Partiamo da una domanda per voi? Tranquilli, sarà semplice.
"Avete bevuto qualche buon vino in questi giorni? Potete fare il nome di un tipo di spumante che avete degustato?"
<attendere che qualcuno dica la parola "prosecco">
Hm interessante! Ora non posso offrirvi un altro bicchiere di prosecco, ma posso offrirvi una bella storia.
Qualche anno fa ho incontrato Luca Ferraro. Abita a pochi chilometri di qui, sulle colline di Asolo <CAMBIO SLIDE>

May we start with a question for you? Don't be afraid, it'll be easy.
"Have you drunk some good wine these days? Could you name some kind of sparkling wine you have tasted?
<waiting for someone saying "prosecco">
That's interesting! Now, I cannot offer you a glass of "prosecco", but I can offer you a good story.
Some years ago I met Luca Ferraro. He lives few kilometers away from here, on the Asolo hills <Change slide>

Image Line
Internet - communication - Agriculture

Passion for innovation, with agriculture in the heart

Internet
It's the mean choose by Image Line to share informations, databases and instruments for farm managing

Communication
It's important to spread innovations and news concerning primary sector to professional players who are part of it

Agriculure
Image Line roots and target market

Image Line Portals

AgroNotizie
news for agriculture

Fitogest
Crop protection products search engine

Fertilgest
Fertilizers search engine

Macgest
farm machinery, with one click

Plantgest
Fruit varieties search engine

Farming machinery, European meeting of dealers
From Sweden to Italy, trough Agritechnica. The international meeting of agriculture machinery dealers will be held in Venice from 20 to 23 October 2016, with Unacma sponsorship

... e Luca sa trasmettere tre grandi passioni. Una è quella per la sua terra, le colline di Asolo (la sua azienda di trova a Caerano San Marco, in provincia di Treviso).

….and Luca can transmit three great passions. One is for his land, the Asolo hills (his farm is in Caerano San Marco, in Treviso province).

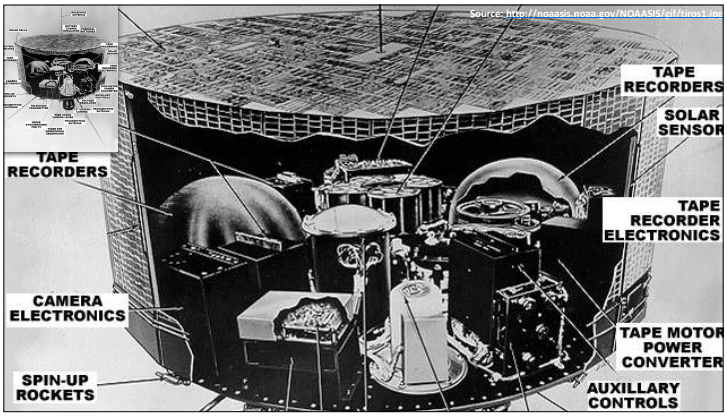
Un'altra, naturalmente è quella per il suo vino... e la terza, beh, ve la faccio raccontare da lui.

Another one is, of course, for his wine….and the third, well, I'll let him tell to you.

Source: https://vimeo.com/41543531

Guardiamo insieme un video

Let's watch a video together



Sapete di cosa si tratta? Questo ha creato le fondamenta per l'agricoltura digitale e l'agricoltura di precisione!

Do you know what's this? This one created the foundations for digital and precision farming

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Source: Data [2015 – Boston Consulting Group]; Photo [BASF]

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Digital Farming - Markets & Data

The precision agriculture market totals EUR 3.0 billion in 2016 and is expected to grow to 4.5 billion in 2020 [2015 – Roland Berger]

In 2015 USD 661 million were invested in precision ag companies, increasing 140 percent from 2014 (USD 276 million) [2015 – AGFunder]

Drone companies captured USD 328 million of funding, representing an increase of 237 percent to 2014 [2015 – AGFunder]

60 percent of the farmers in France, Germany, Poland and the UK believe that precision farming will be widely adopted by 2030 [2015 – Boston Consulting Group]

Source: ForwardFarming.com and www.AgroInnovationTour.it

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Digital Farming - Markets & Data

70 – 80 percent of the new farm equipment sold today has an precision agriculture component [CEMA]

Machine to Machine (M2M) connections in agriculture will grow globally from 12.8 million in 2014 to 224.8 million in 2024 [2016 – Machina Research]

In 2024 Asia-Pacific will be the biggest market for M2M applications in agriculture with 54 million connected devices; Europe will be just behind with 51 million connected devices [2016 – Machina Research]

The EU will dedicate EUR 64 million between 2016 and 2017 to precision farming and digital technologies in the agriculture sector; EUR 30 million will be invested in the implementation of an Internet of Things Large Scale Pilot on "Smart farming and food security" [2016 – Phil Hogan]

The agricultural robotics market was worth USD 1.7 billion in 2015 and is anticipated to reach USD 21.3 billion by 2022 [2016 – WinterGreen Research Inc.]

Source: ForwardFarming.com and www.AgroInnovationTour.it

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Digital farming - Costs

Costs for a satellite navigation system can range from EUR 1,300 for an easy system with only a screen that shows your place on the field to EUR 22,500 for a more complex system with more options, accuracy and auto-steering functions [CEMA]

Drones for agricultural use without specific technology start at EUR 2,000; higher technological drones used specifically for agriculture start at EUR 20,000 [CEMA]

Source: ForwardFarming.com and www.AgroInnovationTour.it

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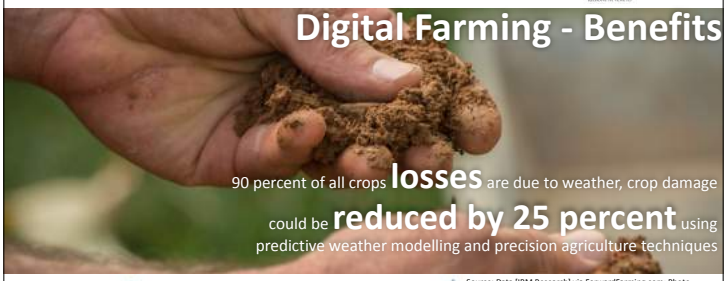

Source: Data [IBM Research] via ForwardFarming.com; Photo [USDA_NASS cc 2.0]

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Digital farming - Benefits

Agricultural technologies could increase global crop yields as much as 67 percent and cut food prices nearly in half by 2050 [2014 – International Food Policy Research Institute]

Advanced satellite navigation systems can be as accurate as 2 centimetre [CEMA]

By combining a satellite navigation system with an autopilot system, farmers can achieve average savings around EUR 20 per hectare per year [CEMA]

Controlled Traffic Farming (CTF) can reduce machinery and input costs up to 75 percent [European Parliament]

90 percent of all crops losses are due to weather, crop damage could be reduced by 25 percent using predictive weather modelling and precision agriculture techniques [IBM Research]

Source: ForwardFarming.com and www.AgroInnovationTour.it

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Digitization in general

6.4 billion connected things will be in use in 2016 and will reach 20.8 billion in 2020 [2015 – Gartner]

The worldwide IoT market will grow from USD 655 billion in 2014 to USD 1.7 trillion in 2020 [2015 – IDC]

The worldwide public cloud services market is estimated to grow in 2016 to USD 204 billion, up from USD 175 billion in 2015 [2016 – Gartner]

Global spending on robotics and related services will grow from more than USD 71 billion in 2015 to USD 135.4 billion in 2019 [2016 – IDC]

Source: ForwardFarming.com and www.AgroInnovationTour.it

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More data on Web/Internet

Globally 3.2 billion people are using the Internet by end of 2015; 2 billion of them live in developing countries [2015 – ITU]

Two third of the people from developing countries (4 billion) remain offline [2015 – ITU]

Over 95 percent of the world population is now covered by mobile-cellular services, but there are still an approximately 350 million people worldwide who live in places with no mobile network coverage [2015 – ITU]

89 percent of the world's urban population is now covered by a 3G network, but only 29 percent of the people living in rural areas (3.4 billion) benefit from 3G coverage [2015 – ITU]

Source: ForwardFarming.com and www.AgroInnovationTour.it

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European farming goes digital

Some more data and opinions

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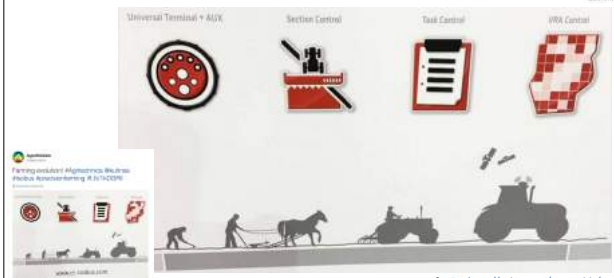
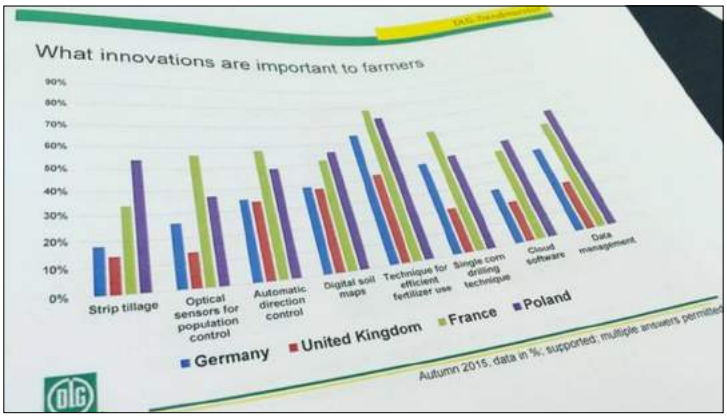


Source: https://twitter.com/agronotizie/status/663432083419889665

What innovations are important to farmers



Video: https://www.youtube.com/watch?v=t1UAY85cgOc

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Image Line and its AgroInnovation Tour #agroinnovation16

We made a journey all over Italy and we got in touch with several professionals (farmers, consultants, contractors...) in order to understand what are they expecting from digitization and technology innovation in general (Internet, Social networks, Web applications)

Source: www.AgroInnovationTour.it

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See also: http://www.farm2050.com/

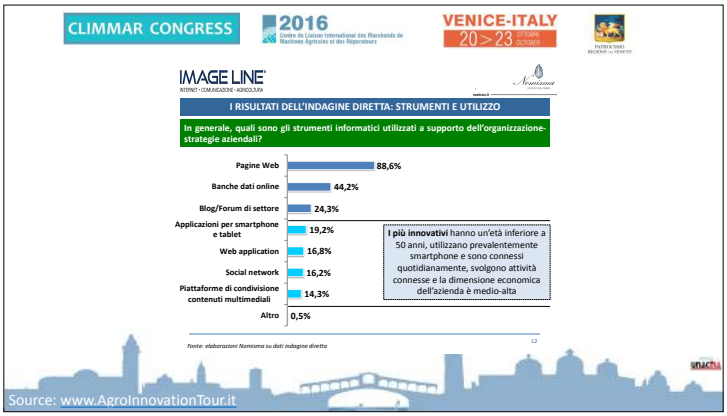
Source: www.techeconomy.it/2015/05/19/google-ventures-investe-sullagricoltura-punta-farmers-business-network/

Video: https://www.youtube.com/watch?v=t1UAY85cgOc

direct survey results: internate utilization and equipment
in the last 5 years, with which frequency did you use the internet as an instrument supporting your business strategy and organization (prices informations, crops, machinery)?

every day or almost –> 61.5% —> in particular, these are farms with: connected activities, more than 40 hectares, more than 100000 € revenue, using internet for more than 10 years, zootechnical (in particular, milk production), certificate productions, chief with a inherent qualification (agricultural expert, agricultural science graduate)
at least once a week –> 28.1%
some times in a month –> 9.1%
more rarely –> 1.2%

Source: Nomisma elaboration of direct survey data



direct survey results: tools and use
In general, which informatics tools are used supporting business strategy and organization?

Web pages: 88.6%
Online databases 44.2%
specific blogs/forums: 24.3%
————————————————more innovative users are less than 50 years-old, mainly use smartphones and are daily connected, develop agriculture connected activities and manage middle-to-high economic size farms
smartphones and tablet apps: 19.2%
Web apps: 16.8%
social network: 16.2%
Multimedia content sharing platforms:14.3%
————————————————————
Other: 0.5%

Source: Nomisma elaboration of direct survey data

direct survey results: tools and use
Among those who use social media (38.6% of the total) supporting farm business (product promotion, competitors informations, agricultural products reviews,…) the more employed are

Source: Nomisma elaboration of direct survey data

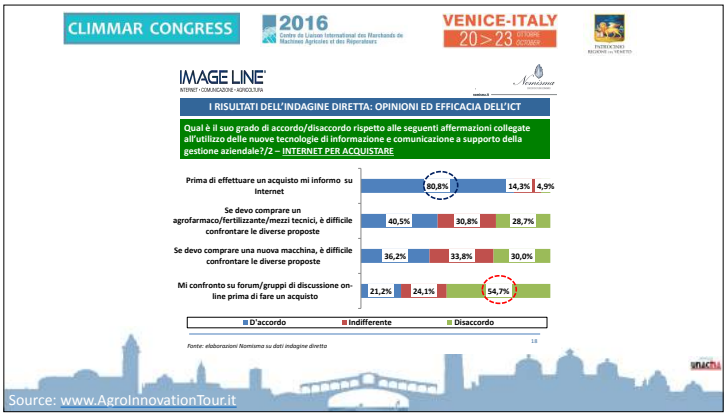
direct survey results: new technologies
Among those using apps and/or web applications (29.6% of the total) supporting business strategies, main services they access to are…

Customized meteo with farm positioning: 80.5%
Crop treatments to employ: 52.4%
Periodic prices informations: 40.4%
Specific news and events: 38.6%
Regulations updates: 37.0%
Funding calls and other public funding opportunities: 24.7%
Main deadlines (eu funds, calls..): 19.5%
Advertising opportunities for farms and products: 14.7%
eu fund payment: 10.3%
Breeding management (cattle registration, productivity,…): 7.2%
professionals for funding consults: 5.1%

Source: Nomisma elaboration of direct survey data

Direct survey results: new technologies
Among the main available technologic innovations for agriculture, which instruments would you like to use supporting your business strategies?
Wether stations: 54.8%
Personalized Phytopathological bulletin Apps: 50.8%
gps o precision farming tools: 43.6%
Drones:43.0%
crop monitoring sensors: 39.3%
Machinery or products dealers Apps: 35.7%
Optical measure tools: 33.4%
Augmented reality: 28.0%

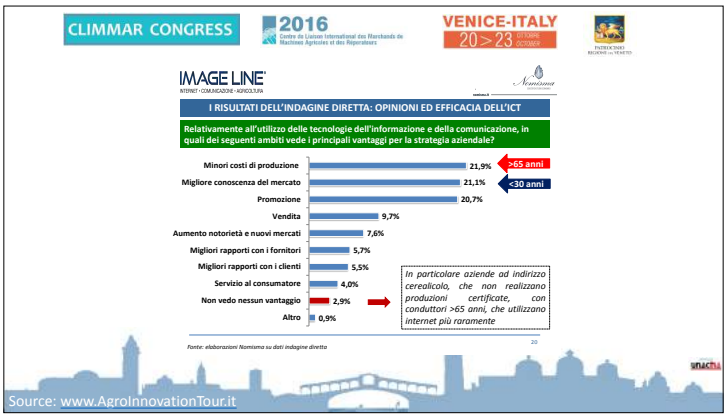
Source: Nomisma elaboration of direct survey data



Direct survey results: ICT opinions and efficiency
How much do you agree with the following statements about information and communication new technologies, supporting business management? Internet for buying

Before buying I gather informations on the internet:	80.8% Agree, 14.3% neutral, 4.9% Disagree
If I have to buy an agrochemical/fertilizer/technical means, it's difficult to compare different proposal	40.5% Agree, 30.8% neutral, 28.7% Disagree
If I have to buy a new machinery, it's difficult to compare different proposal	36.2% Agree, 33.8% neutral, 30.0% Disagree
I ask on online forums/discussion groups before buying	21.2% Agree, 24.1% neutral, 54.7% Disagree

Source: Nomisma elaboration of direct survey data



Direct survey results: ICT opinions and efficiency
Concerning information and communication technologies use, in which of the following sectors do you see main advantages for your business strategies?
Lower production costs: 21.9% (above 65 years-old)
Better market knowledge: 21.1% (under 30 years-old)
Promotion: 20.7%
Selling: 9.7%
Notoriety increase and new markets: 7.6%
Better suppliers relationships: 5.7%
Better clients relationships: 5.5%
Consumer service: 4.0%
I don't see any advantage: 2.9%
Other: 0.9%

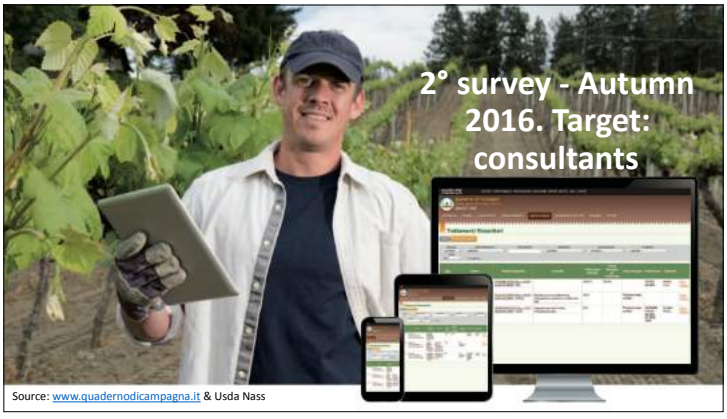
Source: Nomisma elaboration of direct survey data

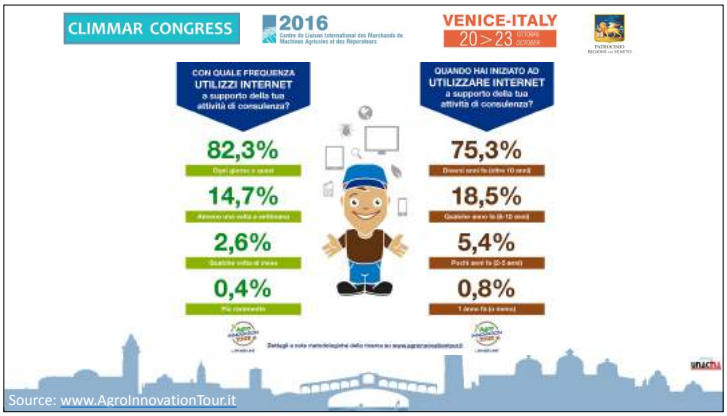
interpretive synthesis: cluster analysis results

Innovators 38%
Age
40-49 years
Education
Diplomates and graduates
Revenue
51,000 to 100,000 €
Cultivated area
41 ha
Internet use frequency
Daily (63%)
Internet use start
more than 10 years ago
activity
Traditional crops and certificate productions
Informatics equipments
Computer, samrtphone, Tablet.
High use of web and social network
ict role
Important in every business phase
new technologies
Strongly interested

Conservators 55%
Age
more than 50 years
Education
agricultural experts
Revenue
more than 100,000 €
Cultivated area
41 ha
Internet use frequency
daily (62%)
Internet use start
more than 10 years ago
activity
Traditional crops
Informatics equipments
computer or notebook
low use of web
ict role
limited to client/suppliers contact
new technologies
not interested

neophyte 7%
Age
less than 40 years
Education
agricultural science graduates
Revenue
less than 50,000 €
Cultivated area
28 ha
Internet use frequency
daily (53%)
Internet use start
2-10 years ago
activity
traditional crops and farmhouse
Informatics equipments
Computer, smartphone, tablet
discrete web use
ict role
websites and blogs for selling and promotion purpose
new technologies
interested





With what frequency do you use the Internet supporting your consultancy activity?
82.3% Every day or almost
14.7% at least once a week
2.6% some times in a month
0.4% more rarely

When did you started to use the Internet supporting your consultancy activity?
75.3% many years ago (more than 10)
18.5% some years ago (6-10)
5.4% a few years ago (2-5)
0.8% one year ago (or less)

For your professional profile, which are the main advantages in using informatics instruments?

42.6% increase of my professional knowledge
14.4 % more efficient communication with clients
11.4% more efficient communication with institutions/authorities
10.6% better market needs knowledge
9.3% lower management costs
6.7% increase of my activity notoriety (and of demand/clients)
3.3% more efficient communications with suppliers
1.6% I don’t see any particular advantage

Internet, consultancy and technical assistance: web and online databases
Among those using web and online databases supporting consultancy activity and technical assistance in agriculture, the most researched informations are…
regulations and specific updates: 21.4% consultants, 10.6% farmers
Informations about agronomic techniques, new varieties and treatments: 18.6% consultants, 18.5 % farmers
Public calls updates and other funding opportunities: 18.2% consultants, 8.1% farmers
Weather forecasts: 11.9% consultants, 35.2% farmers
Products and services informations: 5.7% consultants, 12.6% farmers
Agricultural products prices search: 5.4% consultants, 11,2% farmers
Dedicated events news (field test, exposures, shows): 3.5% consultants, 2.1% farmers

Internet, consultancy and technical assistance: desired informations
what informations would you like to find on the internet/app/social network, among those you do not find now but would be useful in orientating your agricultural consultancy and technical assistance choices?

new techniques-technologies (innovative farming techniques, new products,…): 24.9%
Services (e.g. product efficiency comparison): 16.1%
Market (production forecast, import/export, price trends): 15.9%
about production costs: 15.8% *
Regulations (news about fundings, new regulations,…): 15.1%
Concerning inputs and technical means costs: 9.3% *
No one, I find every information I need
Other informations 0.4%

*: in particular for consultants with less than 10 years of activity

Internet, consultancy and technical assistance: promising technologies
Which technologies/tools do you consider actually worthy and effective in orientating agriculture future in the next years?

App and web applications (phytopathological bulletin, treatments register,…) 50.8% Farmer, 47.7% consultants
Gps (or tools for input rationalizing): 43.6% farmers, 44.9% consultants.
Sensors (for environmental monitoring of plant features) 39.3% farmers, 42.2% consultants
Weather stations: 54.8% farmers, 39.0% consultants
Drones (crop monitoring or specific areas applications): 43.0% farmers, 38.7% consultants
Optical measure instruments (e.g. fruit sugar content monitoring, and other): 33.4% farmers, 24.2% consultants
Product or machinery dealers specific apps: 35.7% farmers, 13.3% consultants

Consultancy and technical assistance: approach to innovation
Which one of the following information do you agree with?
Innovation is essential to promote agricultural system grow: 95.1%
Innovative services/products in agriculture make farmer's life easier: 83.0%
A farm with no innovation is not surviving: 82.6%
A consultant/expert suggesting an innovative product/service gains a competitive advantage: 81.6%
Innovative products/services are often overrated: 70.3%

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Not only in Italy...

Some more stats

Source: ForwardFarming.com and www.AgroInnovationTour.it

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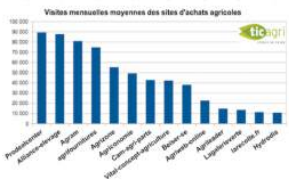
Les achats en lignes des agriculteurs décollent au 1er semestre 2016.

20 septembre 2016



Lors de la présentation des premiers résultats de l'enquête Agrinautes 2016, j'ai promis de donner quelques chiffres sur l'e-achat des agriculteurs.

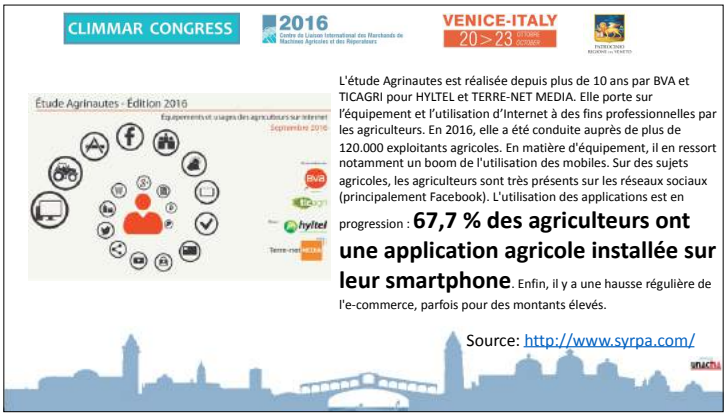
D'après les statistiques de SimilarWeb, au premier semestre 2016, 14 sites ont dépassé les 10 000 visites mensuelles, parmi la vingtaine qui affiche les prix et offre la possibilité d'acheter en ligne.

L'ensemble des sites proposant des achats de produits agricoles sur internet, ont reçu en moyenne 660 000 visites par mois.

Ils représentent 5% des visites des Agrinautes sur l'ensemble des sites agricoles que nous suivons. Il y 18 mois les achats en ligne ne représentaient que 3% du trafic.

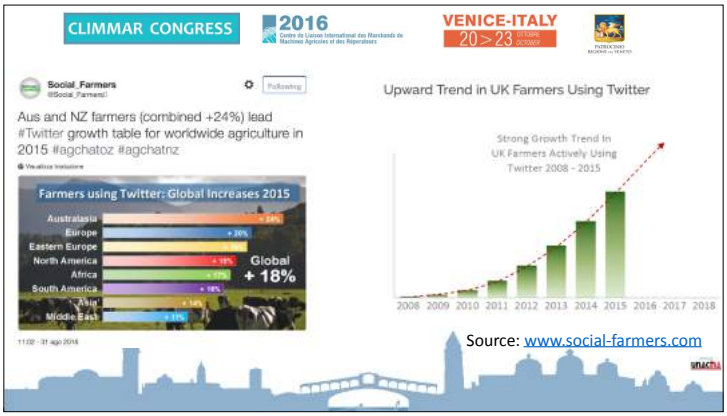
Ce mouvement ne devrait pas s'arrêter là. Ainsi les premiers chiffres des connexions sur ces même sites mettent en évidence une progression de l'ordre de 10% en août dernier par rapport à juillet.

Source: ForwardFarming.com and www.AgroInnovationTour.it



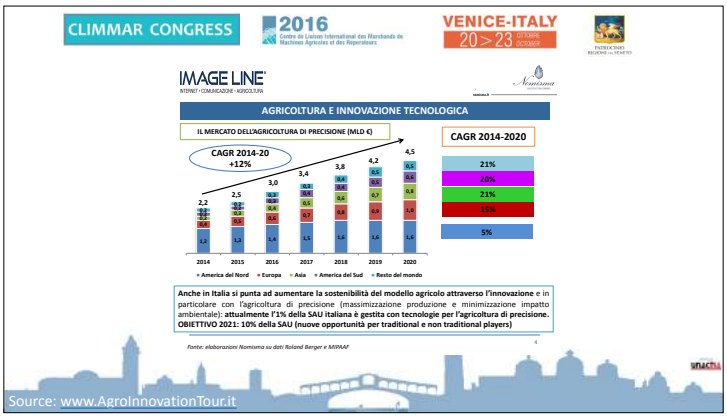
Eventuali approfondimenti: VIDEO IN FRANCESE DISPONIBILE QUI https://www.youtube.com/watch?v=O3aqIUmirw8

other insights: french video available here



Source: www.social-farmers.com

Source: ForwardFarming.com



Agriculture and technologic innovation
precision farming market (billion €)

Also Italy aims to increase sustainability of agricultural model through innovation and in particular with precision farming (maximize production an minimize environmental impact): at the moment 1% of Italian arable land is managed with precision farming technologies.
TARGET 2021: 10% of arable land (new opportunities for traditional and non traditional players)

Agricultural engineering Unit
Agriculture and forestry technologies and methods
Agricultural mechanization, environmental managing, post-harvest, product transformation and biomasses also for energetic purpose, technical-scientific support, certification and regulation harmonization.

Staff
Director 1
Researchers: 21
Technics: 16
Administratives: 7
Research collaborators: 14
Post-doc: 7

Common Agricultural Policy
1.Transfer knowledge and innovation
2.promote innovative technologies
3.Enpower agriculture production chain organization
4.Preserve agriculture connected environments
5.Encourage efficient resources use
6.promote rural areas integration and economic development

–> digital technologic innovations

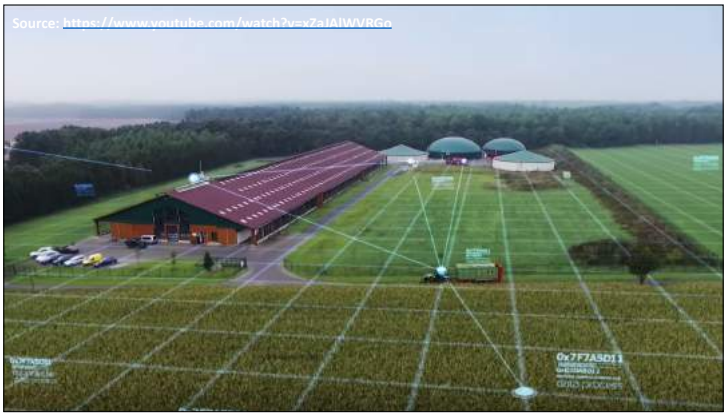
Dital and technologic innovations

Thirties to eighties –> Mechanic and Mechanization

Eighties to 2000 –> electronic

Today –> digital (informatics and telecommunications)

=> digital agriculture
=> precision farming



Nota per il traduttore: Il video è disponibile qui in inglese https://www.youtube.com/watch?v=xZaJAlWVRGo Sarà scaricato in modo da poterlo vedere offline

English video available here https://www.youtube.com/watch?v=xZaJAlWVRGo

Pekka Pesonen, Secretary General of COPA-COGECA, emphasized two major challenges that would need to be addressed from the point of view of European farmers and farm cooperatives: “We need to avoid a digital divide in agriculture and make sure farms of all sizes can benefit from this technology, from small family farms to large agribusinesses. In addition, adequate rural broadband infrastructure across the entire EU is an essential precondition for a successful and inclusive digital transformation in agriculture.”

"Precision agriculture helps farmers to do this by optimising their input use and maximising their productivity, whilst minimising the impact on the environment. But with less than 25% of farmers in Europe using any form of precision farming, uptake must be increased."

"Il nostro ruolo al CEMA è quello di aiutare gli agricoltori a produrre più cibo, con meno lavoro, con meno terra, in maniera sostenibile e a prezzi accessibili", ha dichiarato il Sig Markwell. "L'agricoltura di precisione aiuta gli agricoltori a fare questo, ottimizzando l'uso delle materie prime e massimizzandone la produttività, riducendo al minimo l'impatto sull'ambiente. Ma con meno del 25% di agricoltori in Europa che utilizzano qualsiasi forma di agricoltura di precisione, è necessario aumentarne la diffusione. "
"Inoltre, la ricerca e lo sviluppo deve essere intensificato per incoraggiare i partenariati privati a lavorare insieme sulla tecnologia e sulle attrezzature innovative. L'UE deve lavorare più da vicino con le organizzazioni come CEMA per assicurare che abbiamo i giusti strumenti, tenendo in considerazione i giusti standard di protezione e sicurezza ambientale, al fine di garantire un settore agricolo redditizio in cui gli agricoltori siano in grado di investire ", ha sottolineato.

"Our role at CEMA is to help farmers produce more food, using less labour, with less land, in a sustainable manner at affordable prices," Mr Markwell stated. "Precision agriculture helps farmers to do this by optimising their input use and maximising their productivity, whilst minimising the impact on the environment. But with less than 25% of farmers in Europe using any form of precision farming, uptake must be increased."
"In addition, research and development needs to be stepped up to encourage private partnerships to work together on innovative technology and equipment. The EU must work closer with organisations like CEMA to ensure that we have the right equipment, meeting the right standards of environmental protection and security, to ensure a profitable agriculture sector which farmers are able to invest in," he emphasised.

Alan Jagoe, President of the European Council of Young Farmers (CEJA) said: “Digital technology development and adoption has great potential to support the way farmers run their farms. Digital technology can also play a role in attracting young talents - that are already tech-oriented to farming and thus to one of the most exciting jobs today: ensuring that Europeans have high-quality-food on their plates.” Source: cema-agri.org

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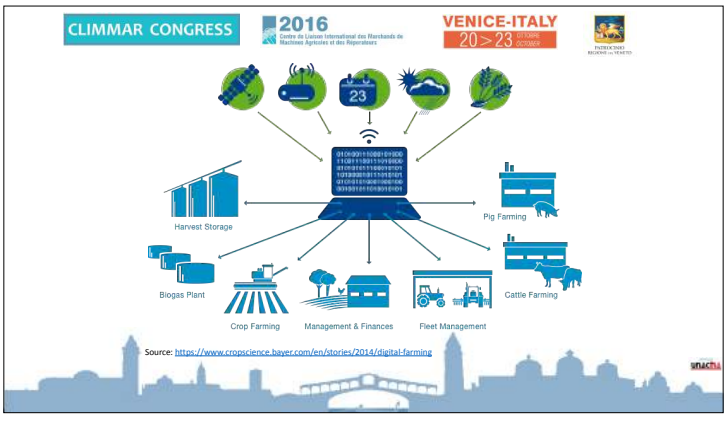
Digital farming: the next revolution?

Our "horizon": from precision to decision farming

Source: ForwardFarming.com and www.AgroInnovationTour.it



Let's keep talking about it during EIMA International 2016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Farm machinery: towards a new European agenda for industrial competitiveness & innovation in farming
Dates: Wednesday, 9 November, 2016
EIMA International 2016
Opening Conference
Wednesday 9 November 2016, Bologna Fair (Italy)
Agricultural Machinery:
towards a new European Agenda
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To mark the opening of the 42nd edition of EIMA International and for the first time, FEDERUNACOMA with the support of CEMA, organize a high-level conference on the topic "Agricultural Machinery: towards a new European agenda for industrial competitiveness & innovation in farming".


SCOPRI
le novità
del
DIGITALE
per
AGRICOLTURA
3 GIOCHI
X
1 viaggio
INNOVAZIONE
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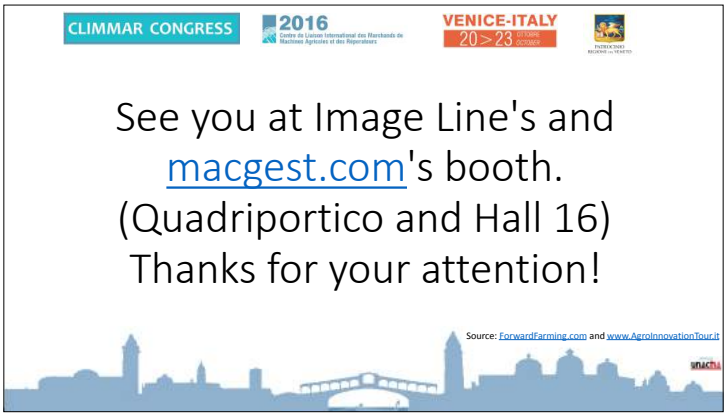

Some other sources: http://www.cema-agri.org/publication/farming-cloud-europe-needs-speed-path-towards-connected-agriculture, http://www.cema-agri.org/publication/digital-farming-practice-preparing-ground-future-agriculture-europe, http://www.euractiv.com/section/agriculture-food/opinion/farming-4-0-digital-technology-at-the-farm-gates/, http://www.euractiv.com/section/agriculture-food/opinion/digital-platform-investment-can-protect-agricultural-jobs/,