Physics can be useful!

Roger Rassool$^{1,2}$, David Peake$^3$ and Bryn Sobott$^1$

Physics Solutions for Industry, School of Physics, University of Melbourne
DETECT Australia, Pty. Ltd.
Australian Collaboration for Accelerator Sciences
Physics Solutions for Industry

If it’s not possible....
If it can’t be done...
If someone else has tried.. (and given up !)
A few case histories..
Our research group’s core businesses is focused on the latest technologies for radiation detection, X-ray and CT imaging systems for non-destructive testing, and image acquisition.

Australian Paper
PaperLinx
Australian Defence Industries
Biomediq DPC
Australian Synchrotron
DECTRIS
Agilent
DPI Ellinbank, NHIA
ECO Growers
Berthold
Cyclotek
Other opportunities

- X-ray Imaging
- Microscopic Imaging
- High-Speed Imaging
- Non-invasive Imaging
- Thermal (IR) Imaging
Hybrid-Pixel Technology

Si-sensor with pixelated pn-diode structure

Indium bump-bonding technology
18um bumps

CMOS chip technology

X-rays
Mouse Imaging
ECO Bananas

The 'Wax Tip Eco-Banana' is both the creation and passion of banana farmers Frank and Dianne Sciacca of Pacific Coast Produce, located near Innisfail, Qld. Frank engaged PSI to develop video analysis software and robotic handling systems to automatically add the red tip to the bananas.
Ellinbank Milk Meter Project

The Eli Milk was designed in Ellinbank Research Institute by Dr Tim Clark and his team. The PSI team developed software for

- Automated RFID
- Rotary/Herringbone automated feeding and milking
- Early Mastitis detection
- Challenged feeding optimized milk production quantification
Where to from here?
Thank you....