

CLIMMAR CONGRESS

2016
Centre de Liaison International des Marchands de
Machines Agricoles et des Réparateurs

VENICE-ITALY
20 > 23
OCTOBRE
2016

Cristiano Spadoni
Marketing & Communication Manager
Image Line [www.imageline.it]
European farming goes digital

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>

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IMAGE LINE
INTERNET - COMUNICAZIONE - AGRICOLTURA

Passione per l'innovazione,
con l'agricoltura nel cuore.

INTERNET:
È il mezzo scelto da Image Line
per la condivisione di informazioni,
banche dati e strumenti per la
gestione delle attività agricole.

COMUNICAZIONE:
È importante divulgare le innovazioni
e le notizie che riguardano il settore
primario agli operatori professionali
che ne fanno parte.

AGRICOLTURA:
Le radici di Image Line ed il suo
mercato di riferimento.

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

Agriculture

Image Line roots and target market



Image Line Portals

AgroNotizie
news for agriculture

Fitogest
Crop protection products search engine

Fertigest
Fertilizers search engine

Macgest
farm machinery, with one click

Plantgest
Fruit varieties search engine



Farming machinery, European meeting of dealers

From Sweden to Italy, through 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.



Guardiamo insieme un video

Let's watch a video together

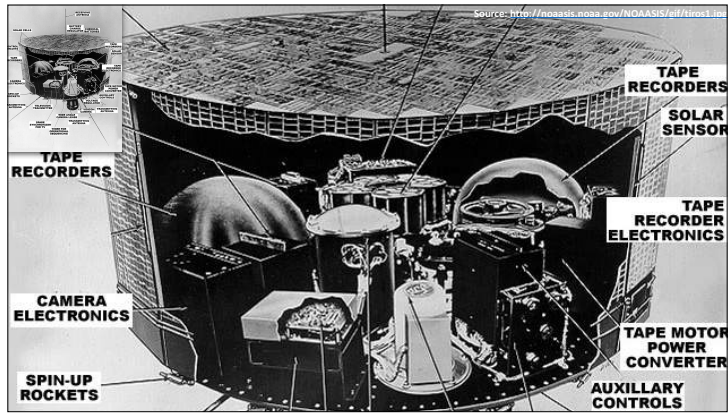
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European Farming goes Digital

- Milestones •

L'agricoltura europea verso il digitale

Le tappe fondamentali



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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REPUBBLICA
ITALIANA

Digital Farming - Milestones

- In 1960 TIROS 1, the first weather satellite, was launched into orbit
- In 1970 the first tractor was equipped with an electronic display
- In 1990 the first connected device in terms of the Internet of Things (IoT) went online: a toaster
- In 1991 LBS, the communication protocol for tractors and machinery and the precursor of the ISOBUS, was standardized
- In 1995 Global Positioning System (GPS) became fully operational
- In 1999 the term "Internet of Things" was coined by Kevin Ashton, Executive Director of the Auto-ID Center
- In 2001 the LBS was transferred into the ISOBUS

Source: forwardfarming.com and www.AgroInnovationTour.it

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Digital Farming - Markets & Data

60 percent of the farmers
in France, Germany, Poland and the UK believe that precision farming will be widely adopted by 2030

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: EzwareFarming.com and www.AgrinnovisionTour.it



Digital Farming - Markets & Data

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

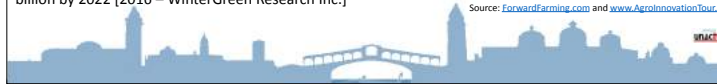
Machine to Machine (M2M) connections in agriculture will grow globally from 12.8 million in 2014 to 224.8 million in 2024 [2016 – Machina Research]

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



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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Digital Farming - Benefits



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

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



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



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]

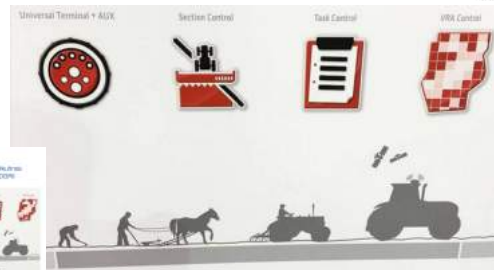
89 percent of the world's urban population is now covered by a 3G network, but only 29 percent of the people living in rural areas (3.4 billion) benefit from 3G coverage [2015 – ITU]

Source: ForwardFarming.com and www.AgroInnovationTour.it



European farming goes digital

Some more data and opinions



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



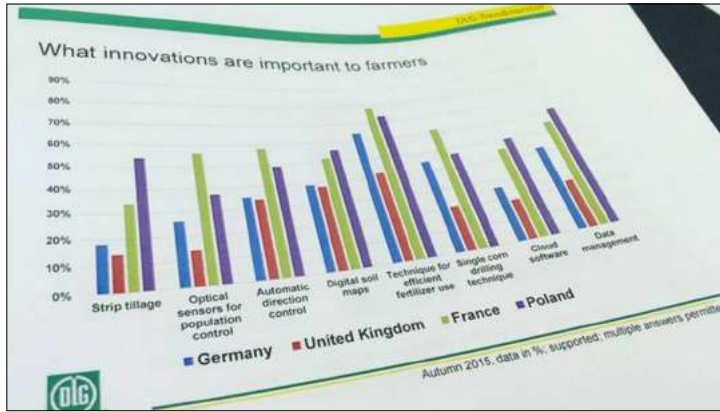
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AgroNotizie
 Quali innovazioni sono importanti per gli agricoltori? @dlgev @agritechnica #Agritechnica
 it.t/1WcWdP

Source: <https://twitter.com/agronotizie/status/66366233214149372>


11:20 - 9 Nov 2016

What innovations are important to farmers




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Let's ask some some German Farmers



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

Source: digitalfarming.bayer.com and www.AgroInnovationTour.it



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

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Let's talk about "Farmer 4.0"

How can we describe this 4th revolution?

Source: ForwardFarming.com and www.AgroInnovationTour.it



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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TECH

Google Ventures investe sull'agricoltura e punta su Farmers Business Network



See also: <http://www.farm2050.com/>
Source: www.tech2economy.it/2015/05/19/google-ventures-investe-sullagricoltura-punta-farmers-business-network/



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**Digital is not (only) a matter of technology
but it's an issue concerning culture!**



Source: www.agroinnovationtour.it

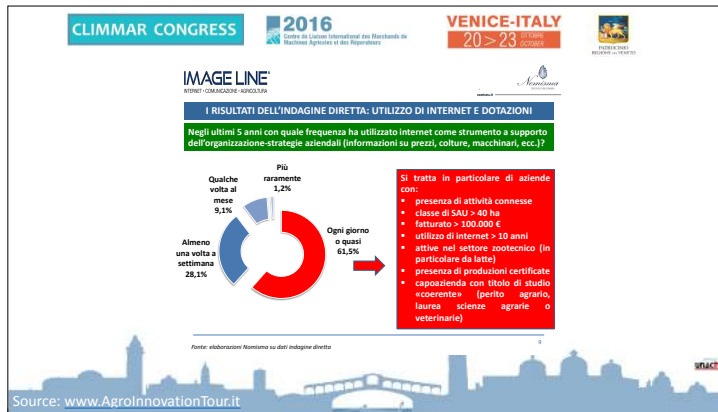


Video: <https://www.youtube.com/watch?v=t1UAY85cgOo>



COMMUNITY IMAGE LINE:
142,000 subscribers
14% consultants
25% farmers

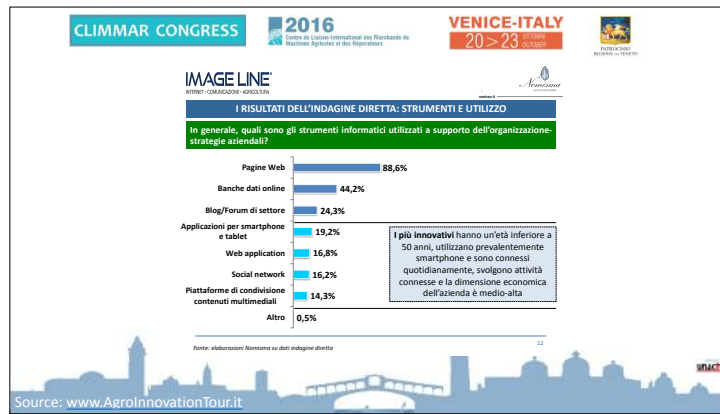
Farmer 4.0:
taking part in communities
to share values and ideas



direct survey results: internet 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 or precision farming tools: 43.6%

Drones: 43.0%

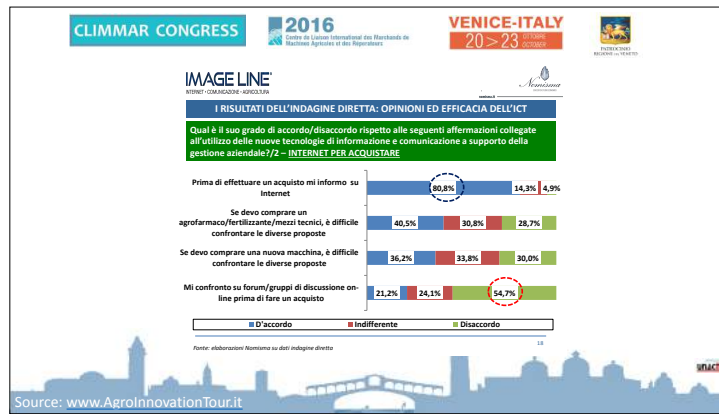
crop monitoring sensors: 39.3%

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

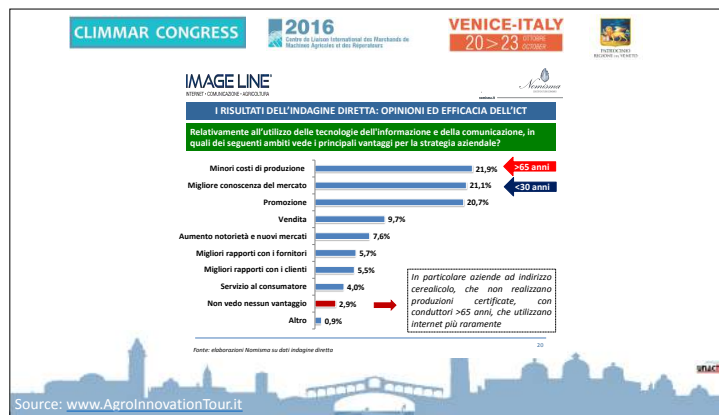
If I have to buy a new machinery, it's difficult to compare different proposal

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%

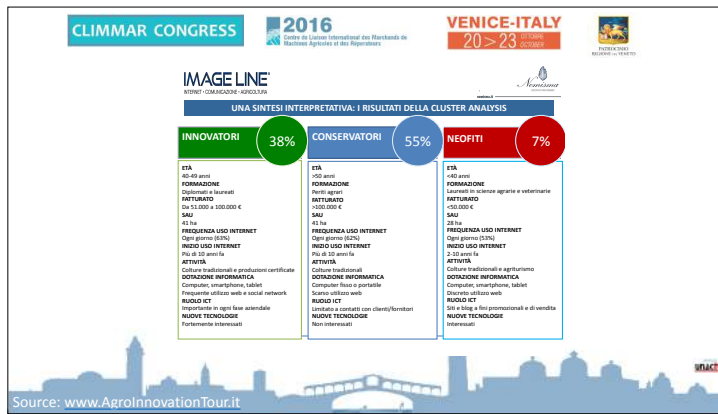
Better clients relationships: 5.5%

Consumer service: 4.0%

I don't see any advantage: 2.9%

Other: 0.9%

Source: Nomisma elaboration of direct survey data

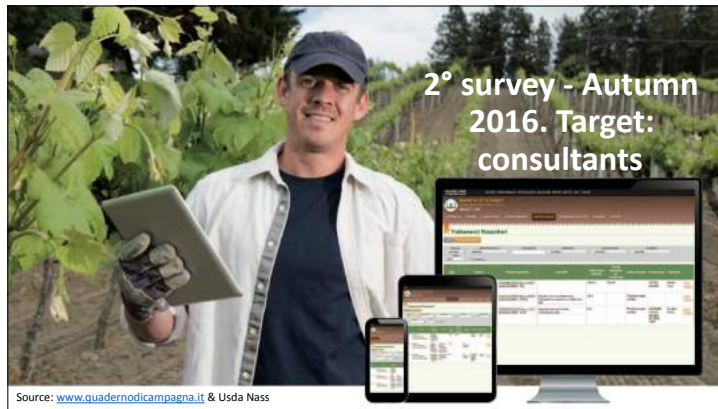


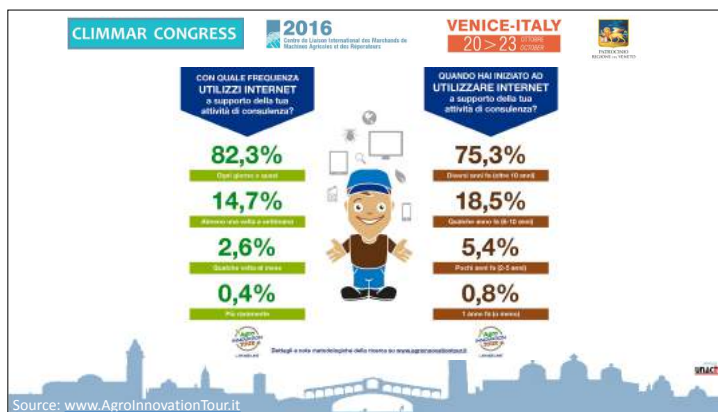
interpretive synthesis: cluster analysis results

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, smartphone, 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

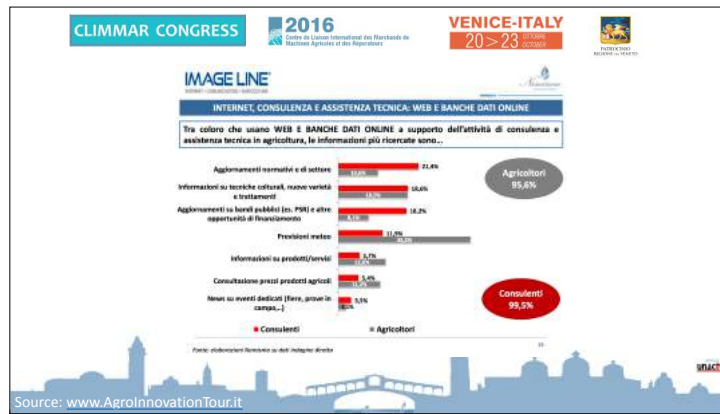
When did you started to use the Internet supporting your consultancy activity?

- 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 & Technical assistance: which kind of info are requested online?

24,9% would like to find more&more info/data on **new GAP (Good Agricultural Practices) and new technologies** - Web is a good tool for extension and assistance.

Source: Survey AgroInnovationTour.it by Image Line and Nomisma - september 2016



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.

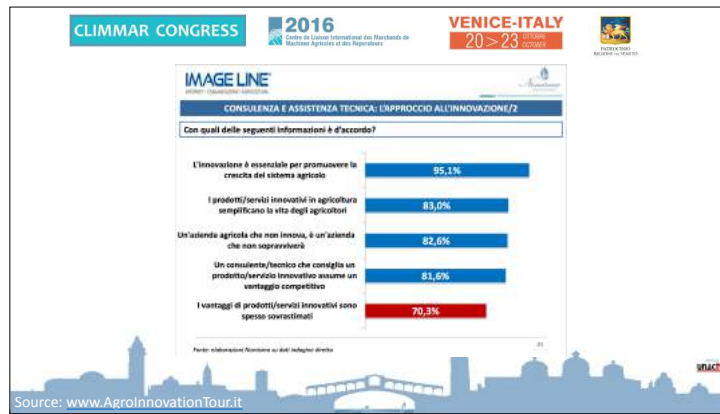
Sensors (for environmental monitoring of plant features) 39.3% farmers, 42.2% consultants

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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Next steps: SAVE THE DATE
NOVEMBER 11th in #EIMA 2016

EIMA International 2016: survey - target "contractors"
 November 11th, 3 to 6 pm - EIMA Web TV Room (Quadrilatero)

Then: farm equipment dealers and agrochemical resellers

Source: ForwardFarming.com and www.AgroInnovationTour.it

Not only in Italy...

Some more stats

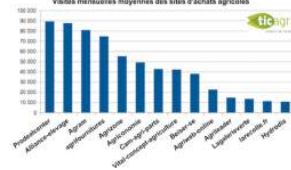
Source: ForwardFarming.com and www.AgroInnovationTour.it



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

20 septembre 2016

Visites mensuelles moyennes des sites d'achats agricoles



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 a 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 conversions sur ces mêmes 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



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Étude Agrinautes - Édition 2016
Équipement et usages des agriculteurs sur internet
Septembre 2016



L'étude Agrinautes est réalisée depuis plus de 10 ans par BVA et TICAGRI pour HYTEL et TERRE-NET MEDIA. Elle porte sur l'équipement et l'utilisation d'Internet à des fins professionnelles par les agriculteurs. En 2016, elle a été conduite auprès de plus de 120.000 exploitants agricoles. En matière d'équipement, il en ressort notamment un boom de l'utilisation des mobiles. Sur des sujets agricoles, les agriculteurs sont très présents sur les réseaux sociaux (principalement Facebook). L'utilisation des applications est en progression : **67,7 % des agriculteurs ont une application agricole installée sur leur smartphone.** Enfin, il y a une hausse régulière de l'e-commerce, parfois pour des montants élevés.

Source: <http://www.syrpa.com/>

Eventuali approfondimenti: VIDEO IN FRANCESE DISPONIBILE QUI <https://www.youtube.com/watch?v=O3aqlUmirw8>

other insights: french video available here

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What about Social network?

Some hints

Source: ForwardFarming.com and www.AgroInnovationTour.it

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Social Farmers
#SocialFarmers

Aus and NZ farmers (combined +24%) lead #Twitter growth table for worldwide agriculture in 2015 #agchatoz #agchatrz

Farmers using Twitter: Global Increases 2015

Australasia	+24%
Europe	+20%
Eastern Europe	+18%
North America	+18%
Africa	+15%
South America	+15%
Asia	+14%
Middle East	+14%
Global	+18%

11:02 - 31 ago 2016

Upward Trend in UK Farmers Using Twitter

Strong Growth Trend in UK Farmers Actively Using Twitter 2008 - 2015

Source: www.social-farmers.com

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Social Media Usage

The use of social media changed the world in solving our problems.

Facebook	>1 billion worldwide
Twitter	554 million worldwide

Social Media Activity of Farmers across the Globe

US	76% between 18-35 years
UK	53%
Australia	33%

With Facebook, we can also solve problems revolving around the use of new machinery faster and develop better solutions to improve our farms.

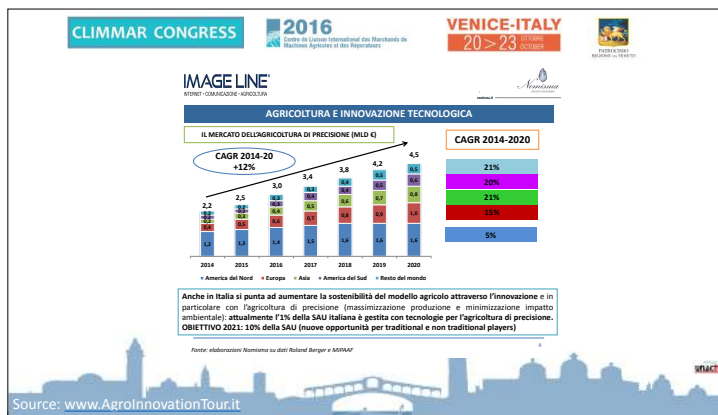
Source: ForwardFarming.com

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Conclusions

Some hints

Source: Macgest.com and www.AgroInnovationTour.it



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 and 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)

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CREA-ING

Unità di Ingegneria Agraria

tecnologie e metodologie nei sistemi agricoli e forestali
 meccanizzazione agricola, gestione ambientale, post-raccolta,
 trasformazione di prodotti e biomasse anche a fine energetico
 supporto tecnico-scientifico, certificazione e armonizzazione
 normativa

Staff	
Direttore	1
Ricerca	21
Tecnici	16
Amministrativi	7
Collaboratori di ricerca	14
Post-doc	7

Fondo Europeo per lo Sviluppo Regionale, 2014-2020
 Ministero delle Politiche Agricole, Alimentari e Rurali
 Ministero delle Infrastrutture e dei Trasporti
 Ministero dell'Ambiente, della Tutela del Territorio e del Mare
 Ministero della Sanità
 Ministero delle Attività Produttive
 Ministero delle Politiche Regionali e dell'Autonomia Locale
 Ministero delle Politiche Europee
 Ministero delle Politiche Economiche e del Commercio Estero
 Ministero delle Politiche Sociali
 Ministero delle Politiche Turistiche
 Ministero delle Politiche Culturali
 Ministero delle Politiche Sportive
 Ministero delle Politiche Giovanili
 Ministero delle Politiche Familiari
 Ministero delle Politiche per il Mezzogiorno
 Ministero delle Politiche per il Nord-Est
 Ministero delle Politiche per il Centro-Sud
 Ministero delle Politiche per il Mezzogiorno e il Nord-Est
 Ministero delle Politiche per il Centro-Sud e il Mezzogiorno
 Ministero delle Politiche per il Mezzogiorno e il Nord-Est e il Centro-Sud
 Ministero delle Politiche per il Mezzogiorno e il Nord-Est e il Centro-Sud e il Mezzogiorno

Fonte: www.AgroInnovationTour.it

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

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La Politica Agricola Comune

Obiettivi prioritari 2014-2020

1. Trasferire conoscenze e innovazioni
2. Promuovere tecnologie innovative
3. Potenziare l'organizzazione della filiera agricola
4. Preservare gli ecosistemi connessi all'agricoltura
5. Incoraggiare l'uso efficiente delle risorse
6. Promuovere l'integrazione e lo sviluppo economico delle zone rurali

Innovazioni tecnologiche digitali

Fondo Europeo per lo Sviluppo Rurale, 2014-2020

Fonte: www.AgroInnovationTour.it

Common Agricultural Policy

1. Transfer knowledge and innovation
2. promote innovative technologies
3. Empower 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

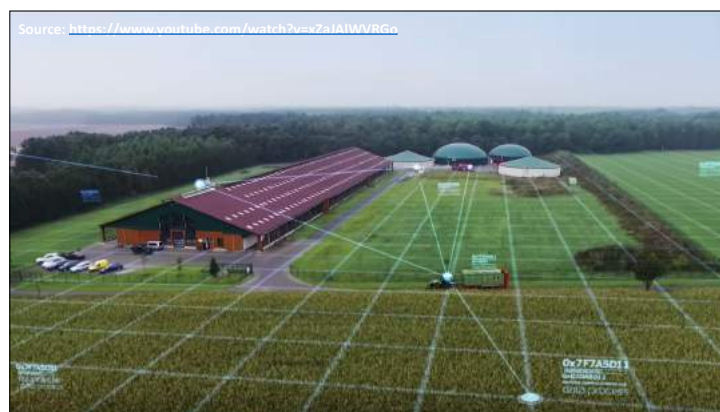
Thirties to eighties → Mechanic and Mechanization

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=xZaJAIWVRGo> Sarà scaricato in modo da poterlo vedere offline

English video available here <https://www.youtube.com/watch?v=xZaJAIWVRGo>

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Some keywords and highlights

Source: ForwardFarming.com and www.AgroInnovationTour.it



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"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"



Words, Pekka Pesonen, Secretary General of COPA-COGECA
 Pic: maggest.com by Image Line and cema-agri.org



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."

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From the side of the European Commission, Iman Boot, Senior Expert Research & Innovation, DG AGRI, and Juha Heikkila, Head of Unit, Robotics and Artificial Intelligence, DG CONNECT, explained how the EU is actively supporting the process of digitization in farming through the provision of strategic research funding in the areas of agriculture and robotics.

In terms of the EU's agricultural policy, Member of the European Parliament Peter Jahr stressed that **"the Common Agricultural Policy (CAP) has an important role to play in supporting the competitiveness of farmers and the uptake of innovation, which should also include digital innovation."**

Source: cema-agri.org

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"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"



Words, Mr. Markwell, CEMA
Pic: maggest.com by Image Line and cema-agri.org

"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.

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"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**"



Words, Alan Jagoe, President of the European Council of Young Farmers (CEJA) cema.org
Pic: macgest.com by Image Line

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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More on Digital Farming?

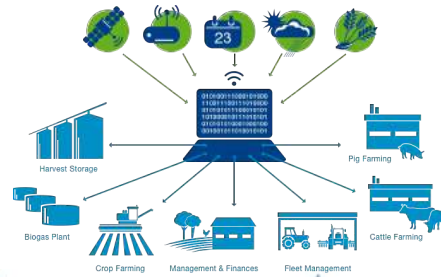
See you in EIMA International!

Source: ForwardFarming.com and www.AgroInnovationTour.it

Digital farming: the next revolution?

Our "horizon": from precision to decision farming

Source: ForwardFarming.com and www.AgroInnovationTour.it



Source: <https://www.cropscience.bayer.com/en/stories/2014/digital-farming>



Let's keep talking about it during EIMA International 2016



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See you at Image Line's and
macgest.com's booth.
(Quadriportico and Hall 16)
Thanks for your attention!

Source: ForwardFarming.com and www.AgroInnovationTour.it



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/>,