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Innovations as Responsible Innovations

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- Frugal innovation: a business perspective
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“Frugal innovation is of particular interest to emerging economies, as this can be an approach to meet the needs of a large population with disproportionately low resources and often with a limited paying capacity” - Arancha Gonzalez

“Frugal innovation is the ability to ‘do more with less’ - that is, to create significantly more business and social value while minimizing the use of diminishing resources such as energy, capital and time.” - Navi Radjou & Jaideep Prabhu



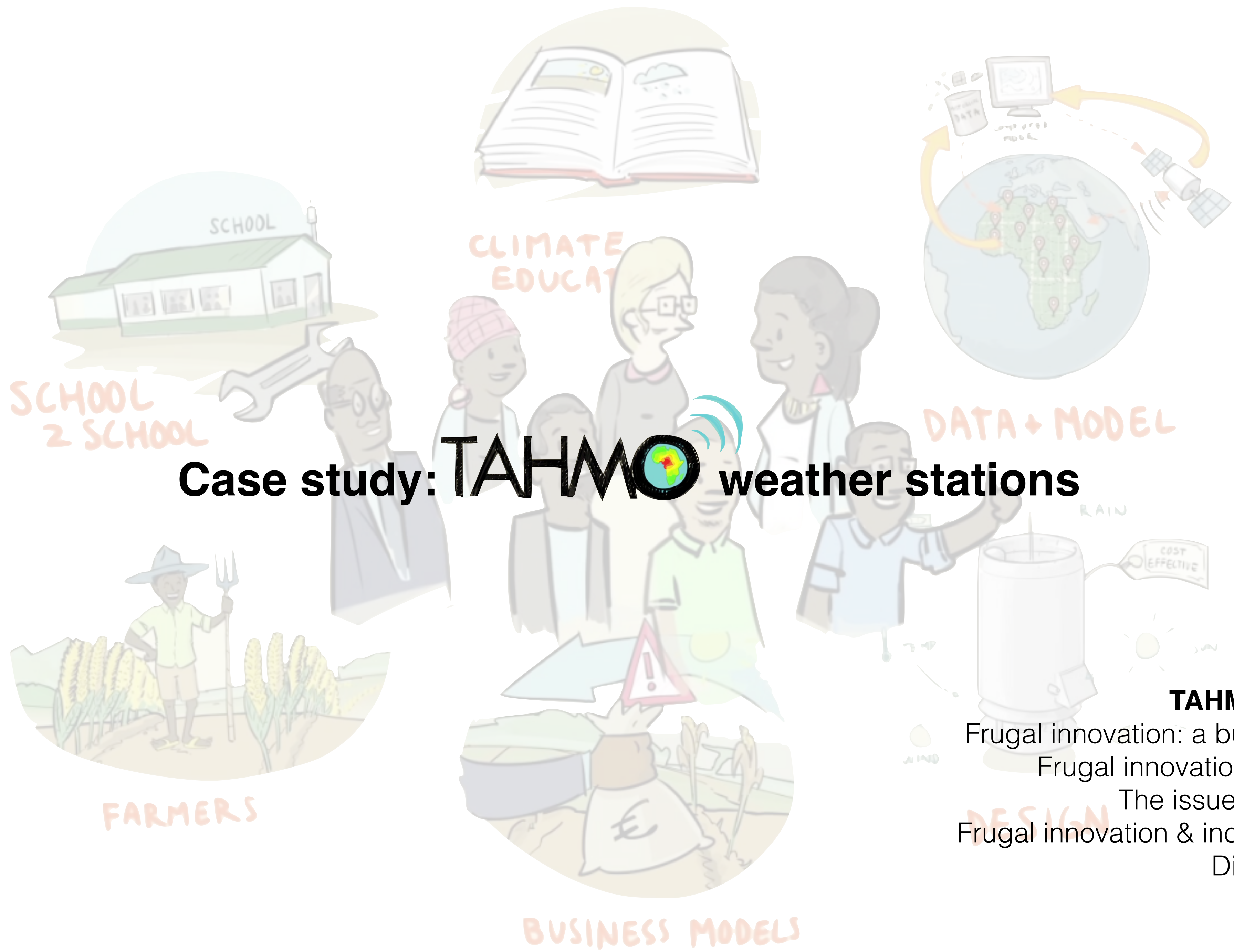
Innovations as Responsible Innovations

The frugal ethos aims to build products that, despite limited resources, solve a real local problem. What if the future is products that aren't insanely great, simply ones that are "good enough"? - WIRED May 2013

A rapidly growing movement is creatively adapting local tech where top-of-the-range is out of reach - WIRED

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Case study: **TAHMO** weather stations

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Frugal innovation: a business perspective

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25\$ Firefox smartphone



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Misconceptions multinational firms

- Limited purchasing power of BoP consumers cannot be translated in profitable opportunities due to low prices
- No room exists for high technology firms in BoP markets as customers in these markets use simple products that are produced with simple low-technology production processes
- Afraid serving BoP markets is considered as exploitation of the poor.

Responsible elements of frugal innovations

- Growth rates of emerging economies in Asia, Africa and Latin America increase the desire for a higher standard of living in the middle class. Thus the pressure on the world's natural resources will increase.
- Business model that provide a link between profits and local economic development



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The issue of social standards

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Issue of social standards

- 2 key elements:
 - Decent working conditions
 - Enabling rights for the laborers
- Key characteristic: you cannot see them - credence good
- Monitoring by government agencies, companies or non-governmental organizations
- Frugal innovations always responsible innovations? NO
- Too low social standards: irresponsible
- Too high social standards: block on innovation

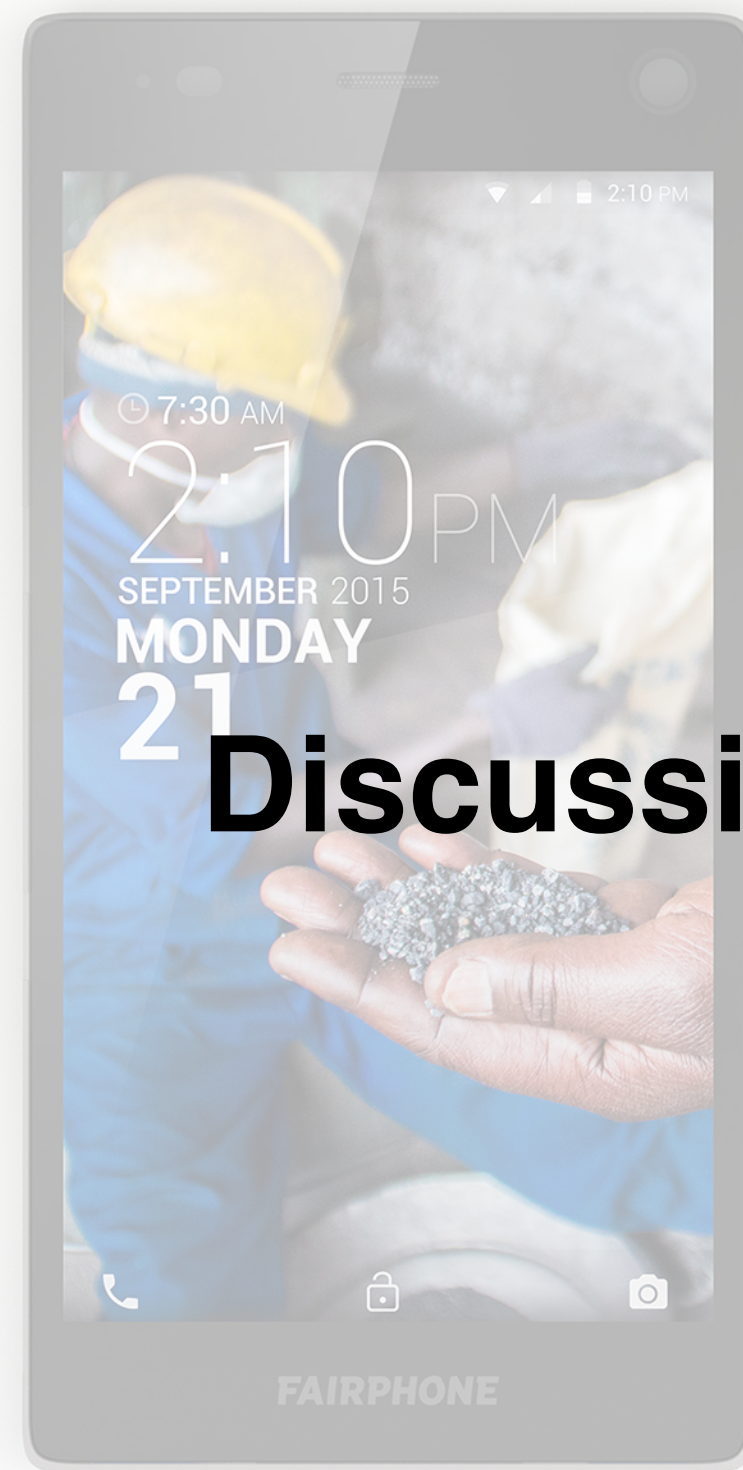
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Frugal Innovation & Inclusive Development

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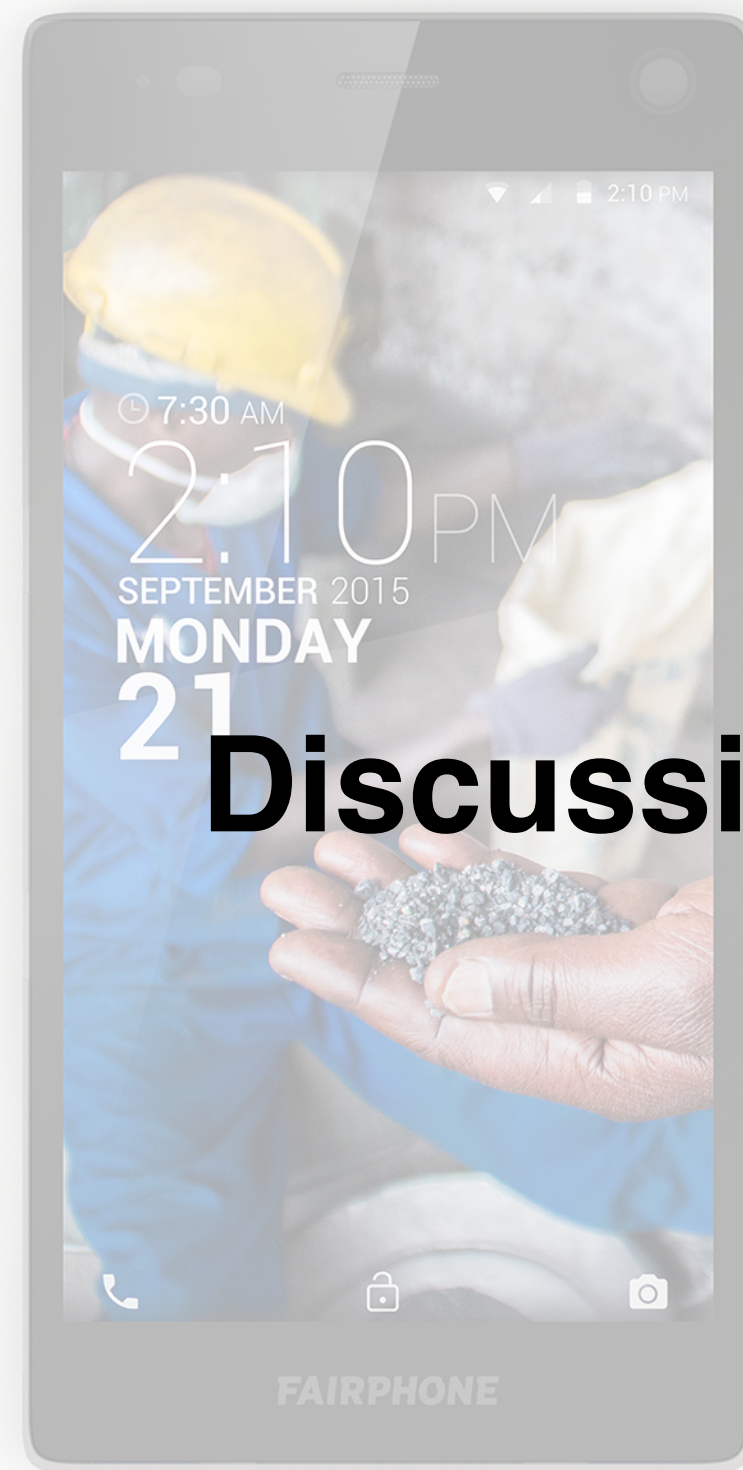
Discussion **FAIRPHONE**

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Frugal



Responsible



Inclusive



Discussion

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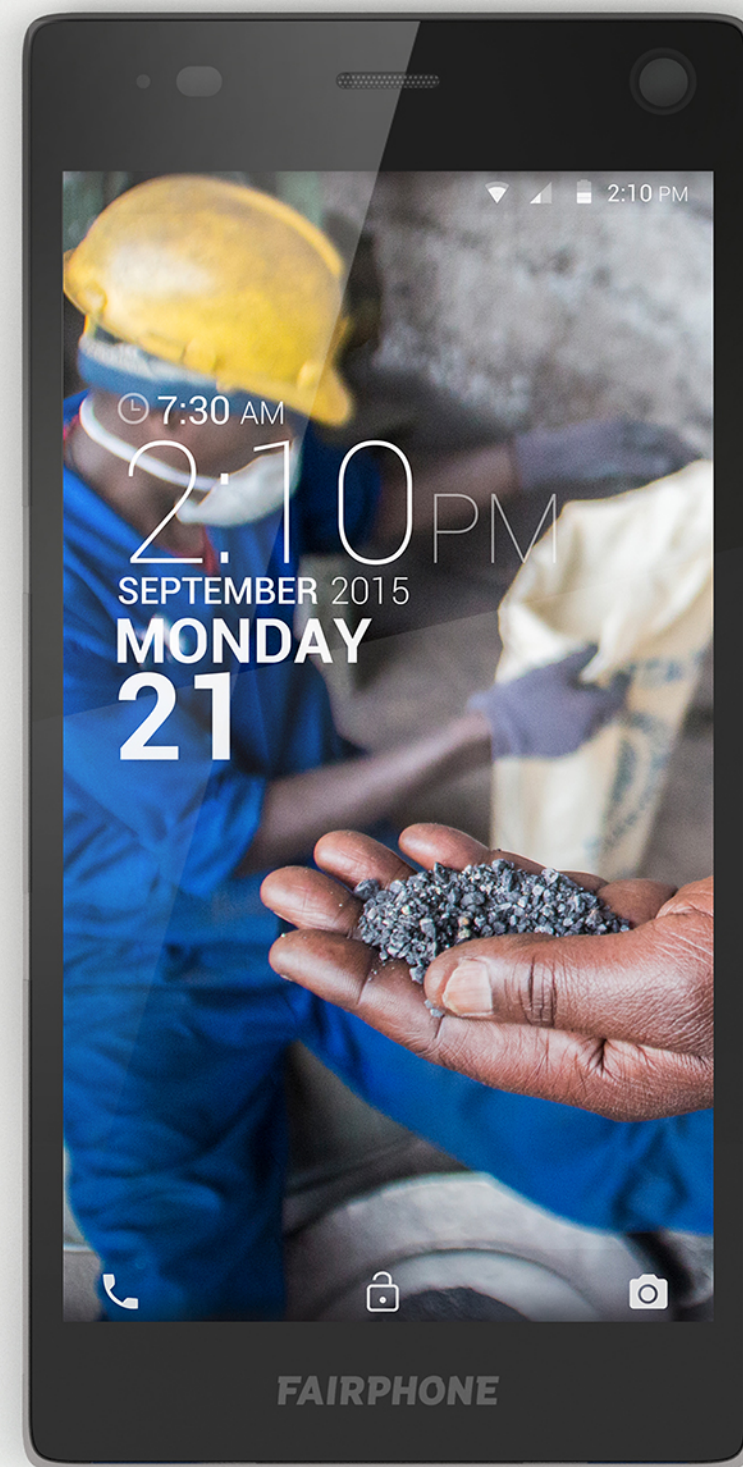
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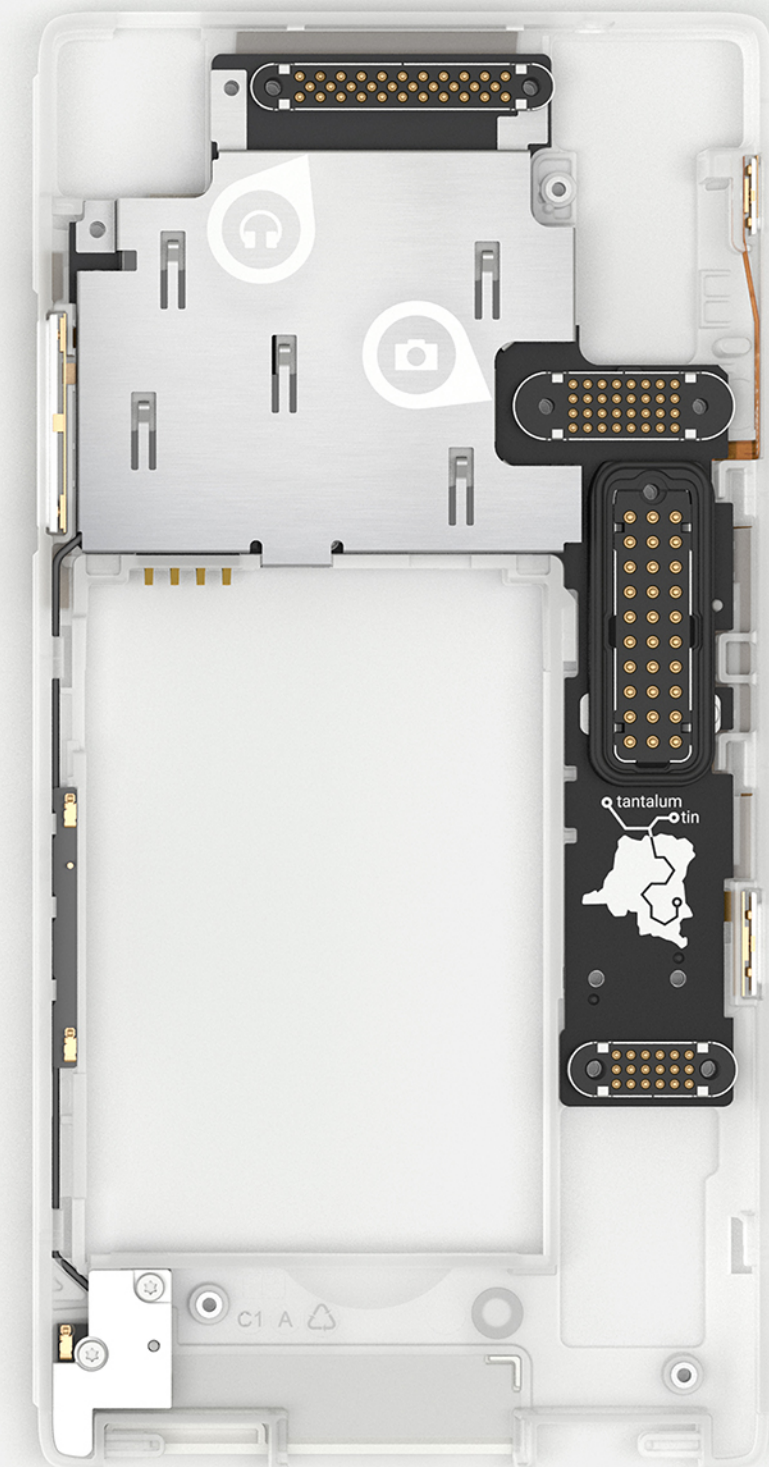
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Responsible



Inclusive

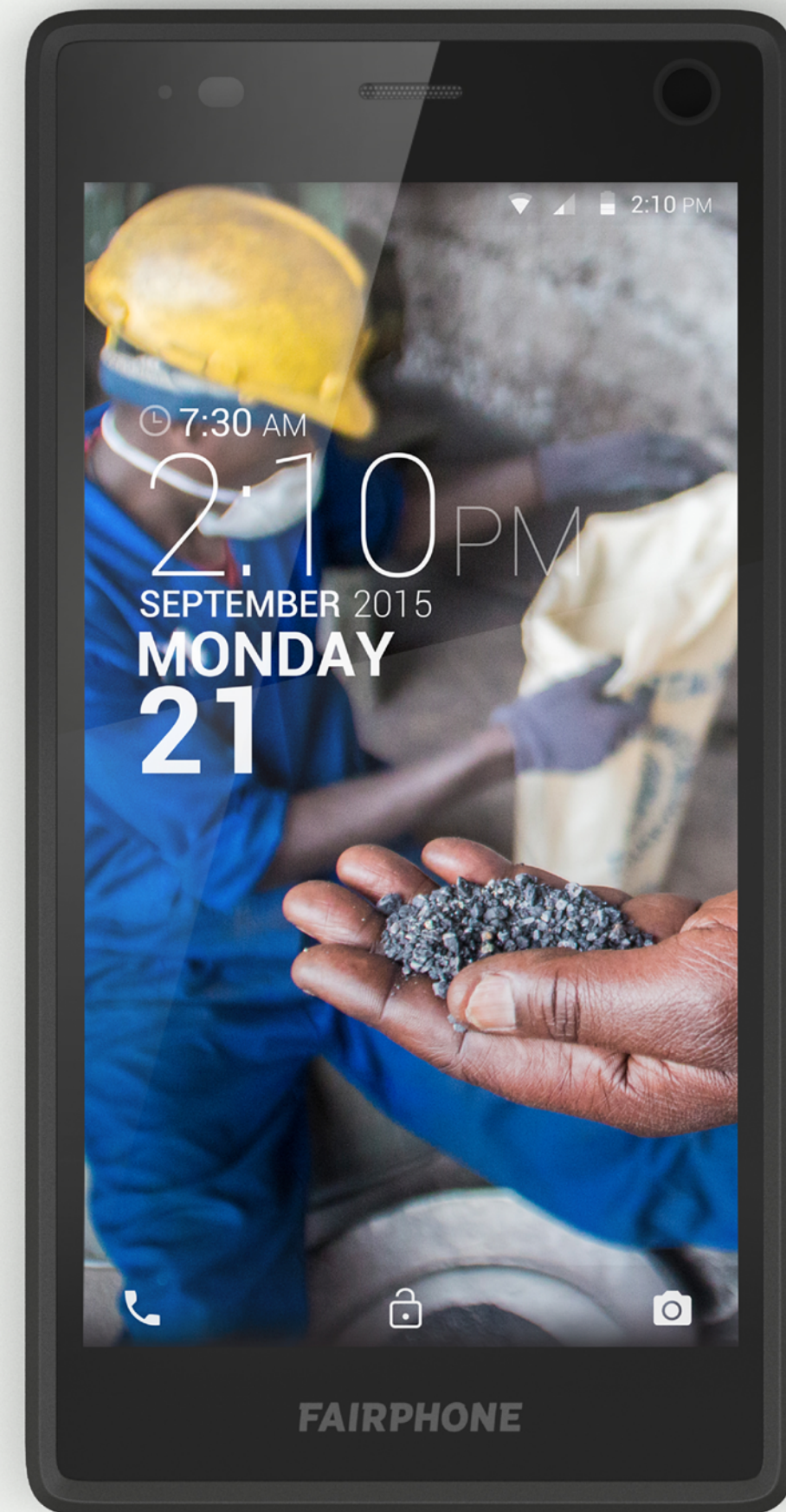


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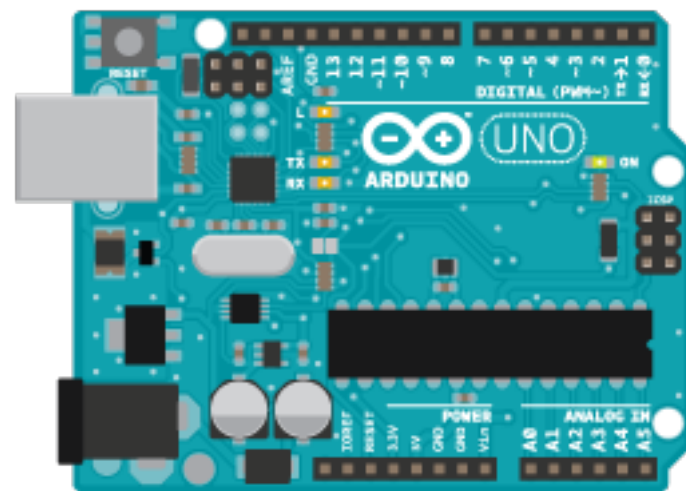
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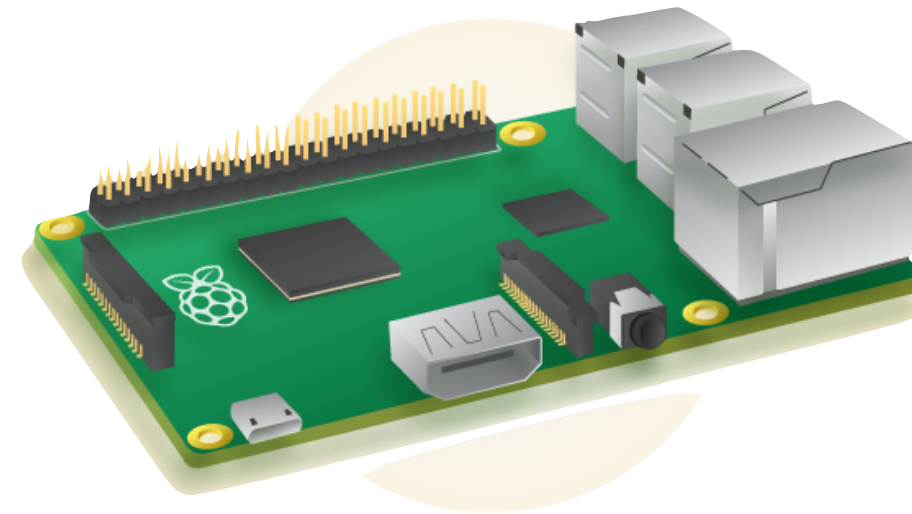
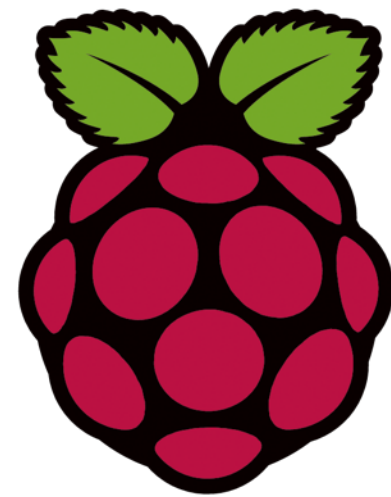


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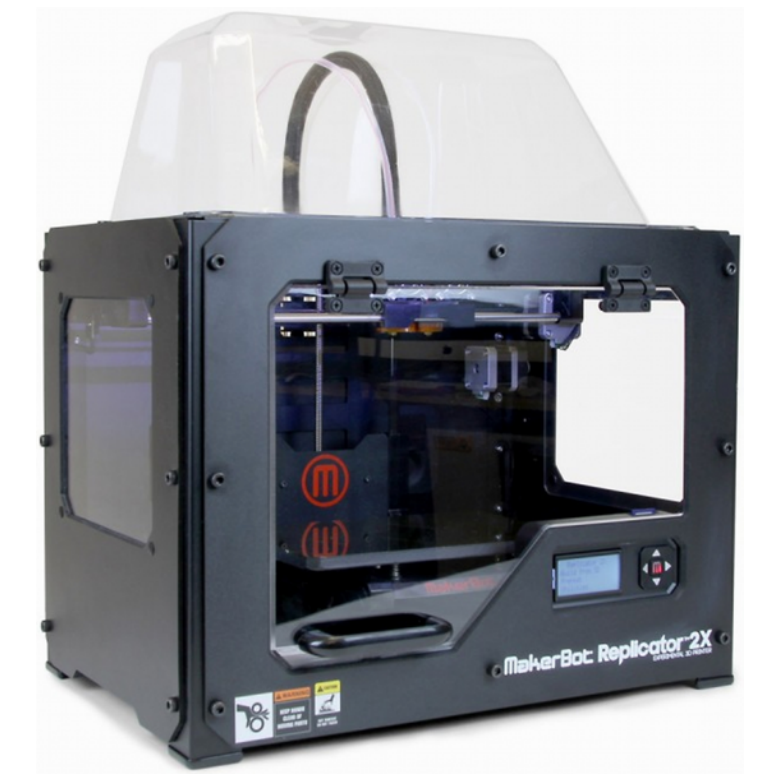
A resurgent do-it-together movement of makers, hobbyists and craft producers is spreading thanks to the ...



Arduino



Raspberry Pi



3D printer

WHO, WHAT, WHERE, WHEN, WHY AND HOW

BRAINWRITING AND BRAIN DRAWING

Frugal Design Exercise

HOW-TO'S



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5min. - round 2 - safety issues

5min. - round 3 - make it inclusive

10min. - round 4 - go into specific

10min. - round 5 - 1 minute pitch

final presentation

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