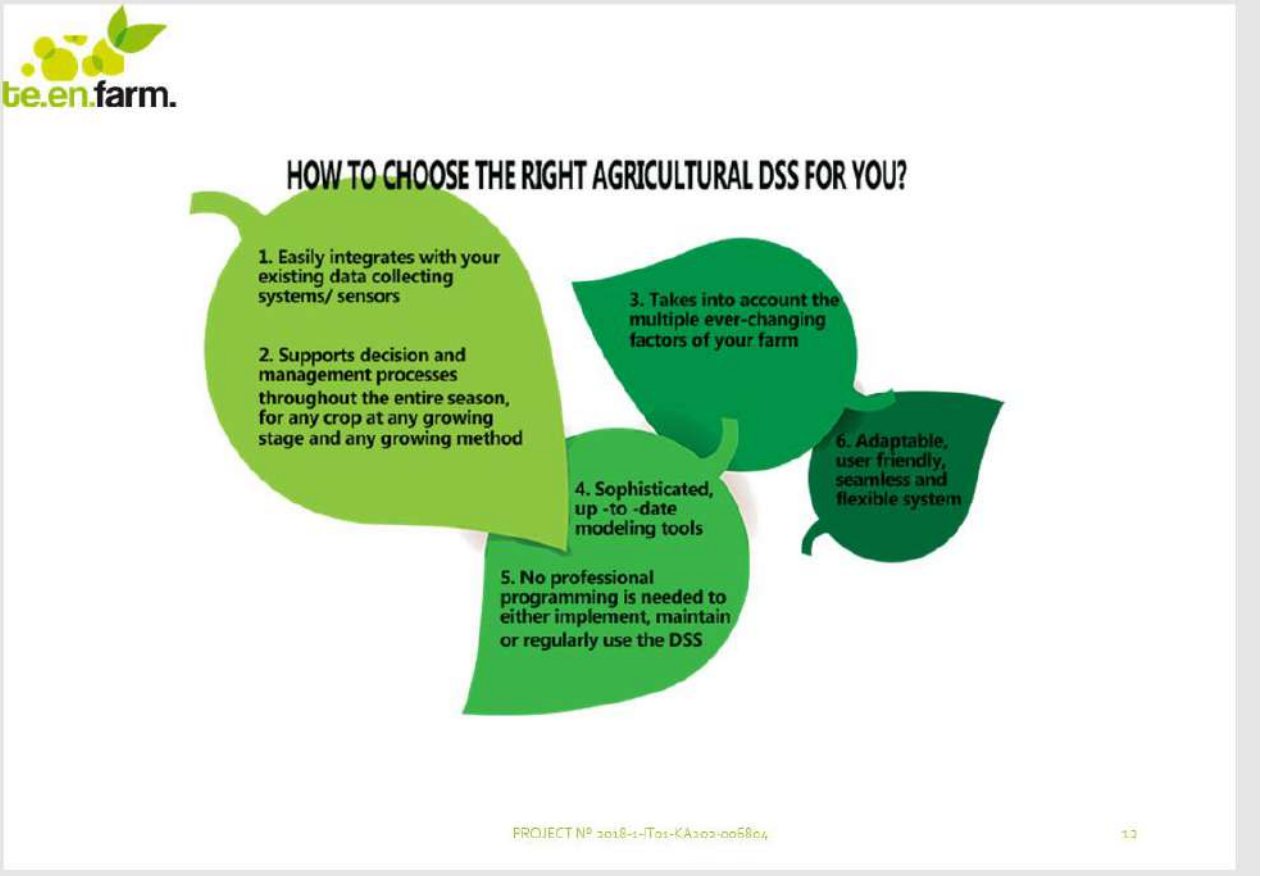
- Decision Inputs: factors, numbers, and characteristics to analyze
- User Knowledge and Expertise: Inputs requiring manual analysis by the user assumptions or selection of structured scenarios in the models
- Predictive Modeling
- Prescriptive Modeling
- Outputs: Transformed data from which DSS "decisions" are generated
- Decisions: Results generated by the DSS based on user criteria

Types of DSS

- **A model-driven** DSS emphasizes access to and manipulation of a statistical, financial, optimization, or simulation model. It uses data and parameters provided by users to assist decision makers in analyzing a situation.
- **A communication-driven** DSS supports more than one person working on a shared task
- **A data-driven** DSS emphasizes access to and manipulation of a time series of internal company data and, sometimes, external data.
- **A document-driven DSS** manages, retrieves and manipulates unstructured information in a variety of electronic formats.
- **A knowledge-driven DSS** provides specialized problem solving expertise stored as facts, rules and procedures.

Examples of users: farmers, farm managers, farmers cooperatives, extension services, investors, policy makers an regulators, development partners, service providers e.g. banks, insurers


te.en.farm.
OBSERVATIONS
GROUND - SATELLITE - SOCIETAL
END USERS & STAKEHOLDERS
Assimilation & Modeling Systems
Weather - Seasonal - Hydrological - Fire
Crop - Energy - Air Quality - Economic
Decision Support Systems & Applications
Crops - Water - Air Quality - Energy
Disaster Relief - Early Warning
Interventions - Trade
Agriculture & Food Security
ASSESSMENT & EVALUATION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HOW TO CHOOSE THE RIGHT AGRICULTURAL DSS FOR YOU?
1. Easily integrates with your existing data collecting systems/ sensors
2. Supports decision and management processes throughout the entire season, for any crop at any growing stage and any growing method
3. Takes into account the multiple ever-changing factors of your farm
4. Sophisticated, up -to -date modeling tools
5. No professional programming is needed to either implement, maintain or regularly use the DSS
6. Adaptable, user friendly, seamless and flexible system
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13

PRECISION FARMING


John Deere Field Connect™


Surface Water


Online, and mobile farm management software

The modern farm is increasingly **data-driven**. From planning and monitoring to compliance and documentation, DSS has solutions for you to gain command of your data, and achieve another level of productivity.

Remote data sharing to support better farming

Crop canopy sensor


RD-M1 Scanner
Vehicle Mounted Road Resurfacing Scanner


3D-MC Milling
Precise 3D profiling


2D Milling Control
Sonic profiling control

Milling

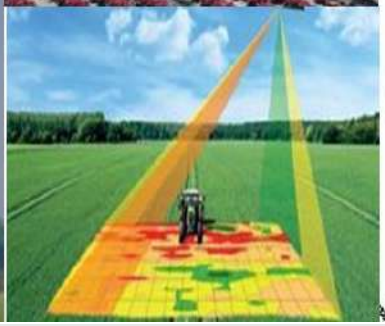
3D Ag Landforming

Lasers

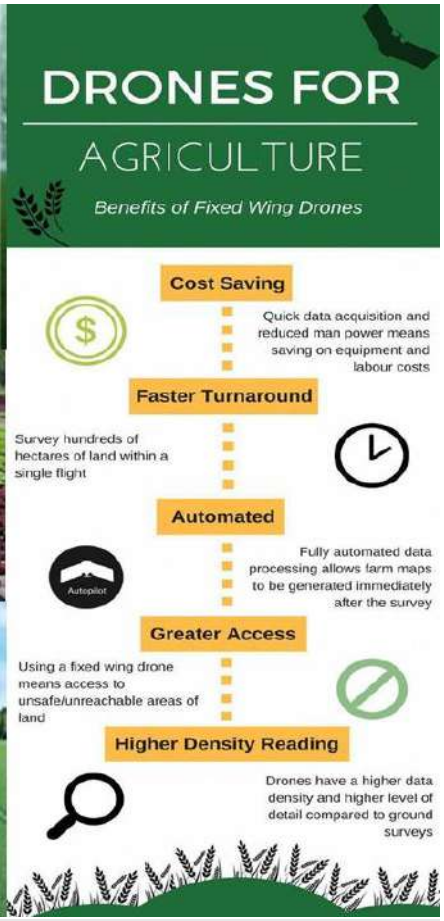
Excavating With Optical Precision

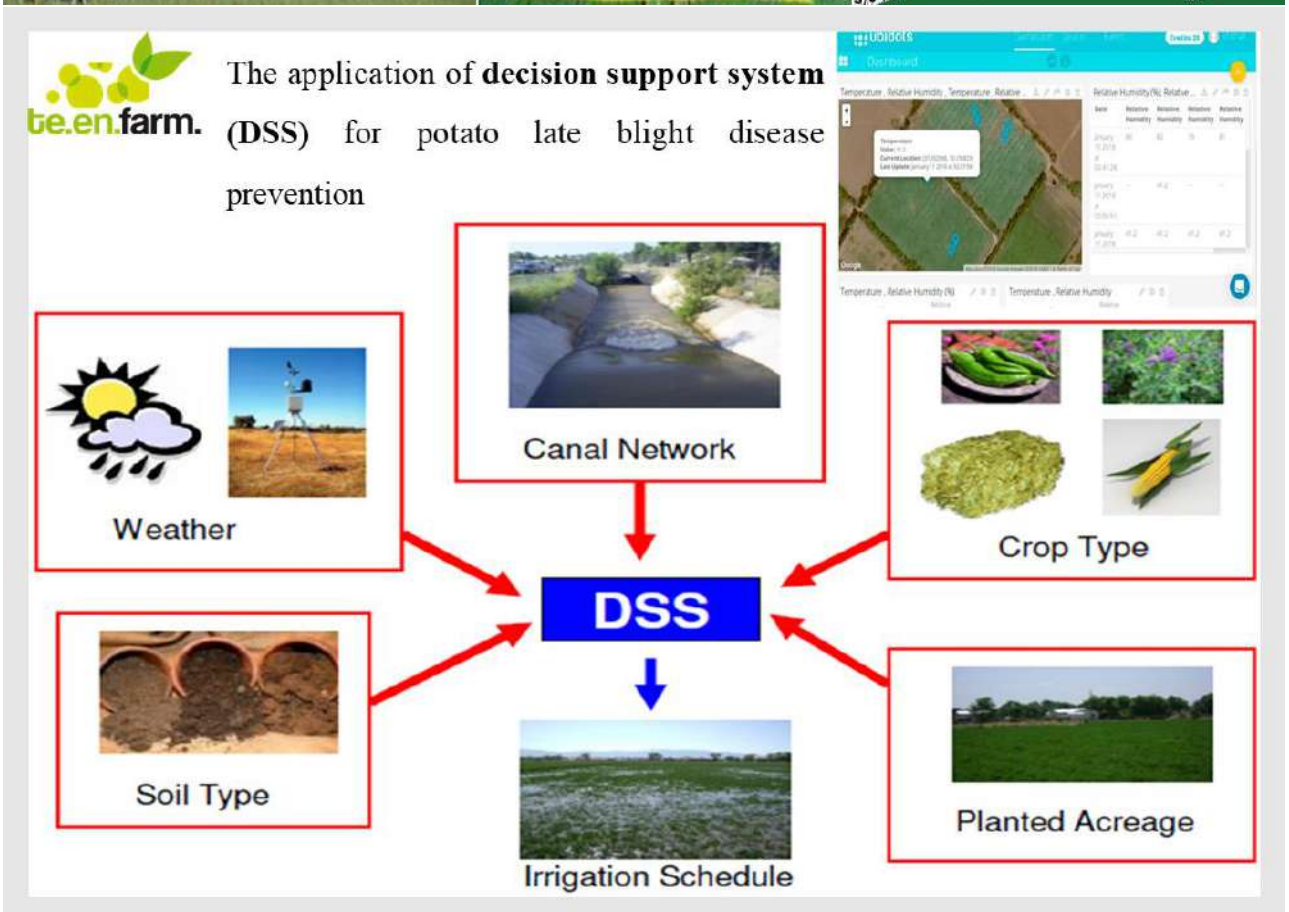

Frost monitoring device by adding Wet and Dry Bulb temperature sensor.


Precision agriculture drones harness technology for efficient farming and better
DRONE
FARMING




Managing crop irrigation This tool provides data for yields and water requirements for a range of crops.


DRONES FOR
AGRICULTURE
Benefits of Fixed Wing Drones
Cost Saving
Quick data acquisition and reduced man power means saving on equipment and labour costs
Faster Turnaround
Survey hundreds of hectares of land within a single flight
Automated
Autopilot
Fully automated data processing allows farm maps to be generated immediately after the survey
Greater Access
Using a fixed wing drone means access to unsafe/unreachable areas of land
Higher Density Reading
Drones have a higher data density and higher level of detail compared to ground surveys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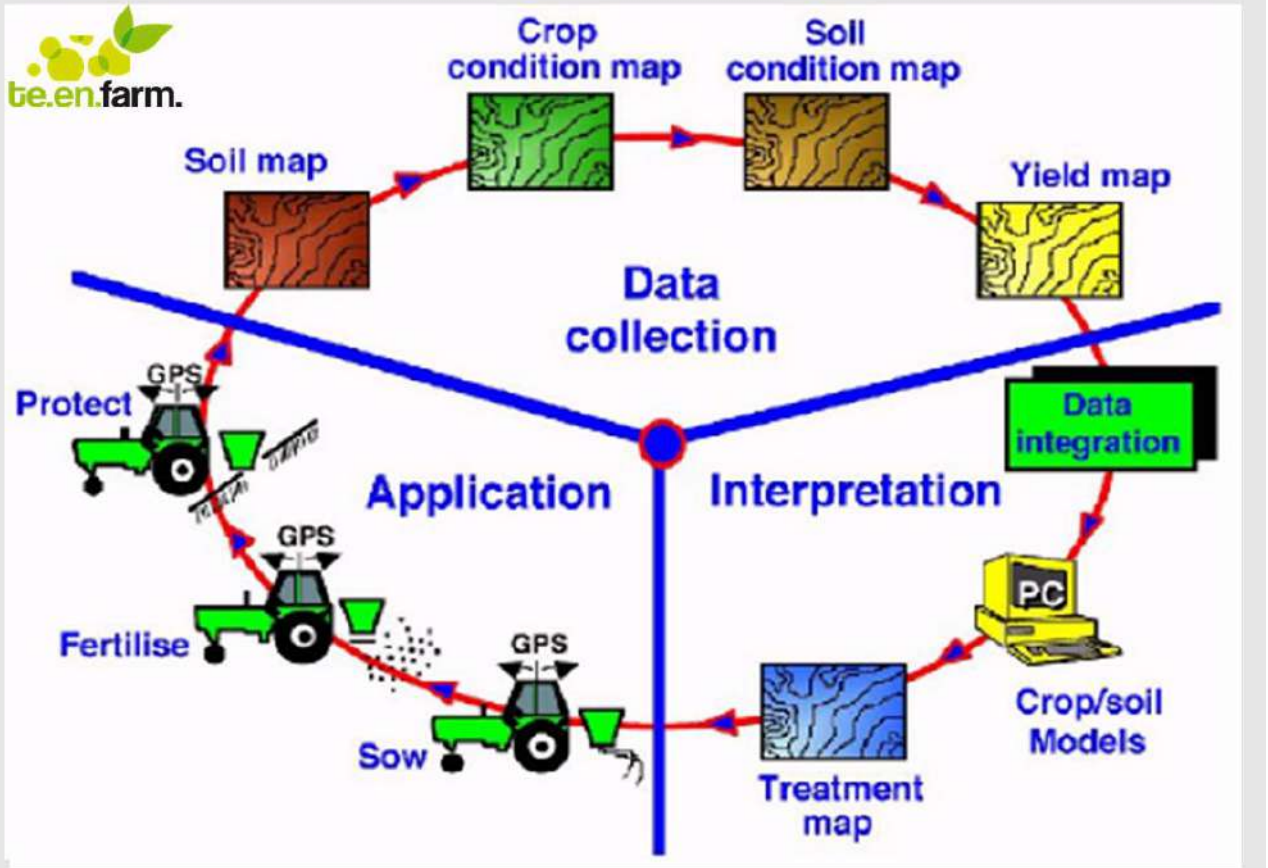
The application of decision support system (DSS) for potato late blight disease prevention
Canal Network
Weather
Crop Type
DSS
Soil Type
Planted Acreage
Irrigation Schedule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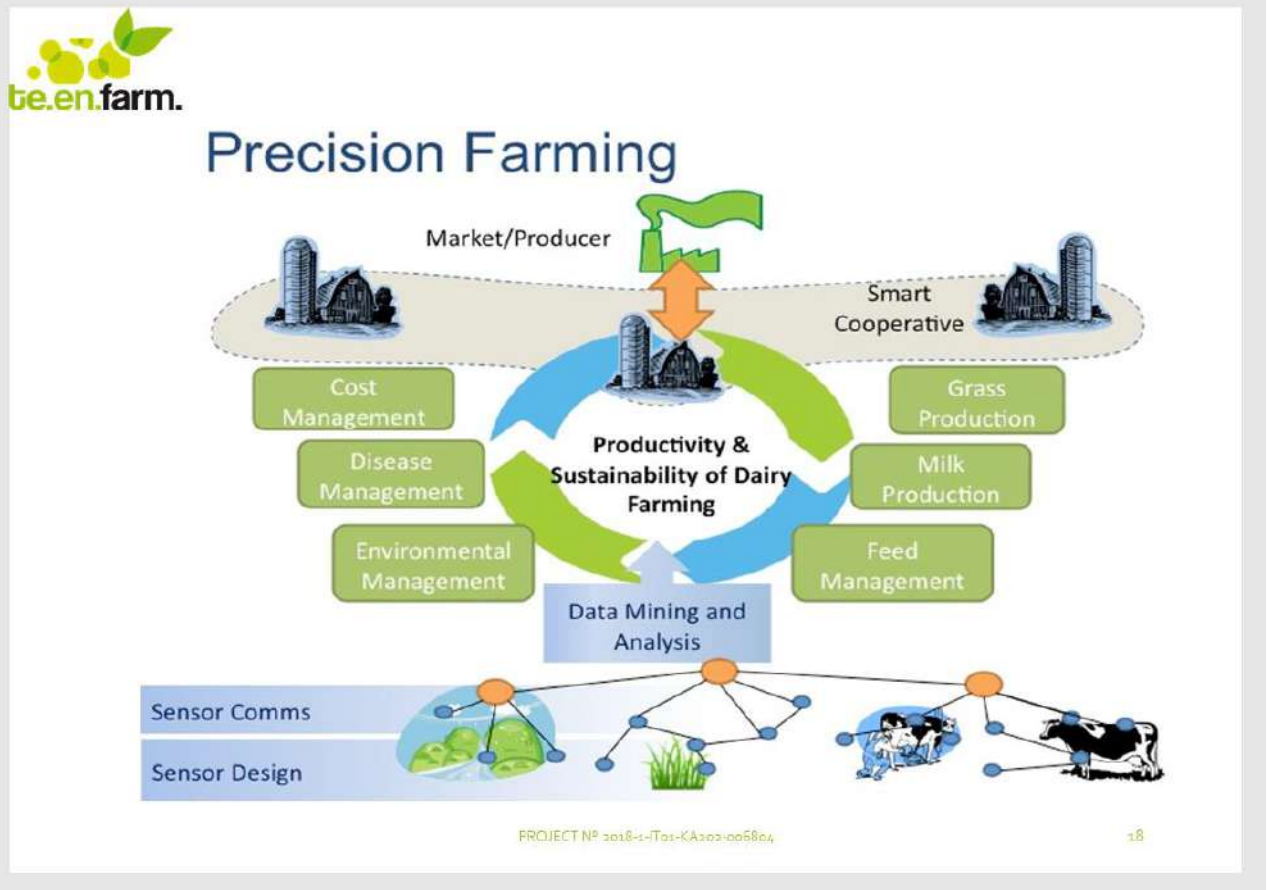
Crop condition map
Soil condition map
Soil map
Yield map
Data collection
GPS
Protect
Data integration
Application
Interpretation
GPS
PC
Fertilise
GPS
Crop/soil Models
Sow
Treatment map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Precision Farming
Market/Producer
Smart Cooperative
Cost Management
Grass Production
Disease Management
Productivity & Sustainability of Dairy Farming
Milk Production
Environmental Management
Feed Management
Data Mining and Analysis
Sensor Comms
Sensor Design
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Assessment

What is digital transformation in agriculture?

A It is a more complex system of farming

B It is a more a of farming without manpower

C It is the move from the physical to digital techs

How does precision agriculture work?

A It seeks to use new technologies to increase only profitability.

B It seeks to use new technologies to increase crop yields and profitability.

C It seeks to use new technologies to increase only crop yields

What are the things precision farming helps with?

A Saving time and labor and reducing amount of inputs

B Saving time and labor, reducing amount of inputs, increasing crop yields, and more efficient information management

C Saving time and labor and more efficient information management

Assessment

What is meant by DSS?

A It's a computer program application

B It's a decision process

C It's a new farming method

What are the advantages of decision support system?

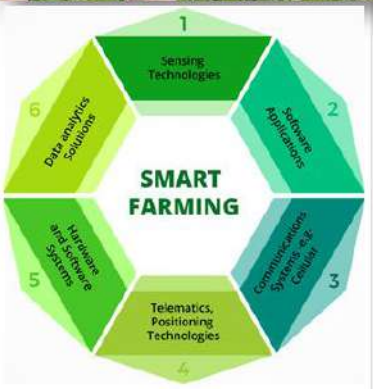
A Time savings (reduced decision cycle time), increased employee productivity

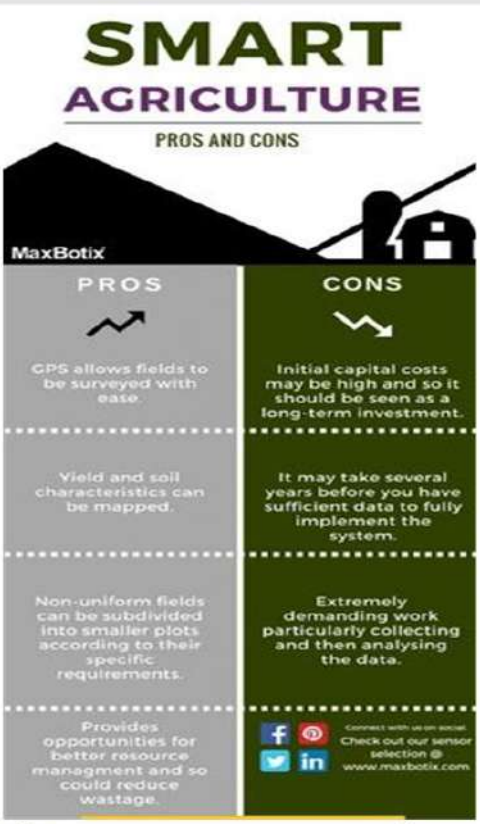
B Increased employee productivity and more timely information for decision making.

C Time savings (reduced decision cycle time), increased employee productivity and more timely information for decision making.

Smart farming

Smart farming is managing farms **using modern Information and Communication Technologies** to increase the quantity and quality of products while optimizing the human labor required. Unlike with PA, the focus of smart farming is not on precise measurement or determining differences within the field or between individual animals. The focus is **how the collected information can be used in a smart way**. Farmers can **use mobile devices such as smart phones and tablets to access real-time data about the condition of soil and plants, terrain, climate, weather, resource usage, manpower, funding**, etc. As a result, farmers have the information needed to make informed decisions based on concrete data, rather than their intuition.





Internet of Things (IoT)

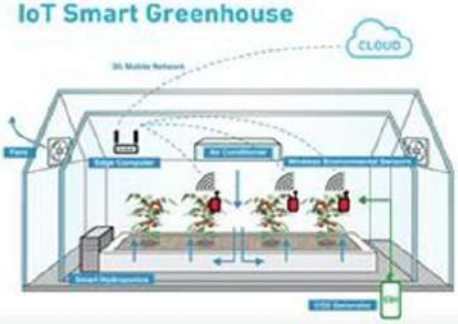
Internet of Things (IoT) is a trending technology that can collect and exchange data from physical objects using electronic sensors and the Internet.

ensors attached to tomato plant

To optimize yields during the season, sensor than the plant itself to help you make the best decision. By listening to a plant's needs, we are able to produce a predictive model for precise decision-making. A plant's needs are identified before the stress is visible - before a health decline is visible - in the field or orchard.

Sensors attached to cotton plants

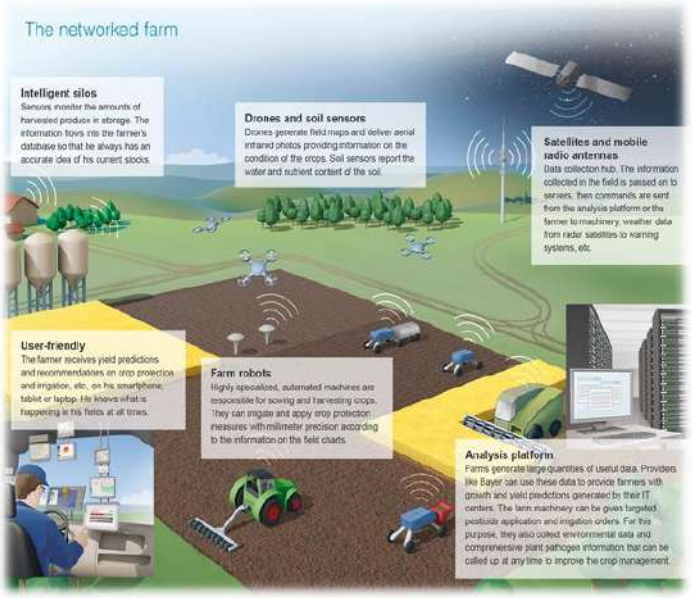
Multi-sensor cow monitoring



A great invention for speedy moving of electrified fencing for mob or intensive grazing

Digital farming

The essence of digital farming lies in **creating value from data.** Digital Farming means to go beyond the mere presence and availability of **data** and **create actionable intelligence** and **meaningful added value from such data.**



Digital farming is **integrating both concepts - precision farming and smart farming**, internal and external networking of the farm and use of web-based data platforms together with Big Data analyses.

Digital farming (DF)

Connecting individual agricultural machines is at the heart of DF. Only when machines "talk" to connected systems will be able to talk about achieving this connectivity.

One example is the ISOBUS standard, which manages compatibility between tractors and is implemented by almost all manufacturers.

Agriculture 4.0 This "version" was born around 2010, following the evolution and development of some of the new technologies such as cheap and improved sensors and drives, cheap microprocessors, high-frequency cellular communications, cloud systems, Big data analytics, etc. **The aim is to integrate internal and external networks in agro-operations.** This means that information in digital form exists for all agro-sectors and processes. Communication with partners as suppliers and customers is conducted by electronic means. The transfer of data, processes and analyzes is also automatic. Using Internet make it easier to handle large amounts of information.

Challenges of new technologies in digital agriculture

- Many small owners will struggle to cope with new technologies due to **lack of knowledge** or **investment capital**.
- The digital divide 'between rural and urban areas. **Adequate broadband infrastructure** in rural areas across the EU is an important prerequisite for achieving a successful digital transformation in agriculture
- **The "big digital divide"** between big and small farms. For example, the price of a mid-range drone or GPS device may be prohibitive for small farms.
- **The collection and management of big data** is another key issue. if big companies control the data, there is a risk of creating a monopoly. Production will be focused on economic benefits at the expense of other goals, the article further states.

The place of young farmers

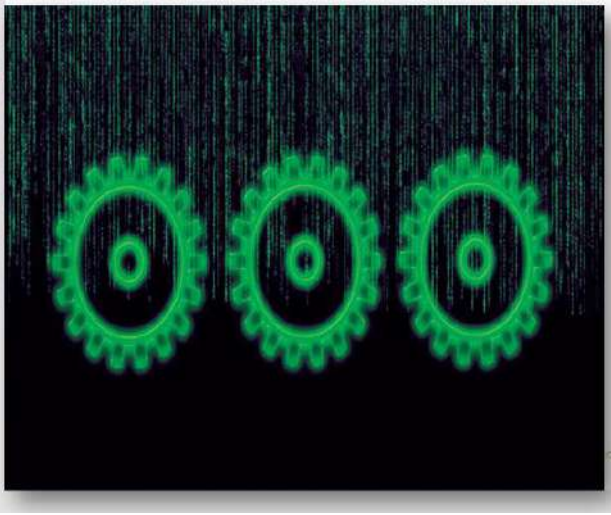
The agricultural sector believes that with the introduction of digital technologies, young people will be attracted to the sector who will see this activity as business.

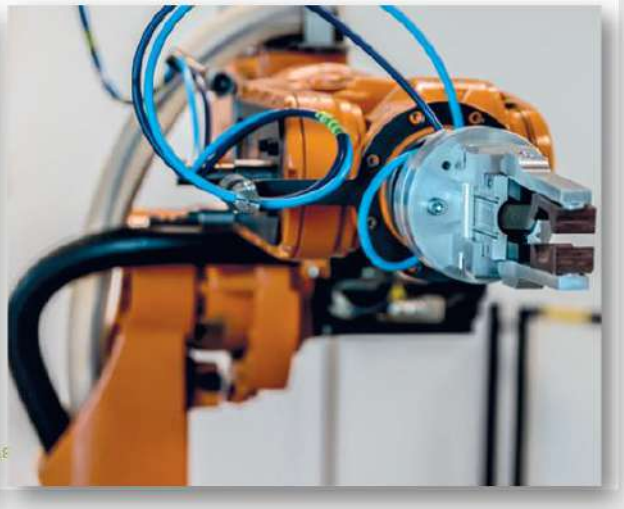
The farmers also expect a split between generations. In many countries, there are both farmers in their 80s and in their 35s. We can imagine these old people trying to work with a cellphone or the latest tractor technology - they just can't do it and will fall behind

The future of farming

The future of farming

Technologies play a variety of roles in the modern agricultural practices, but not the only innovations, that build its new look. Experts are of the opinion that these practices and technologies can be something more than the future of farms. They may turn out to be the key to the survival of the world's population.





The future of farming

Welcome to farming of the future: **a hi-tech, capital-intensive system of growing food sustainably and cleanly for the masses.**

IoT will play a very important role for future farming and will enable farmers to be much more precise, with centimetre-level accuracies

In a world of limited resources, a new hi-tech era will need to be ushered in where automation and data can help farmers address the many challenges of the future.

Make no mistake, the future of farming is smart and it will feed tomorrow's world.

Assessment

What is meant by smart farming?

A It means organic agriculture

B It means efficient agriculture

C It means sustainability

What is meant by digital farming?

A It 's applying precision location methods to decision quality agronomic information

B It 's applying precision location methods to sustainability methods

C It 's applying organic methods

What are main challenges of new technologies in digital agriculture?

A Lack of knowledge or investment capital and the "big digital divide"

B The collection and management of big data

C Lack of knowledge or investment capital and the "big digital divide" and collection and management of big data

Pilot course on «ENTREPRENEURSHIP FOR NEW FARMERS»

Module n. 7
START UP FINANCING

Erasmus+

Module n. 7
Start up financing

Level 1: Introduction

1. **General context**
2. **Bank fundings**
3. **CAP fundings**

Assessment: questions

Level 2. In depth contents

1. **Farming support**
2. **Video and other informations**

Assessment: questions

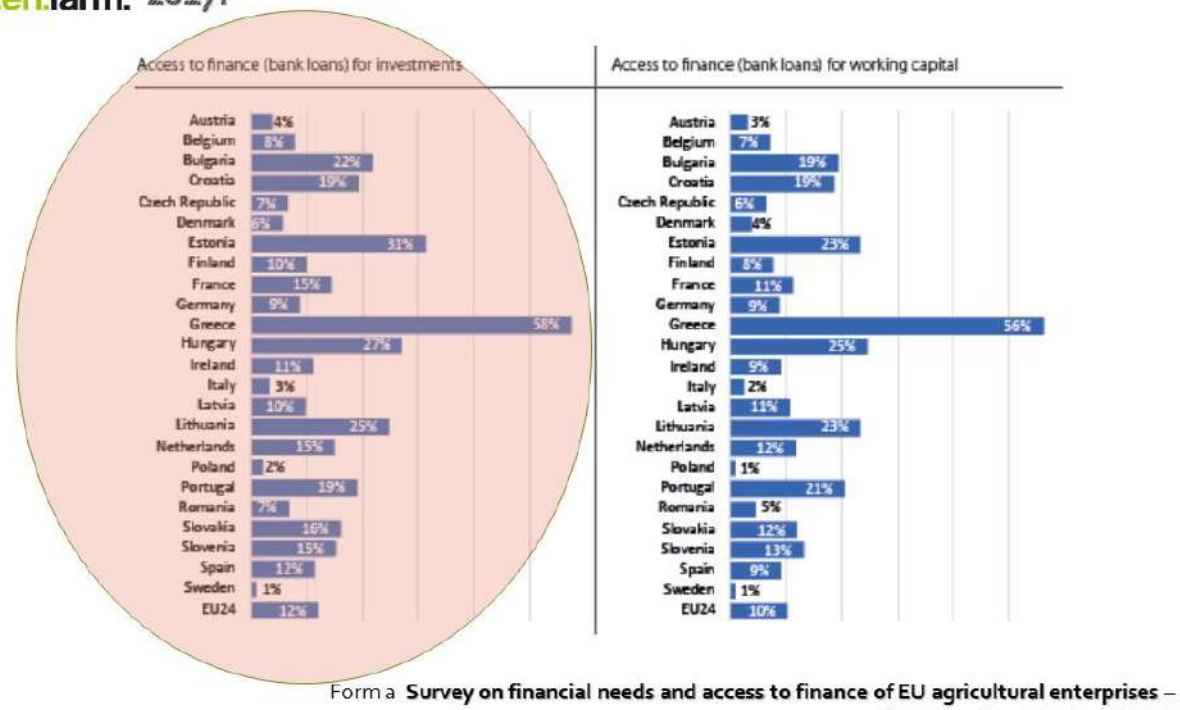
Instructions
Level 1: basic level of information to know for Teen Farm target group students
Level 2: upgrade level to deepen information
*Assessment: Please answer by interac with teacher «**Evaluation form**»*

General context

For a FARMERS there are different financial tools

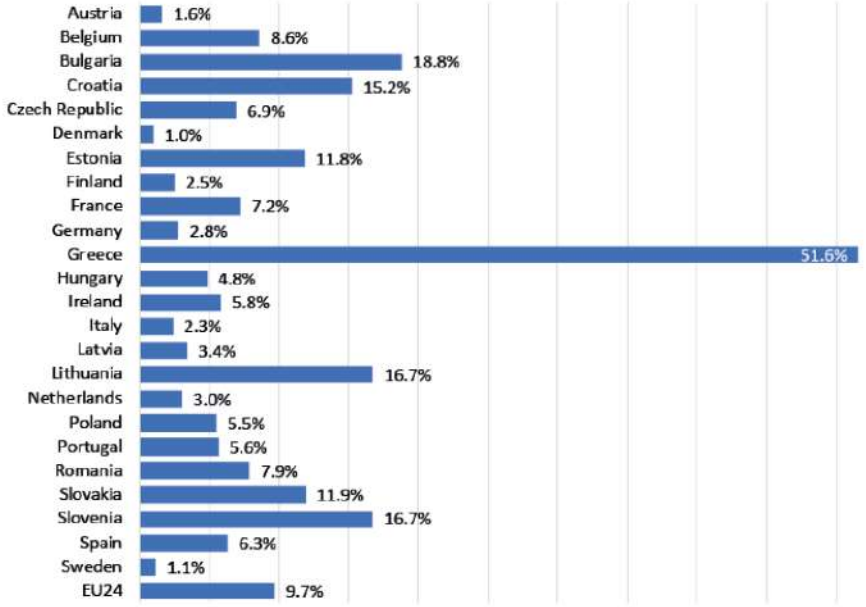
- Bank
- Public funding
- EU's funding

BANK - Share of EU's farmers experiencing difficulties in the 2017.



Form a **Survey on financial needs and access to finance of EU agricultural enterprises** – European Commission DG Agri

Why so many difficulties for accessing Loan ?
Fear of rejection..



Form a **Survey on financial needs and access to finance of EU agricultural enterprises** – European Commission DG Agri

BASILEA AGREEMENT

International Convergence of Capital Measurement and Capital Standards

The preliminary phase and the accompanying documentation must be detailed, the margins of discretion must be reduced (subjective and personalistic) in favor of objective indicators, of **quantitative, qualitative and behavioral**

RATING is a variable through which the Bank reserves conditions more favorable to the most deserving FARMERS and a cost greater riskier companies.

FARMERS must:

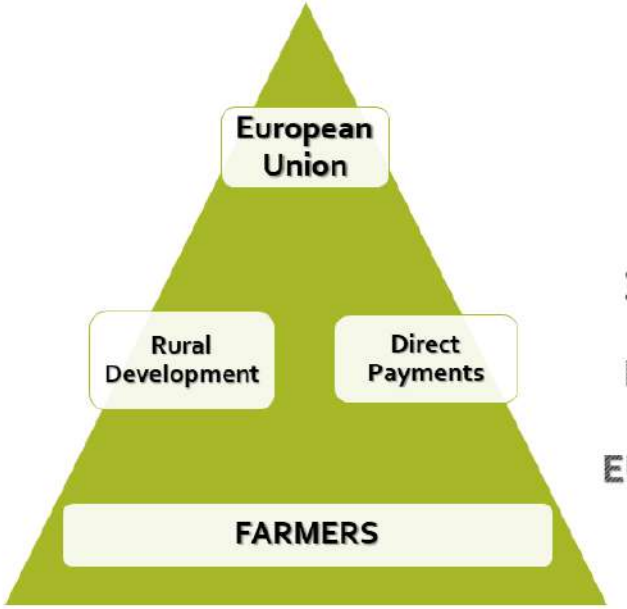
- Possess a transparent management structure
- - Knowing how to transfer their business strategies and objectives
- Possess good market prospects
- Create a relationship of collaboration and mutual trust

FARM 's Rating is not immutable, but it is subject to continuous variations

WHAT COULD A ENTERPRISING FARMER DO TO HAVE AN HIGHER RATING ??

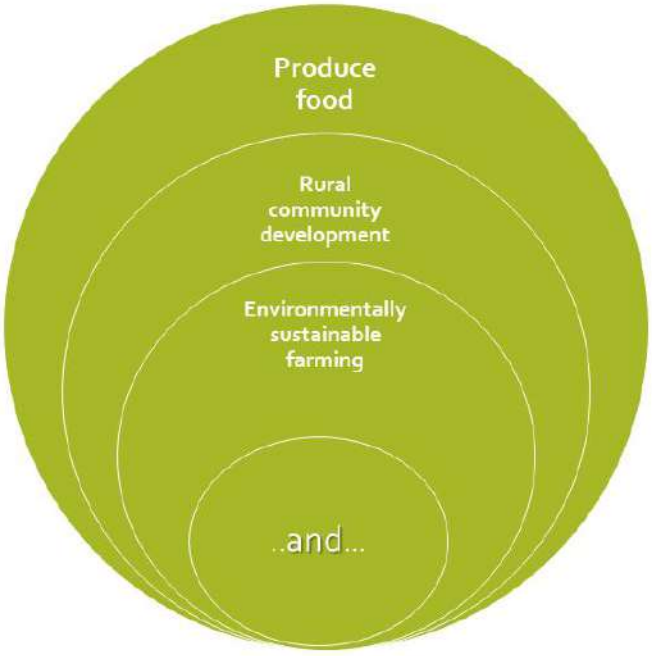
Business Plan!

EU'S FUNDING: Common Agriculture Policy



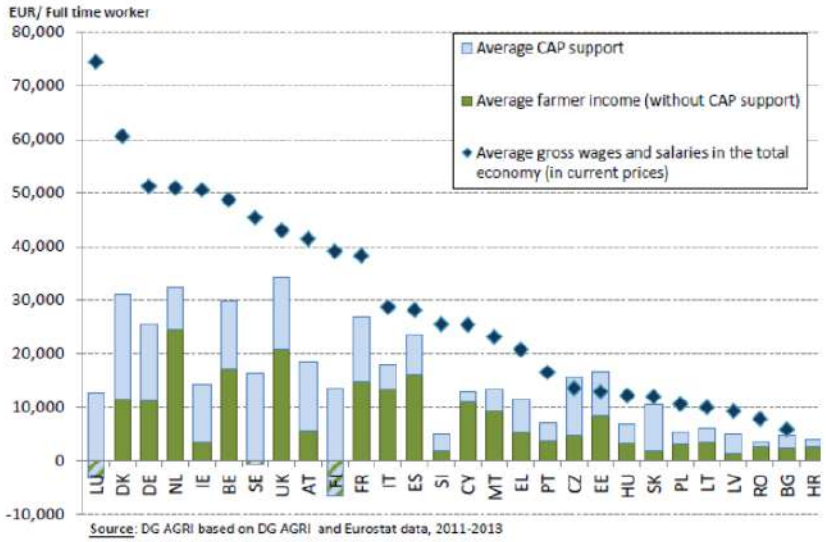
The CAP budget for the period from 2014-2020 provides a total of EUR 408.31 billion with EUR 308.73 billion intended for DIRECT PAYMENTS and MARKET MEASURES (the so-called First Pillar) and EUR 99.58 billion for RURAL DEVELOPMENT (the so called Second Pillar)

Benefits of CAP....



....supporting farmers' income

FARMERS' INCOME IS STILL LAGGING BEHIND SALARIES IN THE WHOLE ECONOMY



Source: DG AGRI based on DG AGRI and Eurostat data, 2011-2013

Direct payments paritally fill the gap between agricultural income and income in other economics sectors, they provide an important **safety net** ensuring there is agricultural activity in all parts of EU including areas with natural constraints.

How can CAP help enterprising farmers?

Normally farmers use following measures:

1. payment for sustainable farming methods ("***greening***")
2. payment for young Farmers
3. payment for Market Measures

..in **Denmark** enterprising farmer can FOCUS on:

- better management of **natural resources** and encouraging **climate friendly farming practices** and to double organic farming areas;
- investments to improve the **environmental performance** of farms, restructuring farms in the pig and cattle sector;
- boosting **innovation** and creating jobs in rural areas.

..in **Italy** challenges could be:

- setting up **young farmers**
- In **depth-trainings**: vocational training and information actions, through measures aimed at promoting knowledge and improving human potential;
- **Innovation** and modernising holdings: modernisation of agricultural holdings and adding value to agricultural and forestry products

..in **Bulgaria** challenges could be:

- improving the **competitiveness** of the agricultural sector and farm viability and ensuring quality food production
- preserving ecosystems and the **sustainable use of natural resources** in agriculture, forestry and food processing
- economic and social development of rural areas – creating jobs, **reducing poverty,** improving social inclusion and quality of life

..in order to upgrade, to make **a leap ahead...**

Focus on **Smart Agriculture...**

Increased
PRODUCTION
Optimised planting, treatment application and harvesting improve yields.

Real-Time Data and
PRODUCTION INFORMATION
Real-time access to information about sunlight intensity, soil moisture, markets, herd management and more provides for better and faster decisions by farmers.

Better
QUALITY
Precise information about production processes and quality helps farmers adjust and increase the specificities of the products as well as nutritional values.

Improved
LIVESTOCK HEALTH
Sensors can detect and prevent poor health in animals early on, reducing the need for treatment. Livestock management can also be improved through geofencing location tracking.

Lower
WATER CONSUMPTION
Lower water consumption due to soil moisture sensors and more accurate weather forecasting.

Lowered
PRODUCTION COSTS
Better resource efficiency through automatised processes in crop and livestock management, leading to lower production costs.

Accurate
FARM AND FIELD EVALUATION
Data about historical yields help farmers plan and predict future crop yields as well as the value of their land.

Reduced
ENVIRONMENT, ENERGY AND CLIMATE FOOTPRINT
Increased resource efficiency reduces the environment and climate footprint of food production.

Assessment

Why is necessary for EU to fund farming sector?

A. Because farmers have got an high income and they must to mantain that
B. Agriculture is always subject to risks
C. European Union has got a surplus on its budget to spend

How many EU pillars do you know, useful to fund farming sector?

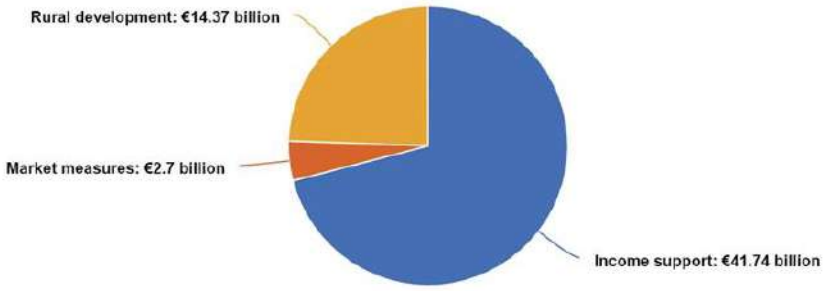
A. Only one: farming fund
B. Three: rural development, direct payments, funds for young farmers
C. Two: rural development and direct payments

Imagine you are a farmer, how can you reach an high Rating?

A. To be ready to rejection by the bank
B. To have a well done Business Plan
C. To know bank director

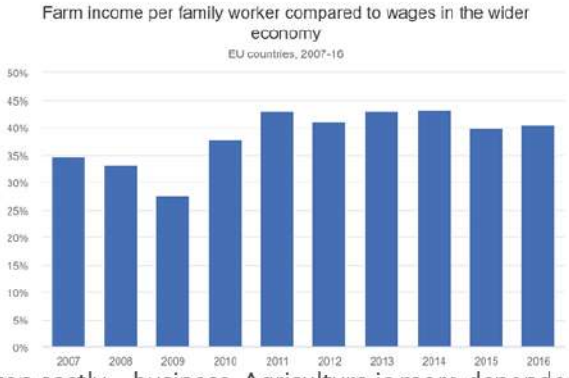
PART 2 - In depth analysis

The EU supports farmers with €58.82 billion in 2018



Source DG **AGRI**

Why farmers need support....



Farming is a risky – and often costly – business. Agriculture is more dependent on the weather and climate than other sectors. There is an inevitable time gap between consumer demand and farmers being able to increase supply as growing more wheat or producing more milk takes time and investment.

EU farmers are under pressure from the increasing global trade in food products and trade liberalisation. Developments on global markets increase competition, but also create new opportunities for the European agri-food sector. Additionally, globalisation and fluctuations in supply and demand have made agricultural market prices more volatile in recent years, adding to farmers' concerns.

These business uncertainties in agriculture justify the important role the public sector plays in ensuring a safety net for farmers' income.

Conditions for support

In order to receive income support, farmers need to respect several eligibility conditions
As a general rule, farmers have to:

- have their farm located within the EU
- meet the **minimum requirements** to receive income support. Income support is not granted for amounts lower than €100 to €500 (depending on the EU country) and/or where the eligible area is less than 0.3 to 5 ha
- perform an **agricultural activity** (production, rearing or growing of agricultural products, etc. or maintaining land in a good agricultural state) on agricultural area (encompassing arable land, permanent crops and permanent grassland) that is at their disposal
- they may have to meet the definition of an "**Active farmer**". The core element of the "active farmer" provision is a negative list of activities – such as airports, waterworks, real estate services, railway services and permanent sport and recreational grounds). Until 2017 in all EU entities operating an activity on the negative list were not considered "active farmers" unless they could prove their farming activity was not marginal. As from 2018 this provision is optional and is applied by 9 EU countries or regions"
- in European Union countries operating the basic payment with a payment entitlements system, a farmer needs payment entitlements to access decoupled income support payments.

Videos and other informations

You Tube channel of DG AGRI https://www.youtube.com/user/EUagri

Animated clip introduces European agriculture to students. It is part of our teacher's resource pack - a collection of ready-to-use teaching and learning resources which aim to raise awareness among young https://www.youtube.com/watch?v=qnYKybqpYR8, italian version

Animated clip introduces to EU's quality marks https://www.youtube.com/watch?v=zd36sOzoogY

A clip on post 2020 CAP https://www.youtube.com/watch?v=xbJhIP6o66k

Assessment

Please list some benefits of CAP..

A. Rural community development, Producing food
B. Rural community development, Producing food, helping farmers' income
C. Environmentally sustainable

Could you please list some elements necessary in order to obtain funds for «farmers support» ?

A. To be married
B. To own more than 100 hectares
C. To be an active farmer

Module n° 8
«RISK MANAGEMENT»

Erasmus+

Module n. 8
Risk Management

Level 1: Risk management in farming

1. **Why risk management**
2. **Tool kit risk management**
3. **Funding risk management**

Assessment: questions

Instructions
*Assessment: Please answer by interac with teacher «**Evaluation form**»*

CLIMATE CHANGES

(INCREASE OF TEMPERATURES…GLOBAL WARMING KEEPS NONSTOP)

INCREASE OF DISASTERS

- FLOODS, DROUGHT, FROST AND HOAR-FROST
- HEAVY RAINS
- EXCESSIVE SNOW
- HAIL
- STRONG WINDS

November 2005, Flood of Tiber river in Umbria

COSTS REGARDING CLIMATE CHANGE

- **ENVIRONMENTAL (danger for plant and animal species because of habitat modification…)**
- **ECONOMIC (agricuture, tourism, energy...)**
- **SOCIAL (houses, facilities, public health)**

Cost savings is doubtless a moral duty with respect of future generations but it is also strategic priority for the national economy.

PREVENTION

Better safe than sorry
(Bernardino Ramazzini da Carpi – second half of the 1600)

COSTS OF PREVENTION AND RECOVERY MEASURES

TOOL KIT RISK MANAGEMENT

Goal: to encourage an 'inclusive approach' as part of a coordinated system of guarantees offered by different risk management tools financed by FEASR

SUB.MEASURE	IMPLEMENTING ARRANGEMENTS (per type of risk covered)
17.1 – SUBSIDED AGRICULTURE INSURANCE POLICY	Climatic, phytosanitary, epidemic coverage risk
17.2 – MUTUAL AID FUNDS	Climatic, phytosanitary, epidemic coverage risk
17.3 – SECTORIAL IST	Significant reduction in income coverage risk

Source ISMEA

RISK MANAGEMENT TOOLS SET UP

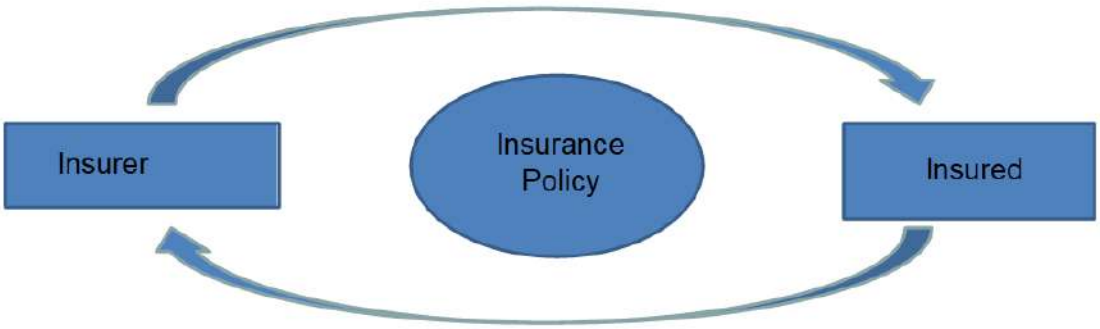
TOOLS	SECTORS	2015	2016	2017	2018	2019
INSURANCE POLICY	PLANT AND CROPO PRODUCTIONS (1)	✓	✓	✓	✓	✓
	LIVESTOCK PRODUCTIONS (1) (2)	✓	✓	✓	✓	✓
	FACILITIES (2)	✓	✓	✓	✓	✓
	REVENUES (2)			✓	✓	✓
	INDEX (2)			✓	✓	✓
FUNDS	CLIMATIC AND FUNDS HEALTH(1)					✓
	IST (1)					✓

(1) UE FUNDS
(2) NATIONAL FUNDS

Source ISMEA

INSURANCE POLICY

Payment of compensation only upon the realization of an event



Risk transfer in return for a fee

Aims

To guarantee wealth and income from events of unforeseable circumstances that may affect the business activity.

RISK MANAGEMENT AND II PILLAR

Reg. (UE) n. 1305/2013 (as amended by Reg.(UE) 2017/2393)

Animals, plants and harvest insurance

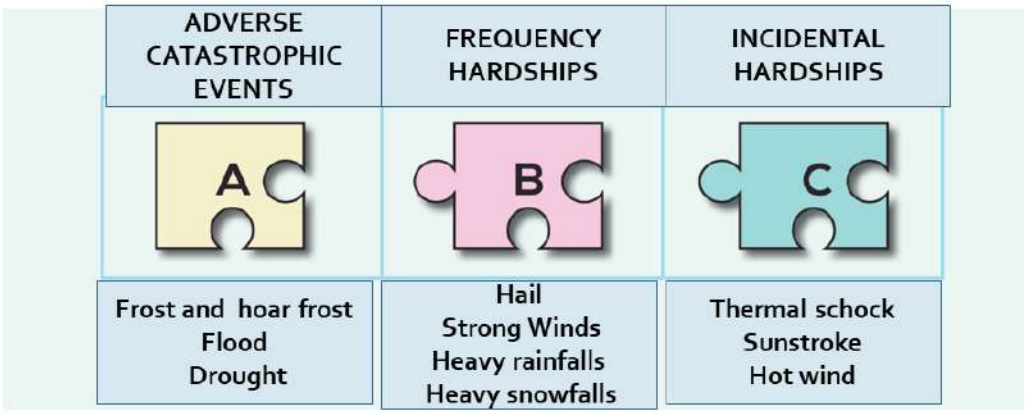
Beneficiaries	Support given to insurance contracts which include cover losses caused by:
Support given to **Active farmers**	Adverse climatic conditions, Epidemic animals diseases Plants pests, parasitic infestation Environmental problems

Minus damage threshold to access EU compensation **30%**

Maximum support rate: **65%** of insurance premium

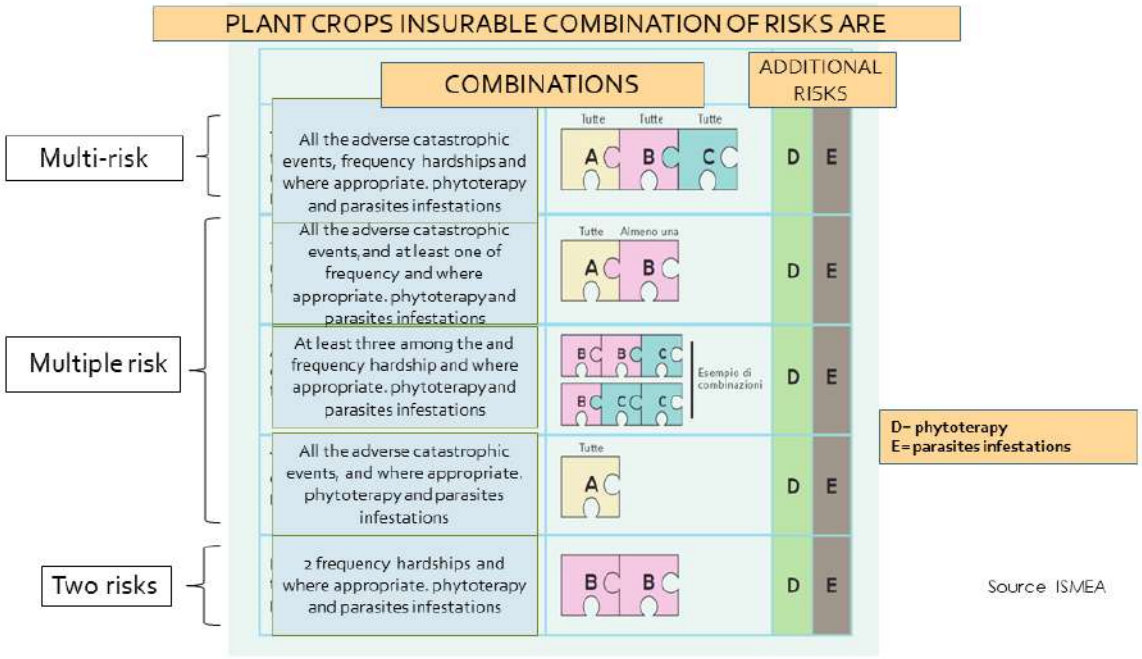
Source: Insurance legislation - Martella

INSURABLE OR SUBJECTED TO MUTUAL COVERAGE RISKS FOR HORTICULTURAL CROPS



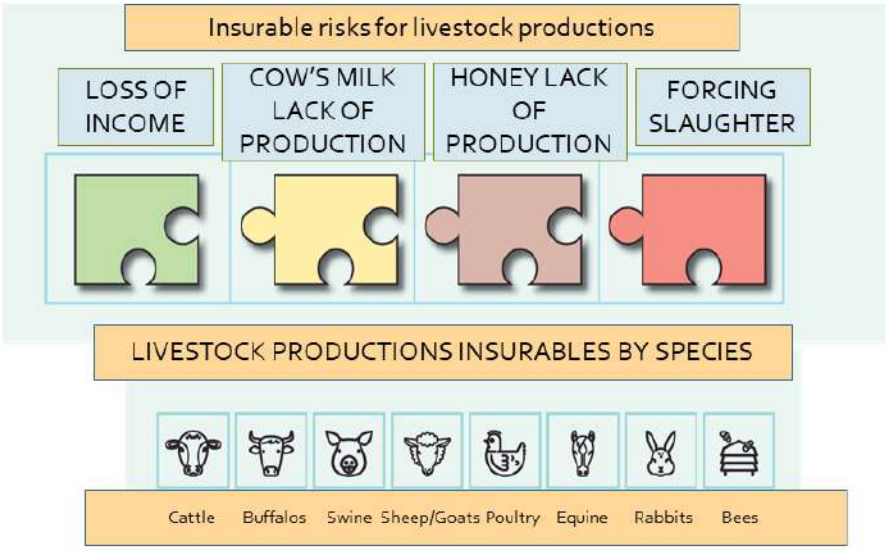
Source ISMEA

PLANT GROWING COMBINATION OF RISK CROPS



Source ISMEA

INSURABLE RISKS FOR LIVESTOCK PRODUCTIONS



Source ISMEA

RISK MANAGEMENT AND II PILLAR

Reg. (UE) n. 1 05/2013 (as amended by Reg.(UE) 2017/2393)

Mutual funds

Beneficiaries	Financial supports due to:
Mutual funds among partners	Adverse climatic events, Epizootic diseases Plant pests, Parasitic infestation, Environmental emergency,

Waste more than 30% of the farmer's average annual production of the previous three years

Source: Insurance legislation - Martella

MUTUAL FUNDS

- In agriculttures **mutual funds** are innovative tools as regards risk-management. They are innovative or complementary to the **usual insurance policies based on mutual and reciprocal aid.**
- The funds guarantee **against financial loss** caused by adverse cllimatic events, plant pests, epizootic parasitic infestation and against **huge decline in income.**

FUND MINIMAL DIMENSIONAL REQUIREMENTS (N° OF MEMBERS)

Mutual fund for climatic, health and environmental risks (Sub-measure 17.2)

700 **minimum number of members** to set up it

Income stabilization fund (Sub-measure 17.3)

150 **minimum number of members** to set up the IST fund

or

50 members **with a total turnovernot less than 10 billion**

Each member undertakes to accede for **3 years** to the fund

PUBLIC SUPPORT

70% **is the rate of public support** for covering contributing eligible costs

RISK MANAGEMENT AND II PILLAR

(Reg. (UE) n. 1 05/2013 (as amended by Reg.(UE) 2017/2393)

Income stabilizing tool (IST)

Beneficiaries	Support is granted if:
Mutual funds among farmers	- The drop in income is greater than 30% average income in the previous three years of the farmer. - Funds compensations for farmers can't exceed 70% of the loss (income).

Income: sum of revenues that the farmer gains from the sale of his own production included every kind of public support deducting production costs.

Source: Insurance legislation - Martella

IST FUND

SECTORS ELIGIBLE

- Fruit and vegetables
- Olive growing
- Poultry farming
- Cow's milk
- Durum weath

✓ The guarantee for the loan refers to the Solar year

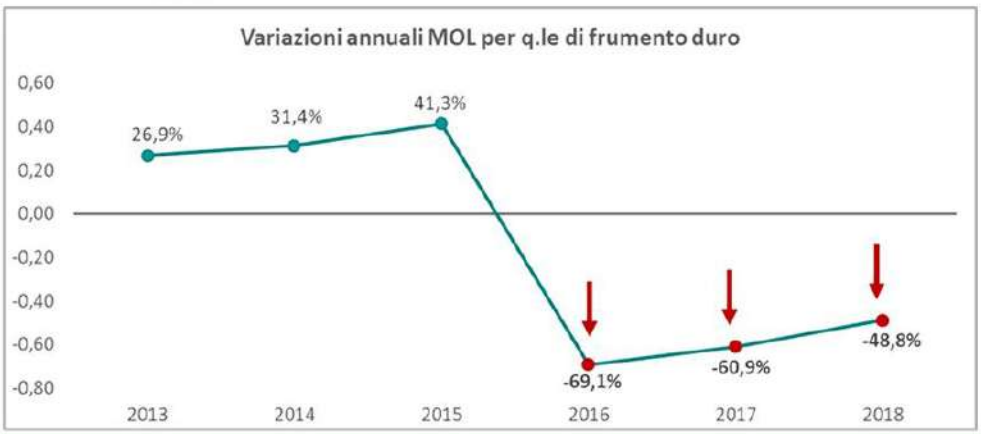
✓ IST can be set up at the same time as other risk management tools

TRIGGER EVENT

«Trigger event» starts the IST fund claims for compensation for the loss of income exceeding the threshold of 20%.

ADG publishes in its website the 'trigger event'when the negative changes in income is higher than15% compared to the average income of the previous three years.

Annual trigger event : IST wheast case



Among the examined variables we have also considered behalf of third parties' costs

Source ISMEA

STATUS OF IMPLEMENTATION

The aim of the European legislator was to increase the spread of a more favourable financial backing. Italy is the country which gave the greater share of financial resources to the risk management, particularly, as regards insurance (TAB 1). Other formulae (mutual funds and IST) had very little success particularly mutual funds have been activating away by Romania, Italy and France while IST from Italy, Hungary and Spain.

As regards income stabilization tool, few resources planned from Hungary and Spain suggest a more experimental trigger while in Italy the implementing regulatory legislation is not available yet.

SM	PREMI ASSICURATIVI	FONDI MUTUALISTICI	IST	TOTALE
BELGIO	5,1	0	0	**5,1**
FRANCIA	540,7	60	0	**600,7**
ITALIA	1.396,8	97	97	**1.590,8**
LETTONIA	10	0	0	**10**
LITUANIA	17	0	0	**17**
MALTA	2,5	0	0	**2,5**
PAESI BASSI	54	0	0	**54**
PORTOGALLO	53,2	0	0	**53,2**
ROMANIA	0	200	0	**200**
SPAGNA	0	0	14	**14**
UNGHERIA	76,3	0	19	**95,3**

Fonte: DG Agri.

Data speak about a not really thrilling startup of risk management tools. The main issue is about the setting of PAC 2° Pillar, fundings for risk management, a choice that can limit the effectiveness regarding to a different organization (i.e. a specific regulation or in the CMO field as with friut and vegetables and wine).

...FOR THE FUTURE

SUSTAINABILITY ⇨ **RESILIENCE**

IN PAC POST 2020 RISK MANAGEMENT ASSUMES A CRUCIAL ROLE BUT IT WILL BE NECESSARY TO FORESEE APPROPRIATE ACTIONS AS REGARDS VOCATIONAL TRAINING AND ADVICE TO GUARANTEE THE PREVENTION OF CULTURE EMERGENCY.

Pac post 2020 will need to have a more efficient planning aimed at combining complementarily EU interventions with member states' strategies and private sector tools.

Assessment

What is the maximum supplemental rate of the insurance prize:
A. 30%
B. 70%
C. 65%

The costs of climate change are:
a. environmental, economic and social costs
b. environmental, moral, social costs
c. economic, moral, social costs

The insured risks for vegetable cultivations are:
a. climate, frequency and accessory
b. catastrophals, frequency and accessories
c. catastrophals, frequency and climate

Frequency of advantages are:
a. Flood, strong wind, excess of rain, snow
b. Straws, strong wind, excess of rain, excess of snow
c. Necks, ice-creams, excess of snow, flood

Above which% of production loss shall mutual funds:
A. 65%
B. 30%
C. 70%

Is it necessary to be an active farmers to assist the insurance support?
a. yes
b. no
c. depends on the type of entrepreneur

What is the% of loss of income allowing access to the fond ist?
A. 20%
B. 30%
C. 40%

Pilot course on «ENTREPRENEURSHIP FOR NEW FARMERS»

Module n. 9
Innovation, Research and Cooperation

PROJECT N° 2018-1-IT01-KA202-006804

Erasmus+

Module n. 9
Innovation and Cooperation

Unique Level: Introduction

1. **European context**
2. **Challenges for future farming**
3. **EIP-AGRI**

Assessment: questions

Instructions
*Assessment: Please answer by interac with teacher «**Evaluation form**»*

PROJECT N° 2018-1-IT01-KA202-006804

.....have you ever heard about «**Sustainable Development Goals**»?

Agriculture is strictly connected to some of them..

EUROPEAN CONTEXT

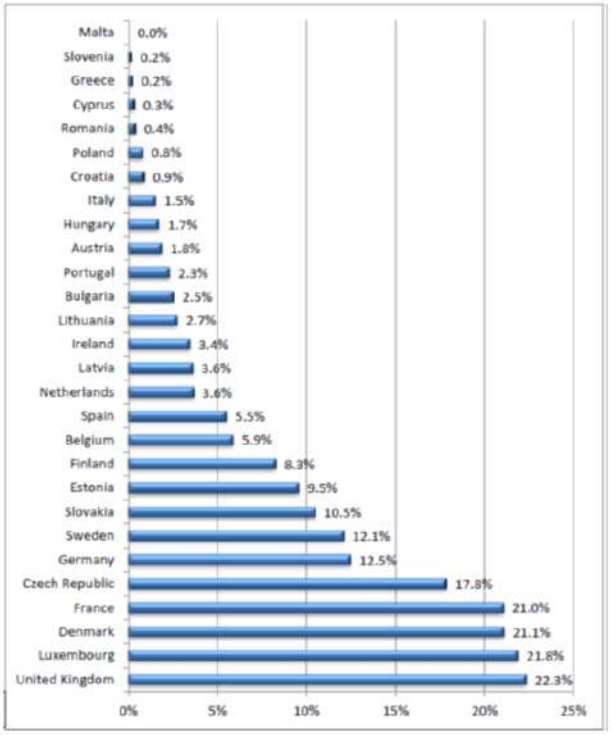
In a changing world, the **EU**'s economy needs innovation to become **smarter**, more **sustainable** and more **inclusive**.

Along with its growth, the EU has launched the strategy EU 2020, an initiative aimed to help all EU countries to provide their citizens with a more competitive economy, more and better jobs and a better quality of life.

3 key words: **smarter, sustainable inclusive**

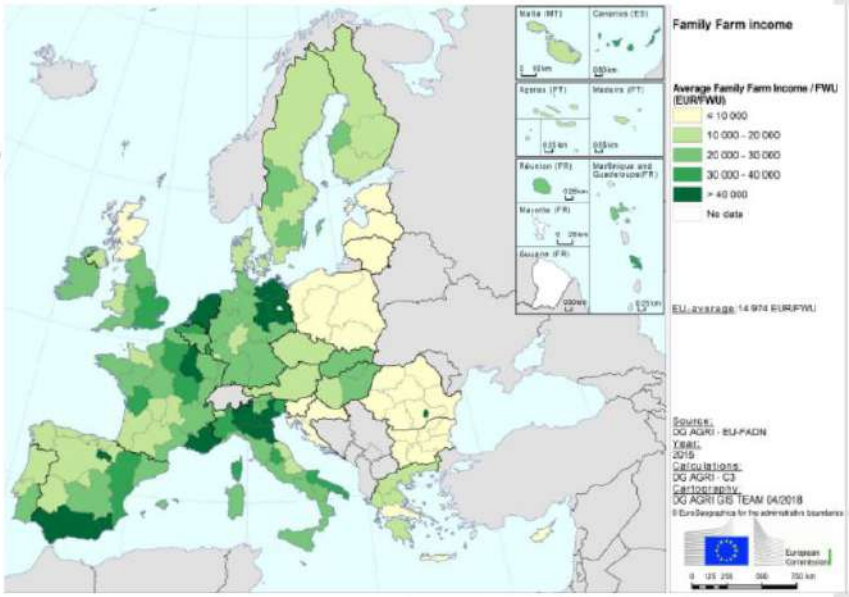
Let's have a look to agricultural context all over Europe

1. **Little farms....**



Percentage of farms with 100 ha UAA (Utilised Agricultural Area) or more, Eurostat 2013

2. **Regional differences in farms' income....**



From Dg AGRI – EU Commission

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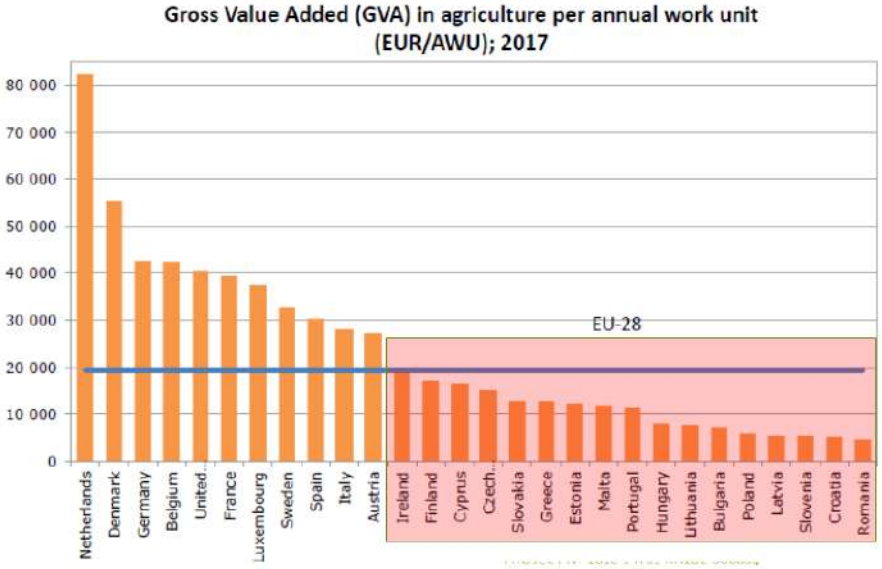
3. Low productivity (as Gross Added Value) for many MS..



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Which solution?
Not only one....

Not alone....

Not without challenges.....

SPEAKING OF CHALLENGES....

5 MAJOR CHALLENGES FACING AGRICULTURE, AGRI-FOOD AND RURAL AREAS

1. Food and nutrition security
2. Climate change
3. Environment and biodiversity
4. Maintaining a healthy lifestyle
5. Rural areas

Data source: EPRS adaptation from INRA and Wageningen Univercity

HOW TO FACE THESE CHALLENGES?

Data source: adaptation from INRA and Wageningen Univercity

Food and nutrition security	New plants breeding techniques including greater use of existing genetic resources and breeding ; animal breeding ; drought resistant crops ; reducion of food waste
Climate change	Use of big data leading to precision farming ; new farming system ; ecological approaches including use of eco-system services
Environment biodiversity	Precision farming ; ecological approaches such as eco-system services; collaboration of farmers with new business models
Healthy lifestyle	More sustainable consumption patterns; food traceability; school fruit schemes , smart cities; urban and peri-urban farming
Rural areasand territorial cohesion	European Innovation parternships on agricultural sustainability and productility (EIP-AGRI); rural development programmes; urban and peri-urban farming , social innovation; SMART villages; digital connectivity; LEADER type development ; bio economy actions

EUROPEAN COMMISSION POSITION

In its communication on the **CAP post 2020**, the **European Commission** recognises the role of **Research and Innovation**. It considers them to be part of the *'foundation of progress concerning all the challenges which confront the EU's farm sector and rural areas, economic, environmental and social'*.

European Commission considers that support for knowledge, innovation and technology will be crucial to 'future-proofing'.

2 key words:

Research, Innovation

EIP Strategy

eip-agri
AGRICULTURE & INNOVATION

European Innovation Partnership in agriculture

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WHAT IS?

Fostering a competitive and sustainable agriculture and forestry sector that '*achieves more from less*'

Closing the innovation gap between research and practice and forming partnerships by:

1. Using the **Interactive Innovation Model**
2. Linking actors through the **EIP-AGRI Network**

https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_brochure_network_2015_en_web.pdf

Source: Insurance legislation - Martella

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LET'S MAKE AN EXAMPLE OF WHAT COULD HAPPEN.....

Target **real-life needs, problems or opportunities**

Choose consortium partners with **complementary types of knowledge and skills** (for "cross-fertilisation")

including **farmers, foresters or other end-users** to benefit from their entrepreneurial skills

From Dg AGRI – Unit Research and innovation

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Involve "multipliers" - people who can bring in practical knowledge and help disseminate the results in the long term

Set up a plan with a **clear role for each of the different partners**

Organise **knowledge exchange activities** between the partners

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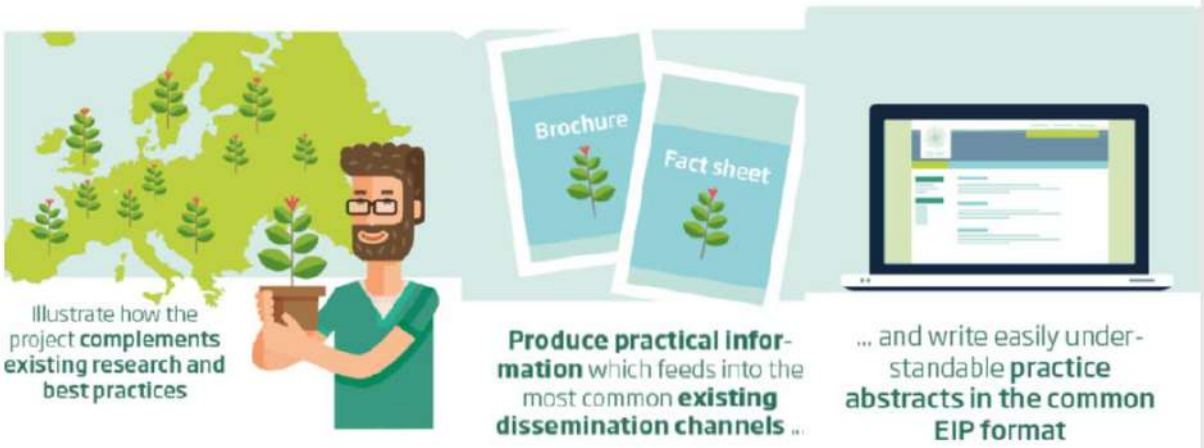
Bridge the gap between research and practice **by facilitating discussions**

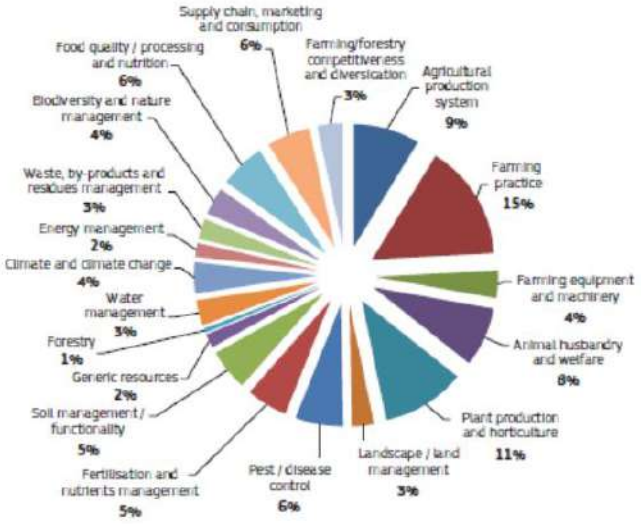
Involve interactive innovation groups such as **EIP-AGRI Operational Groups**

All partners must **co-create and co-decide throughout the project**



OPERATIONAL GROUPS

What are EIP-AGRI operational groups working on?



..SOME EXAMPLE IN Teen Farm's COUNTRIES..

..SOME EXAMPLE IN YOUR COUNTRIES..

EIP AGRI Operational groups _ The italian projects

Assessment

2030 Agenda for sustainable development how much objectives does it expect?
A. 15
B. 17
C. 20

Which member state has less dimension agricultural companies?
a. Malta
b. Cyprus
c. Croatia

Which member state has the highest productivity in terms of GDP?
a. Germany
b. FraNce
C. Netherlands

In which sector the EIP-AGRI Operational Groups were most developed?
a. Farming practice
b. Animal husbandry and welfare
c. Water management

It could be possible to find same problems to face in farming systems in different countries?
a. Yes with same solutions also
b. No impossible
c. Yes but with same solutions

In what member country are there mostly developed Operational Groups?
a. Italy, Spain, Greece
b. Belgium, Spain, Greece
c. Netherland, Italy, Spain

What it means for EIP-AGRI?
a. European Innovation Project
b. Productivity and Innovation
c. European Partnership for Innovation

What is the purpose of the EIP-AGRI ?
a. To promote sustainable and competitive agriculture and forestry that "get more and better with less"
b. Promoting interaction between farmers
c. Modernizing agricultural activity

With which instrument the EIP-AGRI is funded:
a. 1st pillar
b. 2nd pillar
c. CMO

[i] https://ec.europa.eu/ploteus/content/descriptors-page