SONY

Sensorer idag och framöver

Peter Karlsson, Research and Standardisation

Smarta lösningar med ny sensorteknik och bildanalys – seminarium med fokus på växtskydd, 2017-05-18

Research and Incubation

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RESEARCH & INCUBATION

Started 1st of June 2015 with ~100 dedicated individuals

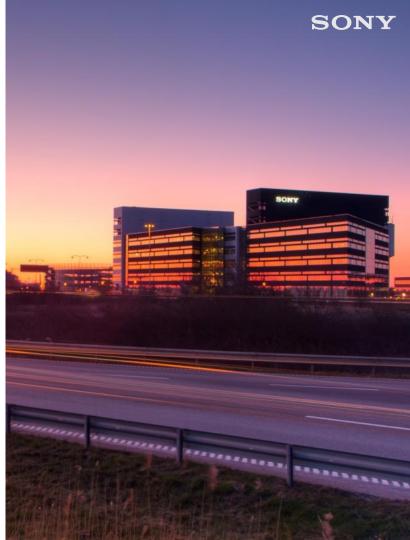
Mission: Establish a foundation for Sony's business beyond smartphones and wearables

- Leading Network and IoT research and driving contributions towards standardization
- Create and Incubate new technologies and businesses resulting in new products and services focusing on B2B and B2B2C.



Full backup from CEO level:

"Sony intends to accelerate efforts to leverage its strengths in new business..."



FY17 - Research Focus Areas - High Level



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5G	loT architectures & security	Positioning & Sensing technologies	Data analytics & machine intelligence

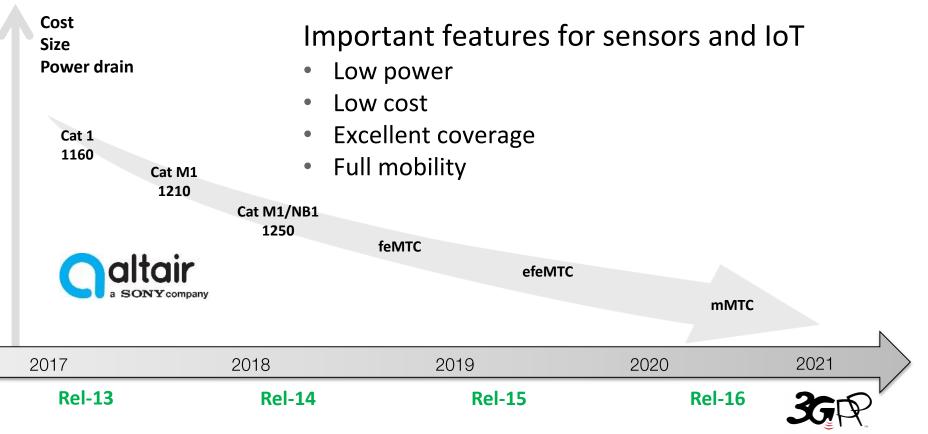
Standardization, Academia and Industry Collaboration

Potential SLU Alnarp and Sony collaboration

Håkan Schroeder, Dean, Faculty of Landscape Planning, Horticulture and Crop Production Science Peter Karlsson, Sony Mobile, Need of weed reduction

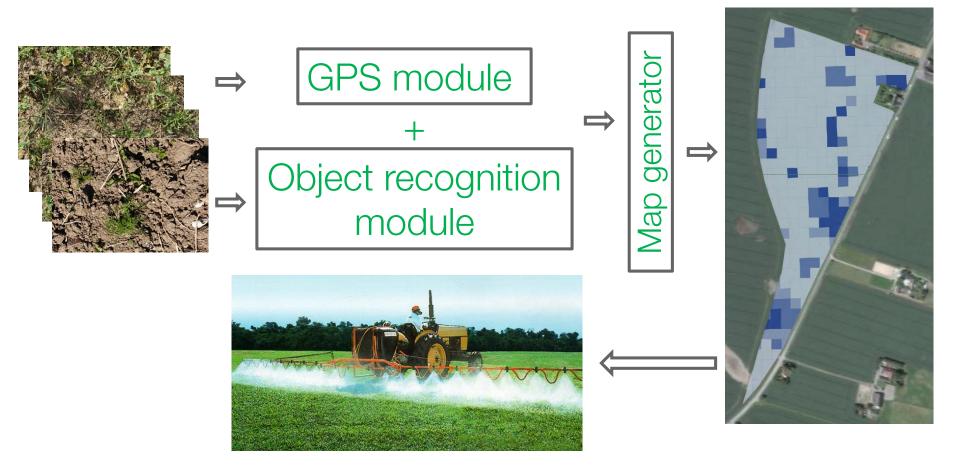


IoT connectivity evolution towards 5G

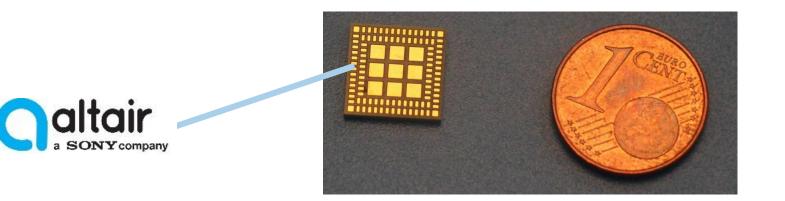


A GLOBAL INITIATIVE

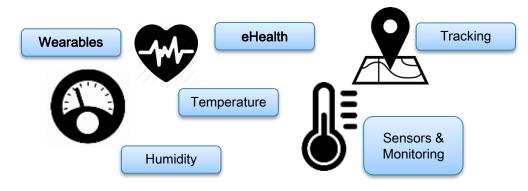
Example 1:optimised weed reduction



Example 2: sensors connected to mobile network







Example 3: analysis of data from connected pigs



Ear tag with sensors and Bluetooth local connectivity



Connected "smart" pigs

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Gr2

Sm Om

Gr64

Gr3

A 8321-5 Check for lameness

S B

 \bigcirc

07:32 - Ongoing

A 8389-2 Low activity last 24 hours

North Beach Barn

Gr4

 \bigtriangledown

* C 4G 79 % 09:41

Gr64

Q

Cloud service Analyses individual and group data, identifies anomalies and fertility cycle indicators **Observer** Collects data from Ear tags П PIG+ Sunny Hill Farm • Gr4 Gr5 Gr4 Gr5 S

Ear tag **Reports activity &** temperature

Monitor individuals & herds in multiple farm locations

Mobile and desktop app with farm overview, alerts and predictions help farmer monitor animal wellbeing, take correct decisions and plan production.

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Research Collaboration

Driving local, regional and global research & innovation



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