

SC2 Dissemination Event

More resilient and resource efficient value chains

EU-PLF

Bright Farm by Precision Livestock Farming

www.eu-plf.eu

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Brussels



Smart Farming for Europe

Value creation through **P**recision **L**ivestock **F**arming

Overview

- Project outline
- Consortium overview
- Project results
- Impact
- Lessons learnt

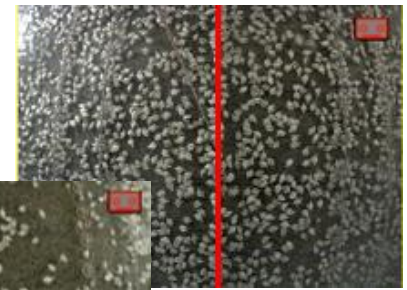
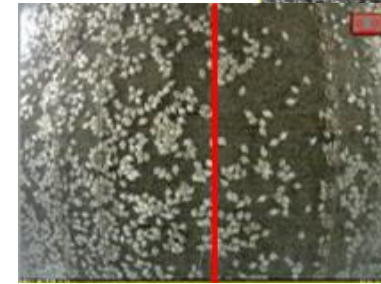
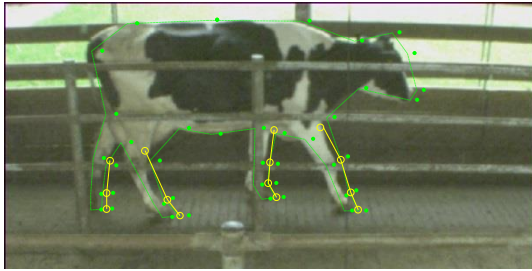


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Project Outline

What is Precision Livestock Farming (PLF) ?



Management of livestock farming by continuous automated real-time monitoring/managing of production/reproduction, health and welfare of livestock and environmental impact.



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Approach and main project objectives

- PLF installations on farms: 10 pig farms, 5 broiler farms, 5 cow farms
- Data collection and analyses
- Start 4 spin-off companies
- Determine added value of PLF technology through the value chain
- Generate a **practical blueprint**: A manual on how to implement PLF technology in a farm



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6 Universities

KU Leuven	Belgium
SLU	Sweden
University of Bristol	UK
Unimi	Italy
RVC	UK
WU	the Netherlands

Consortium overview

6 SME's

SoundTalks	Belgium
PLF Agritech	UK
Xenon	Belgium
Abrox	Spain
Syntesa	Spain
M&M Corporation	Belgium

3 Research institutes

INRA	France
ARO	Israel
Teagasc	Ireland

3 Industrial partners

Fancom	the Netherlands
GEA FT	Germany
Nutrition Sciences	Belgium

20 Farmers

1 Dissemination partner

EAAP Italy



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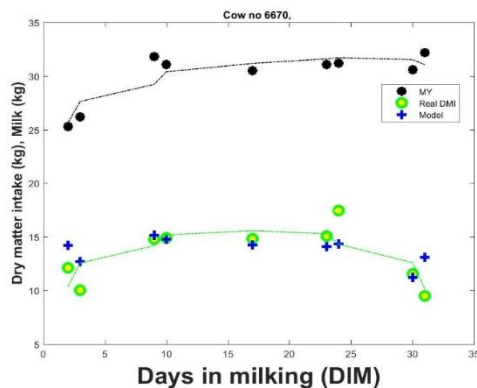
Project results: Novel Feed intake model using CowView

CowView

Commercial conditions



Controlled environment
(ARO)



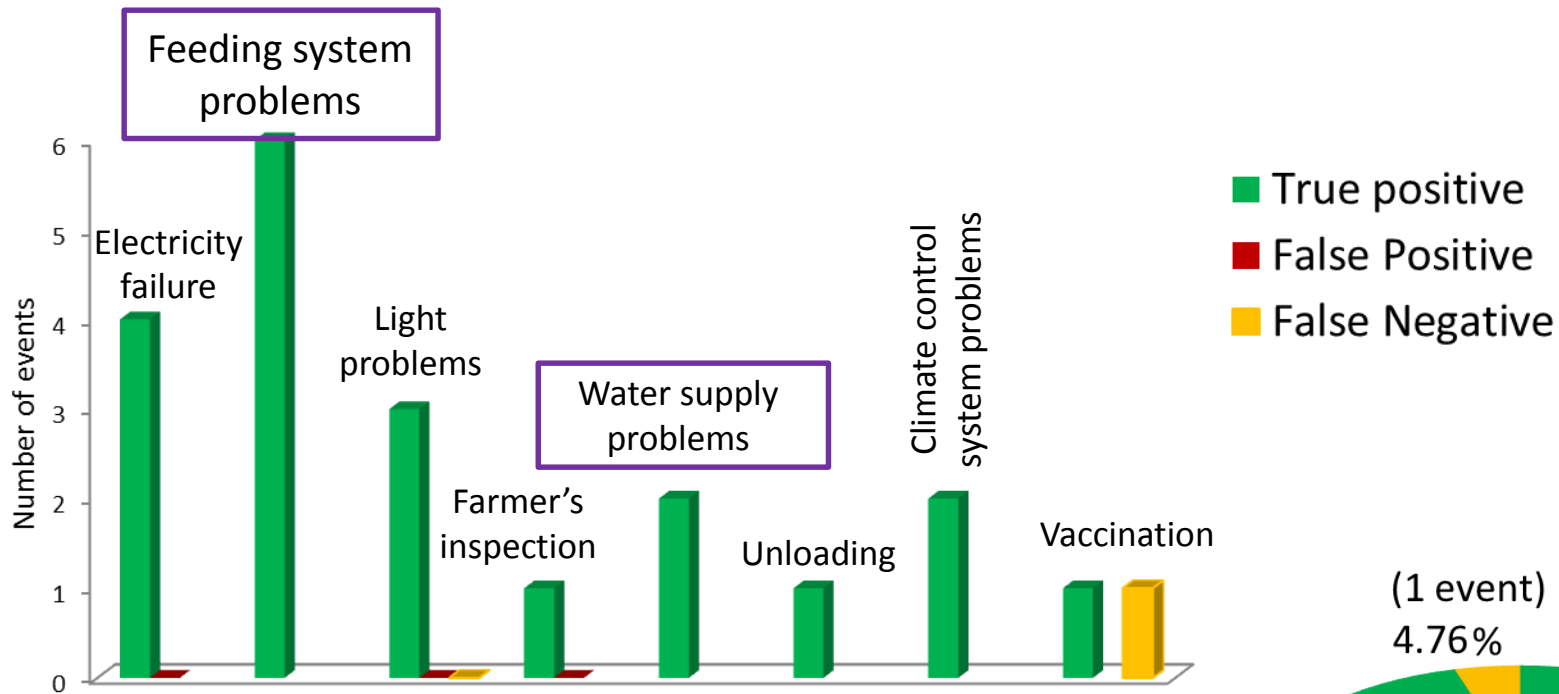
Accurate model



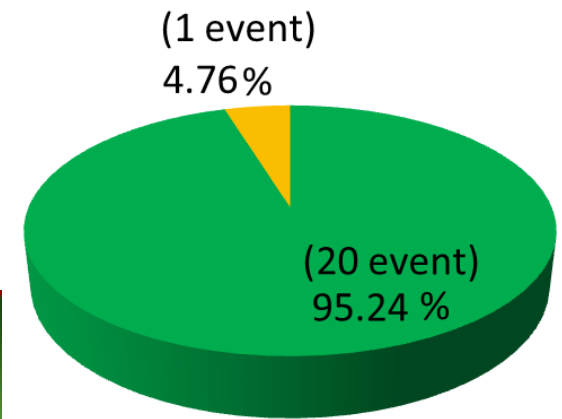
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Detected events in the validation experiment over 42 days



Conclusion: Events in a broiler house could be detected using top-view image analysis with an accuracy of 95.24 %



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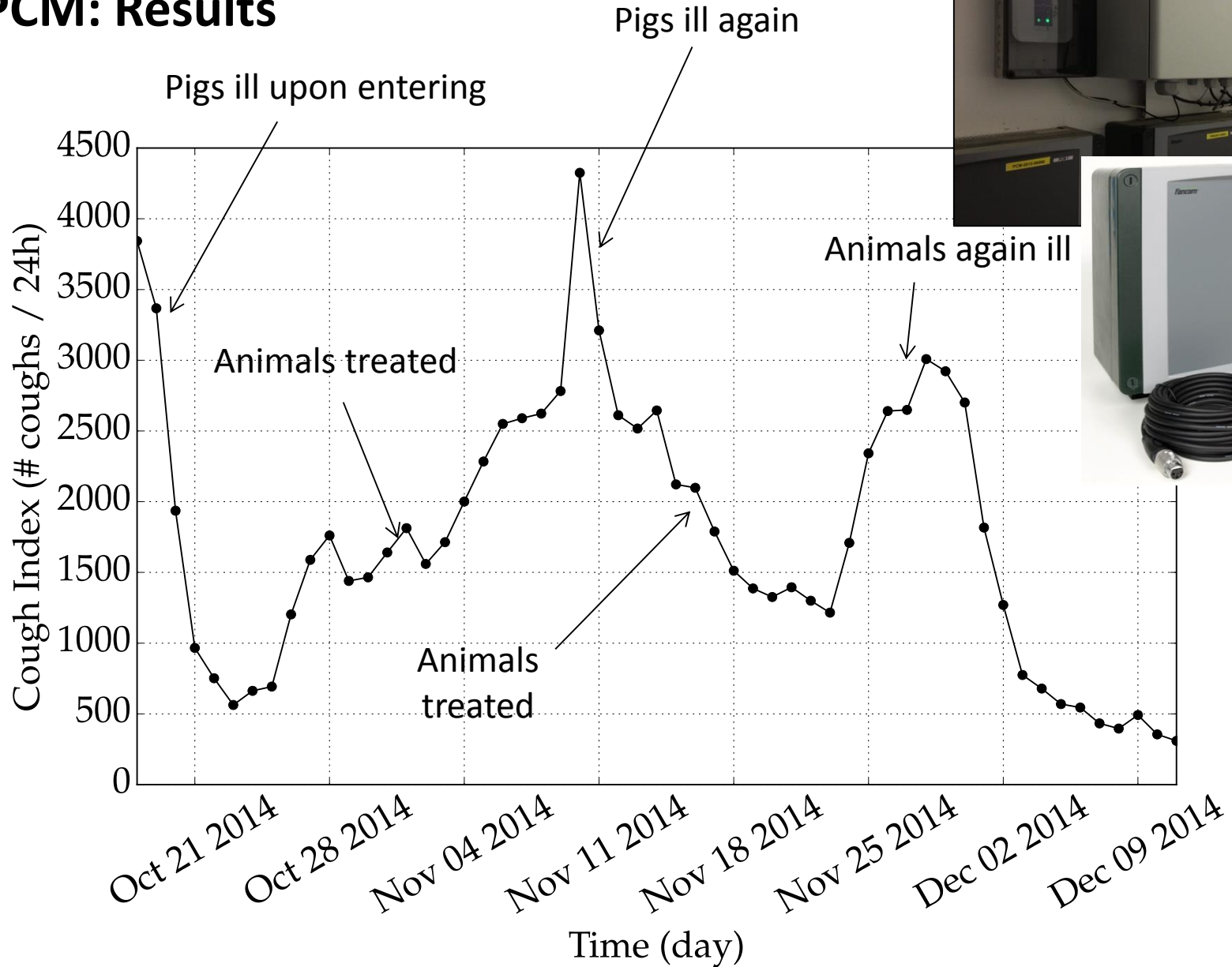
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Infection Monitoring by On-line Pig Sound Analysis

i.c.w. University of Milan, SoundTalks NV, Fancorn BV



PCM: Results



Calves – cough monitoring

- Calves
 - An algorithm was developed for calve cough monitoring
 - The output of the algorithm was linked to Bovine Respiratory Disease
 - Increase coughing -> presence of BRD



Impact

- Testimonies of farmers
- Visibility of continuous automated PLF approach versus yearly visits
- Potential business models for this approach
- Start discussion regarding ownership of information versus data
- 4 successful start-ups
- Creation of blueprint = website

Farmers



PLF as a service – Business model

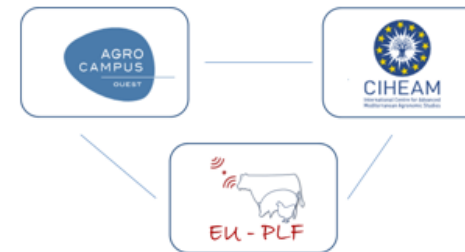
Four spin-off companies

- Organised events in search for start-up teams



Creation of the Blueprint

- Will have a common platform with the e-learning course
 - Blueprint: 30 minutes
 - e-learning course: 30 hours



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Dissemination of results

- Website – www.eu-plf.eu
- 4 newsletters
- Social media
- 44 invited keynotes
- E-course and EU-PLF blueprint: website
- 1 week PLF course in Zaragoza
- Documentaries on Euronews, Arte, ...



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Measures to ensure uptake of the results by end-users beyond the consortium

- Keep blueprint updated
- Transfer all rights of blueprint to European Committee of Precision Livestock Farming
- Organise 2 yearly European Conference on Precision Livestock Farming



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Lessons learnt

Main success factors that contributed to the project's outcomes

- Collaboration with European farmers
- 4 start-up companies
- Good collaboration between part of the research partners
- Collaboration between some of the academia & research institutes, farmers, big companies, SME's, start-ups



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Benefit from the participation in a EU-funded project/international consortium?

- Best expertise in the EU brought together
- interdisciplinary research between research disciplines
- Interaction Industry - Research



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Knowledge gaps/further research needs

- The impact of PLF to closely monitor animal health and reduce anti-microbial resistance
- New business models for PLF



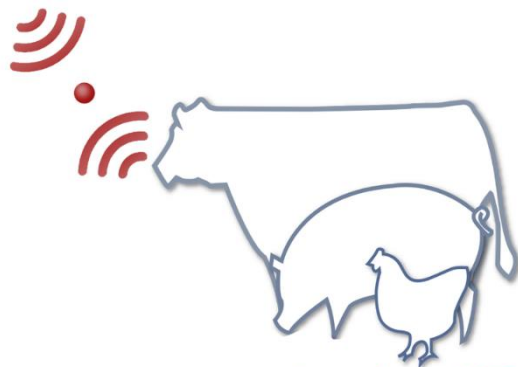
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Final EU-PLF Conference

29 September 2016 – Brussels

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EU - PLF



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Thank you

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