

EssentialTech

Reducing poverty through essential technologies

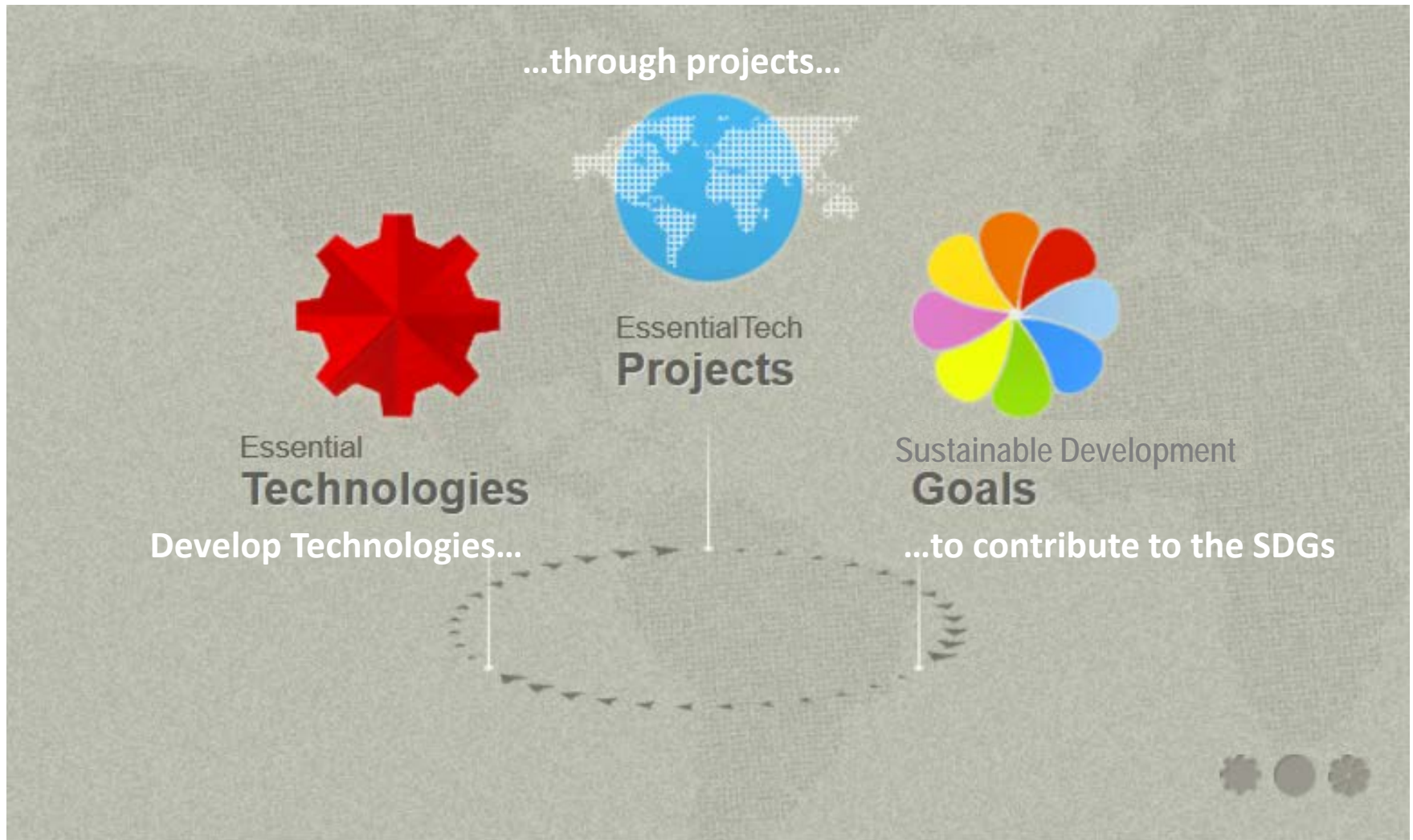


A program of the Cooperation & Developpement Center

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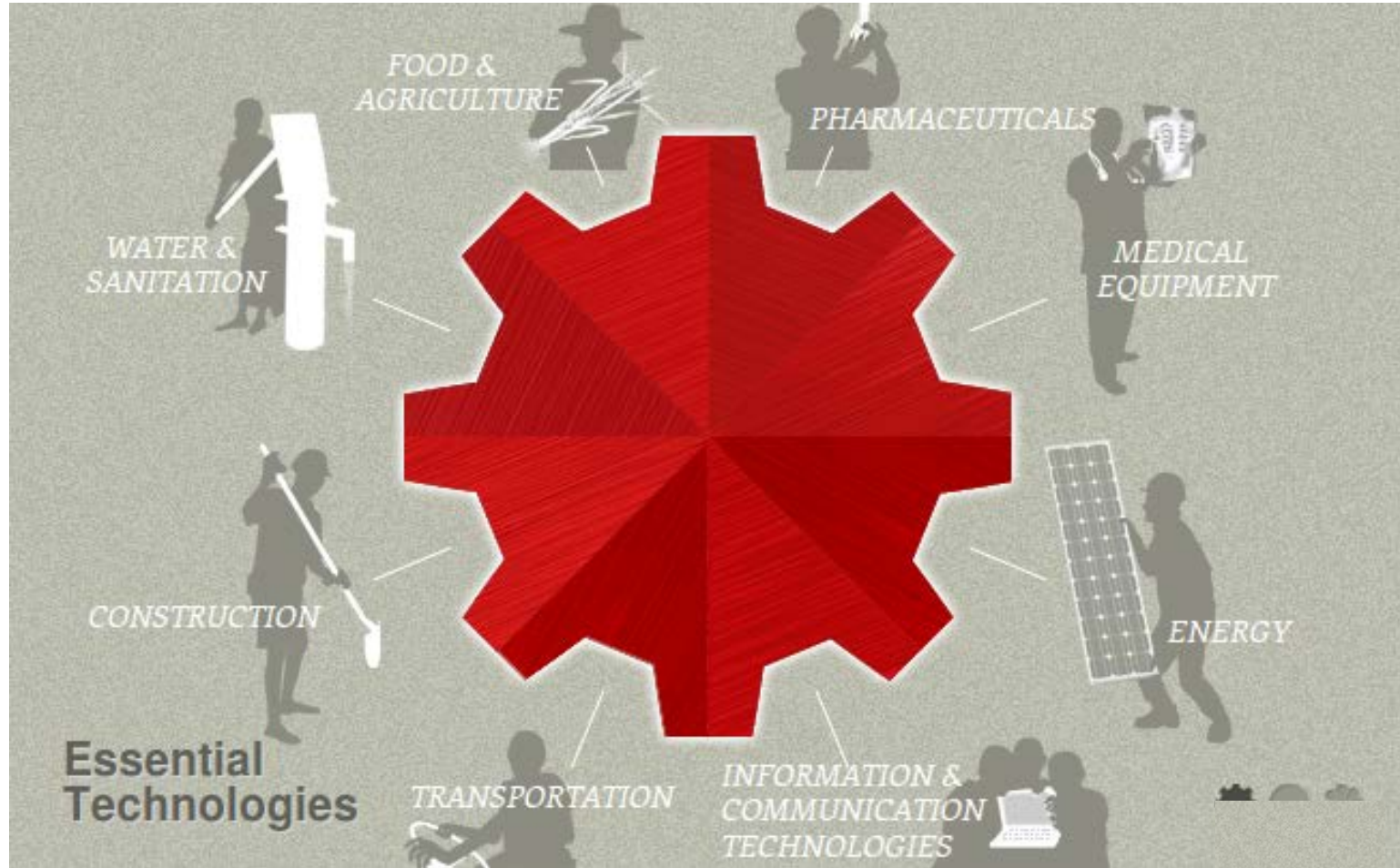


<http://essentialtech.epfl.ch>

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Essential Technologies





✓ Context

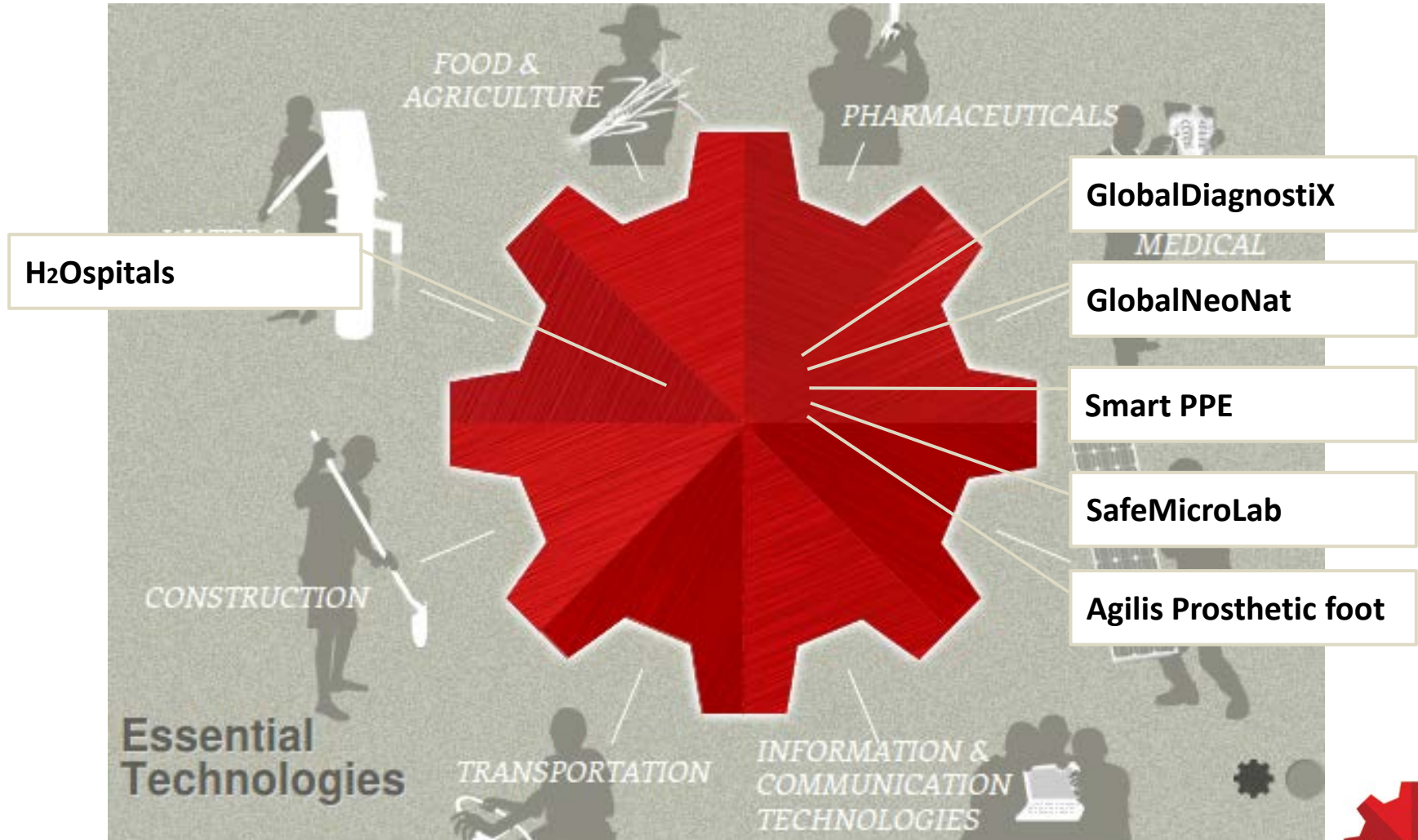
✓ Stakeholders

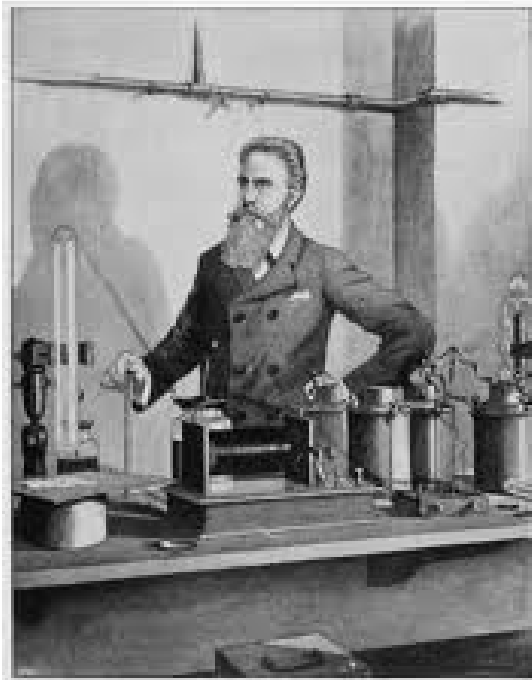
✓ Technological Feasibility

✓ Business Model

✓ Start-up / Existing Company

✓ Impact





Wilhelm Konrad Röntgen (1845-1923)



1895



2016

2/3 of humanity without access to radiology. [WHO]

Tuberculosis



- **Complications of Pneumonia**
- **Dislocations, deformations**
- **Foreign bodies**
- **Resp. and cardiovascular**
- **Tumors**

Road Traffic Accidents

(20-50 mio/y; 90% LMICs)





Technology & Business models not adapted to context of scarcity in:

- financial resources
- trained personnel
- adequate infrastructures

Goals:

- Digital: State of the art/compliant to standards
- Sustainable/robust : **>10 years** lifespan in context
- Affordable, TCO (10y): reduced **10x** (vs existing)
- Easy to use & safe : even for the incompletely trained
- Connected: Teleradiology in low-bandwidth context

Project started: 2012

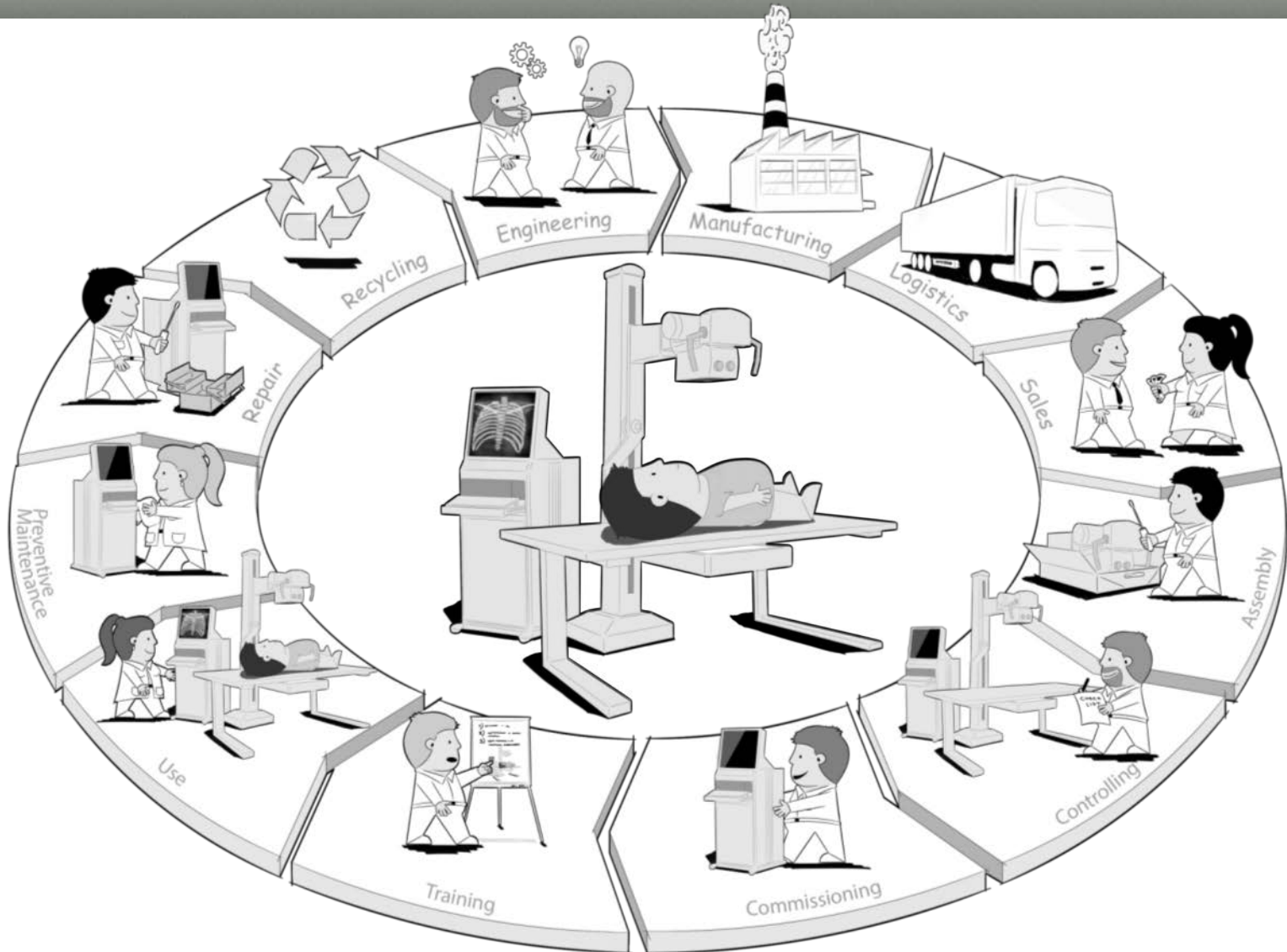
Alliance: 20 labs, 40 specialists in CH and Africa



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Value Chain



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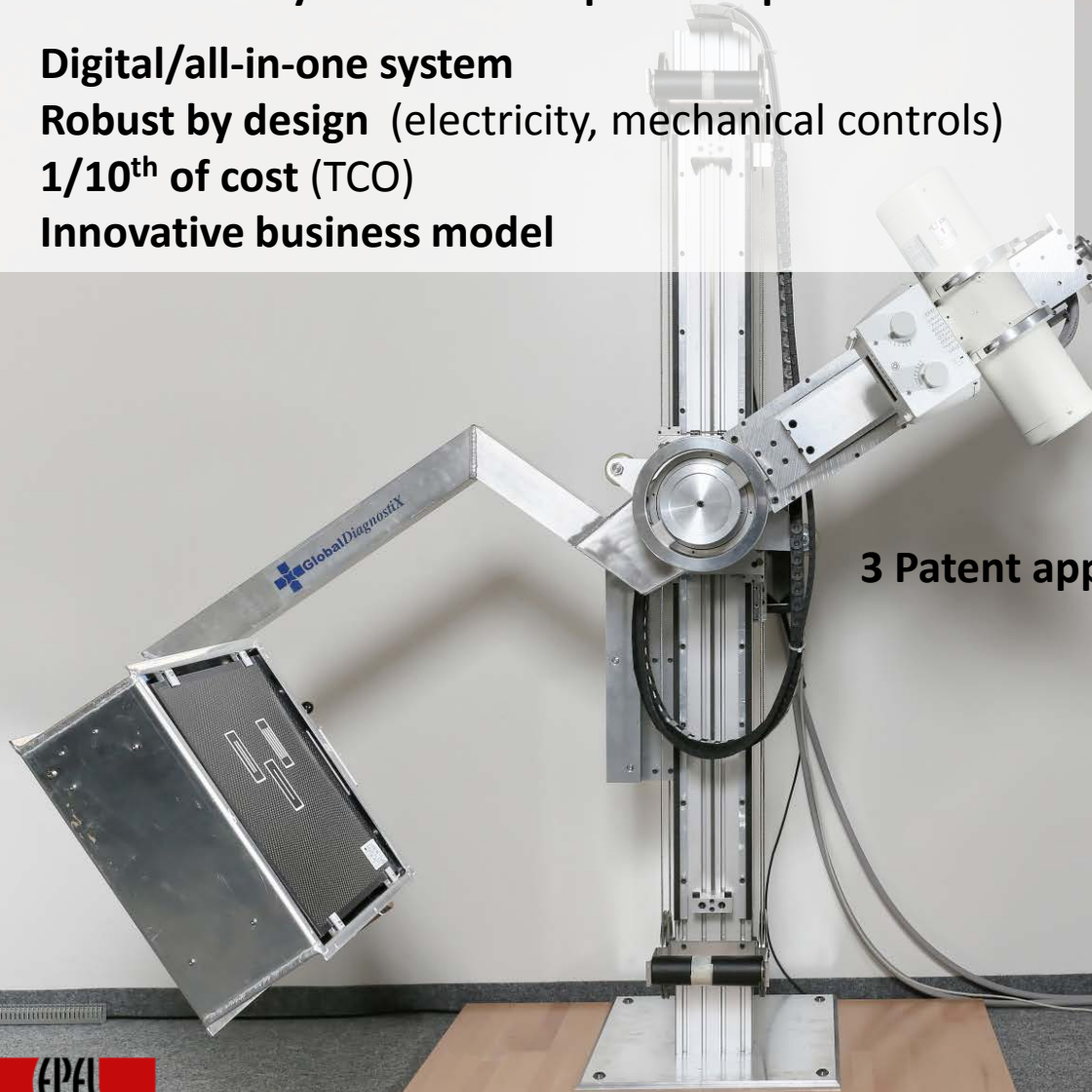
Results

Techn. Feasibility and Business plan completed

- Digital/all-in-one system
- Robust by design (electricity, mechanical controls)
- 1/10th of cost (TCO)
- Innovative business model

pristem
MEDICAL SYSTEMS MADE TO LAST

3 Patent applications filed



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