

## **WELCOME**



# ADVANCED IMAGE SENSOR FEATURES FOR DEMANDING APPLICATIONS

How can we make it affordable?

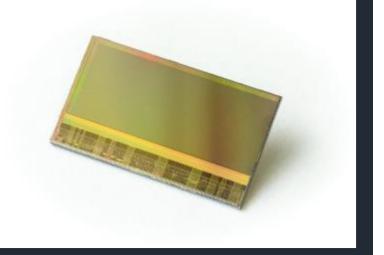
Philippe Rommeveaux (philippe.rommeveaux@pyxalis.com)
President & CEO

## **About Us**



# The custom image sensor Solution that perfectly fits Your needs

Pyxalis specializes in design services and custom solutions development and sales for advanced CMOS image sensors serving a wide range of applications from niche to high volume markets



## **Company History**



**LAUNCH** 

2010 CIS design house 10 people **NEW LOCATION** 

2014 In Moirans, France



**NOW** 

ISO 9001: 2015 certified

28 people, hiring

## The Team!





## **Our Partners**

A solid ecosystem!





## Applications we're in



**AEROSPACE** 



**VIDEO SURVEILLANCE** 







**DIGITAL PHOTOGRAPHY** 







**BIOMETRICS** 



**AERIAL PHOTOGRAPHY** 

## ... Happy Customers

100% enjoying their experience with Pyxalis!!



























## How do we serve them? Using advanced features

PUXOLI Your Image Sensor Solution

## **B-to-B** developments

**CUSTOMER REQUIREMENTS** 

**SOLUTION A** 

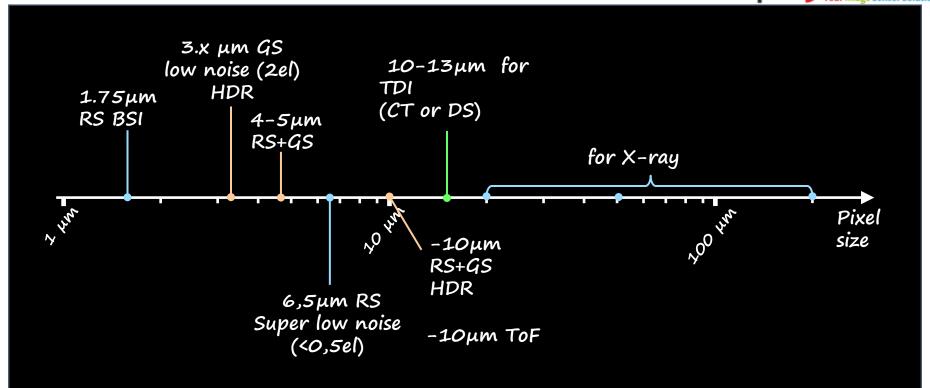
**CUSTOMER FUNDING** 

**EXCLUSIVE** 

For differentiated solutions

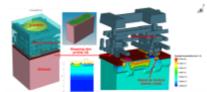
### Sensor portfolio from pixel view





## **CREAPYX**





#### **Pixel Evaluation Platform**

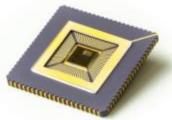
#### **FEATURES**

- pixel sizes from <1μm to >500μm
- pixel architectures (3T, 4T, 5T ...shared)
- Ultra low noise pixels
- FSI and BSI circuits
- Full timing adjustment

#### **TARGETS**

- Pixel innovation
- Securing product development when using new pixel
- Customer demonstration







## A UNIQUE FAST & FLEXIBLE PIXEL DEVELOPMENT & DEMONSTRATION PLATFORM

OPEN ACCESS TO CREAPYX THROUGH LICENSING



## **Enlarging use of advanced sensors**



## **B-to-B** developments

**CUSTOMER REQUIREMENTS** 

**SOLUTION B** 

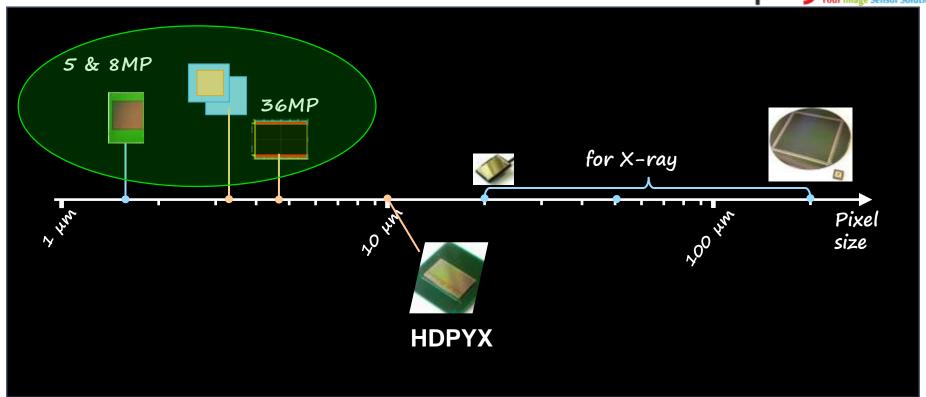
CUSTOMER FUNDING WITH SOME RETURNS ON RESALE

EXCLUSIVE ON A PARTICULAR DOMAIN BUT

**RESALE OK OUTSIDE** 

## **Platform concept**



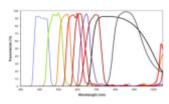








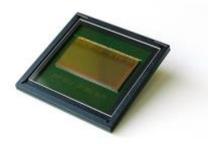
#### **MULTISPECTRAL/SPECTRO APPLICATIONS**







BSI for UV QE ENHANCEMENT



Platform designed to be flexible and quickly modified with limited effort 10µm pixel 14bit ADC HDR up to 120dB 1100 rows x 2900 col.





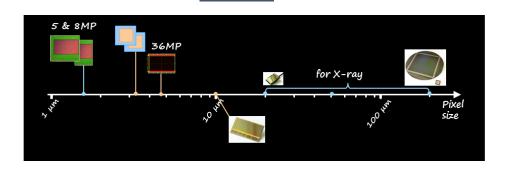






## How to make new highly performing platforms available?





B-to-B dev

**CUSTOMER REQUIREMENTS** 

**CUSTOMER FUNDING** 

**EXCLUSIVE** 

unique solution

The solution:

B-to-nB

Off-the-shelf

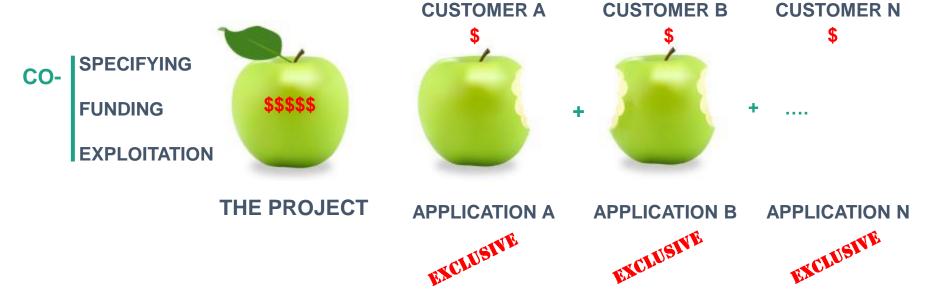
NO CUSTOMER initial FUNDING

NO DIFFERENTIATOR

### B to nB

a CO-... approach



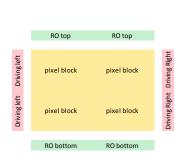


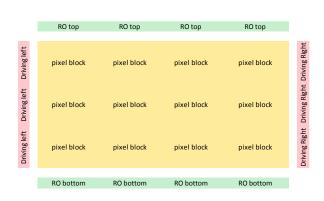
**SOLUTION C** 

#### **NEW PLATFORM DEFINITION**



Name	Resolution	Pixel pitch	Dynamic range	Frame rate
High Resolution platform	Variable: from 30MP to 150MP	~4,5µm	#90dB and +	>>120fps in 35mm format





#### **PROJECT TIMELINE:**

- -Specification phase started
- -Prototypes available in 2018

### THE HR PLATFORM

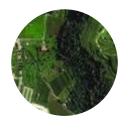
Applications













AEROSPACE

**CINEMA** 

**MACHINE VISION** 

AERIAL PHOTOGRAPHY

EARTH OBSERVATION



## Summary





Pyxalis capabilities
Sensor reuse

