

# Street Hacks

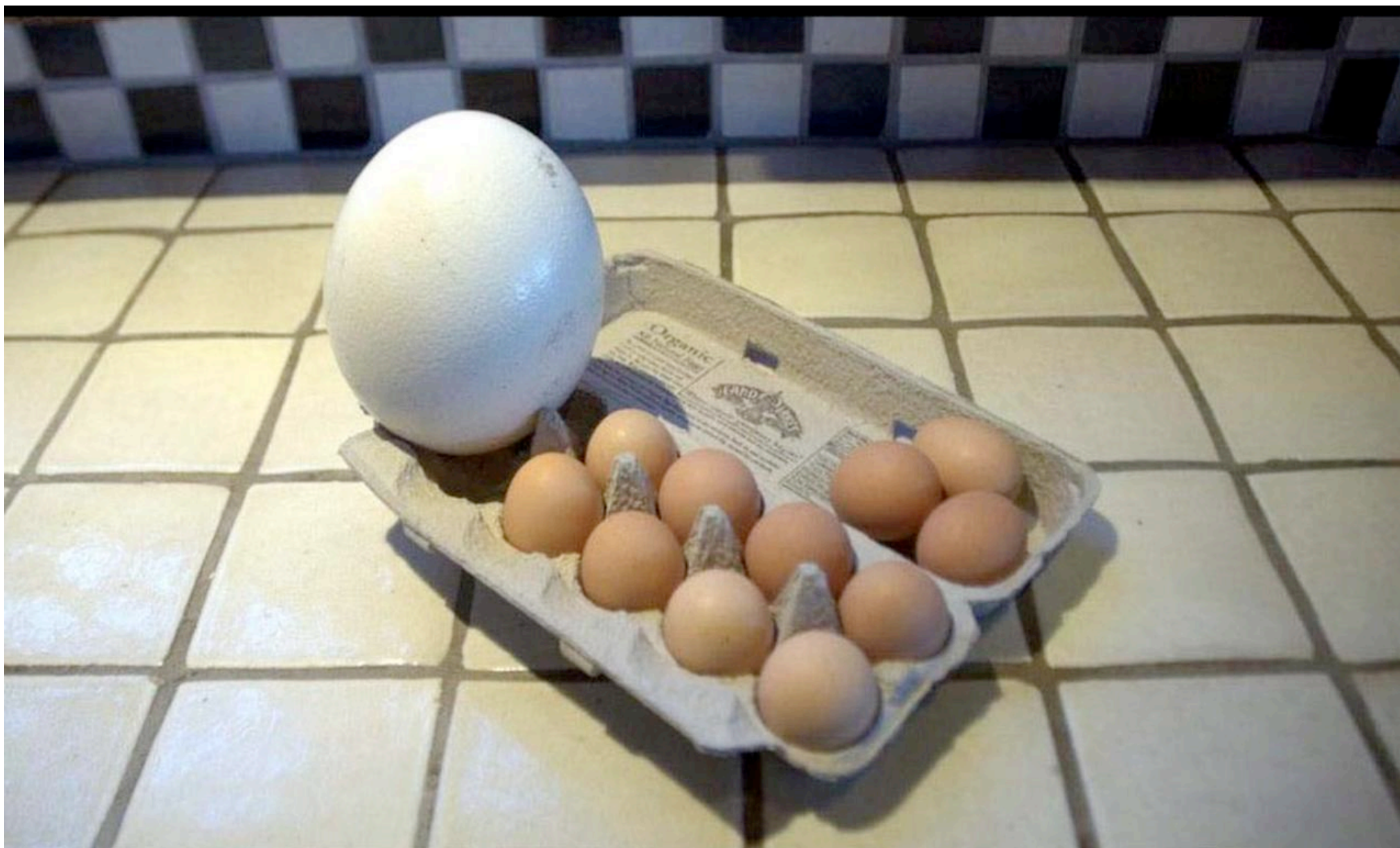
JAN CHIPCHASE & DUNCAN BURNS

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~ 6.6 billion people on the planet  
3.3 billion cellular connectivity  
1 billion+ phones / year  
16 phones per second ( NOKIA )  
~ 400,000+ retired / day / US





nokia design / disruptions / 3- 15

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# how we work

contextual, open studios, ad-hoc interviews, participatory design, ...













# mobile phone markets

research conducted in Ji Lin, Chengdu, Beijing, Xiamen, Cairo, Tehran, Lhasa,  
Ho Chi Minh City, Hue, Delhi, Mumbai, Ulan Bataar, Soweto, Accra,  
Kampala++









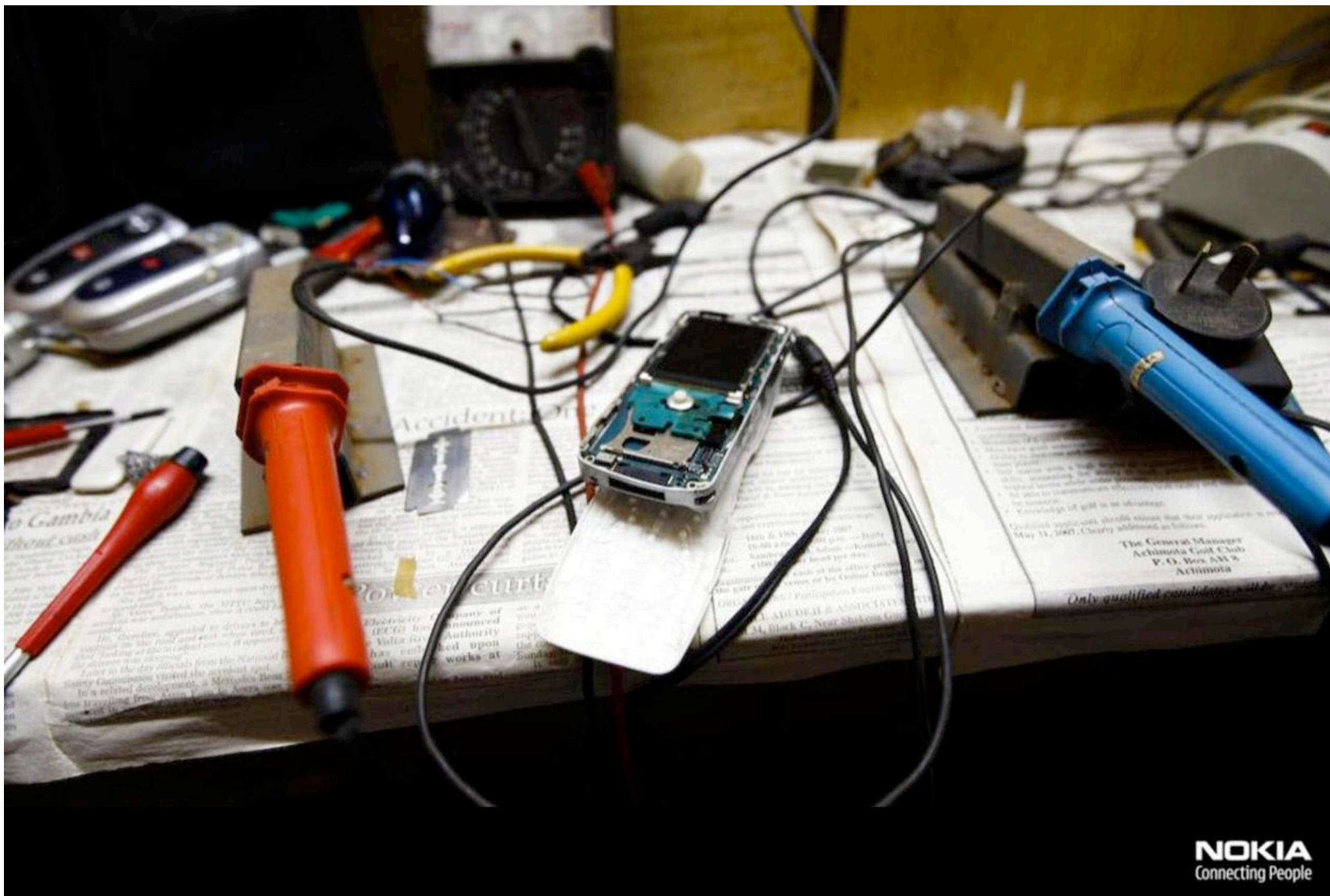




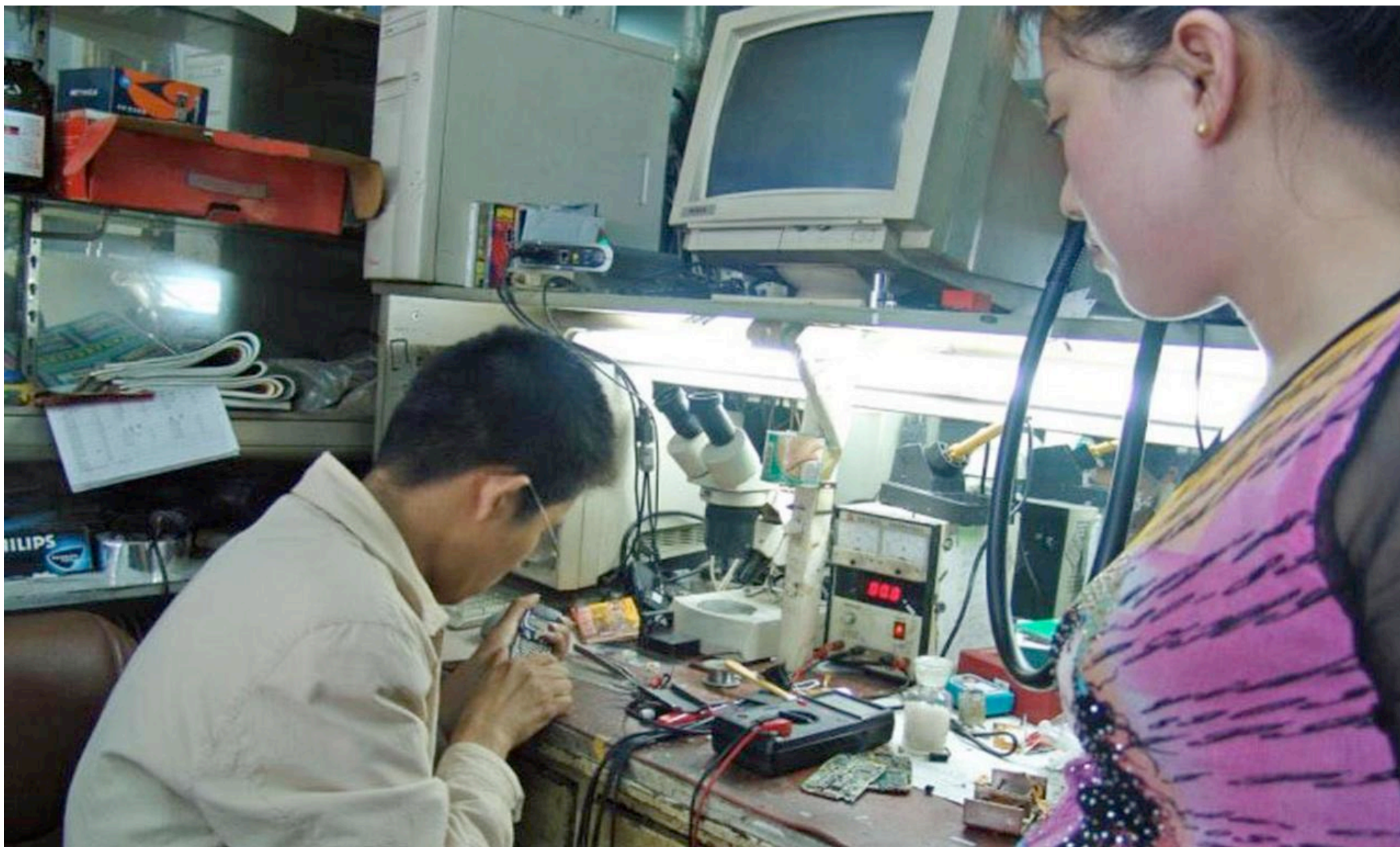
# how does it work?



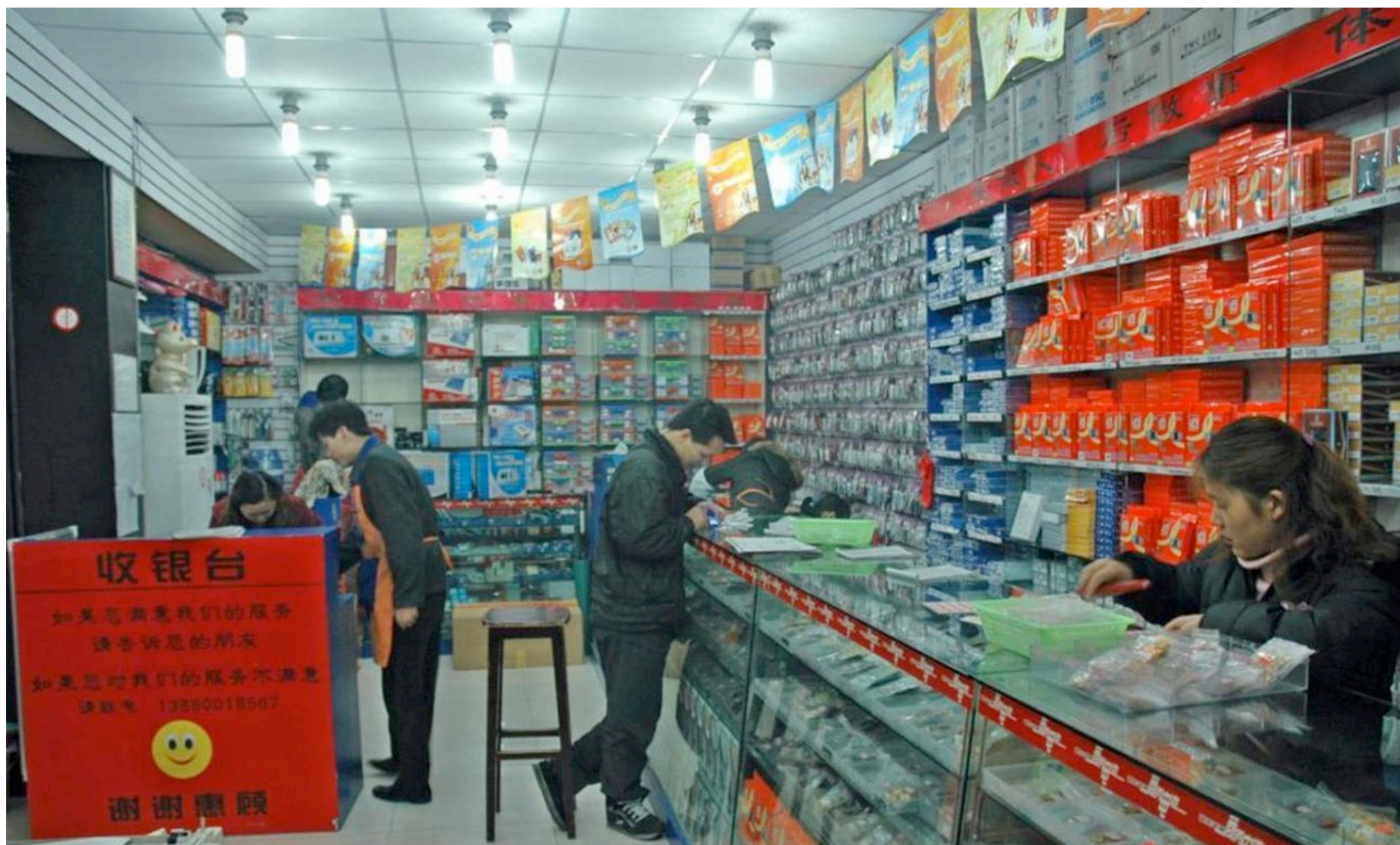












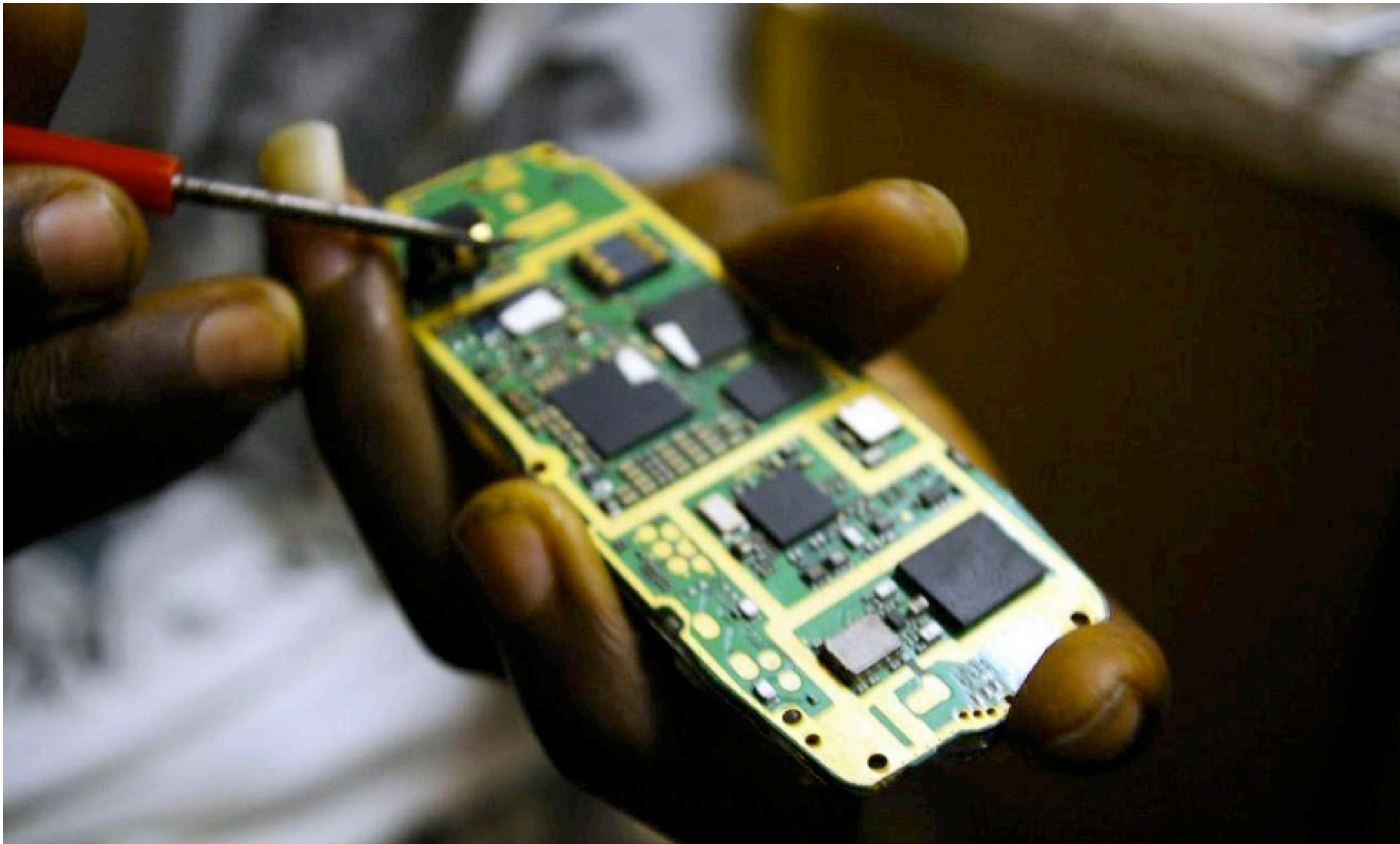
# what services do they offer?

changing covers, keypads, from replacing speakers, displays to re-soldering circuit boards

'official' vs 'unofficial' components

re-flashing, installing alternative languages, unlocking  
software installation and content







software on demand

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software on demand

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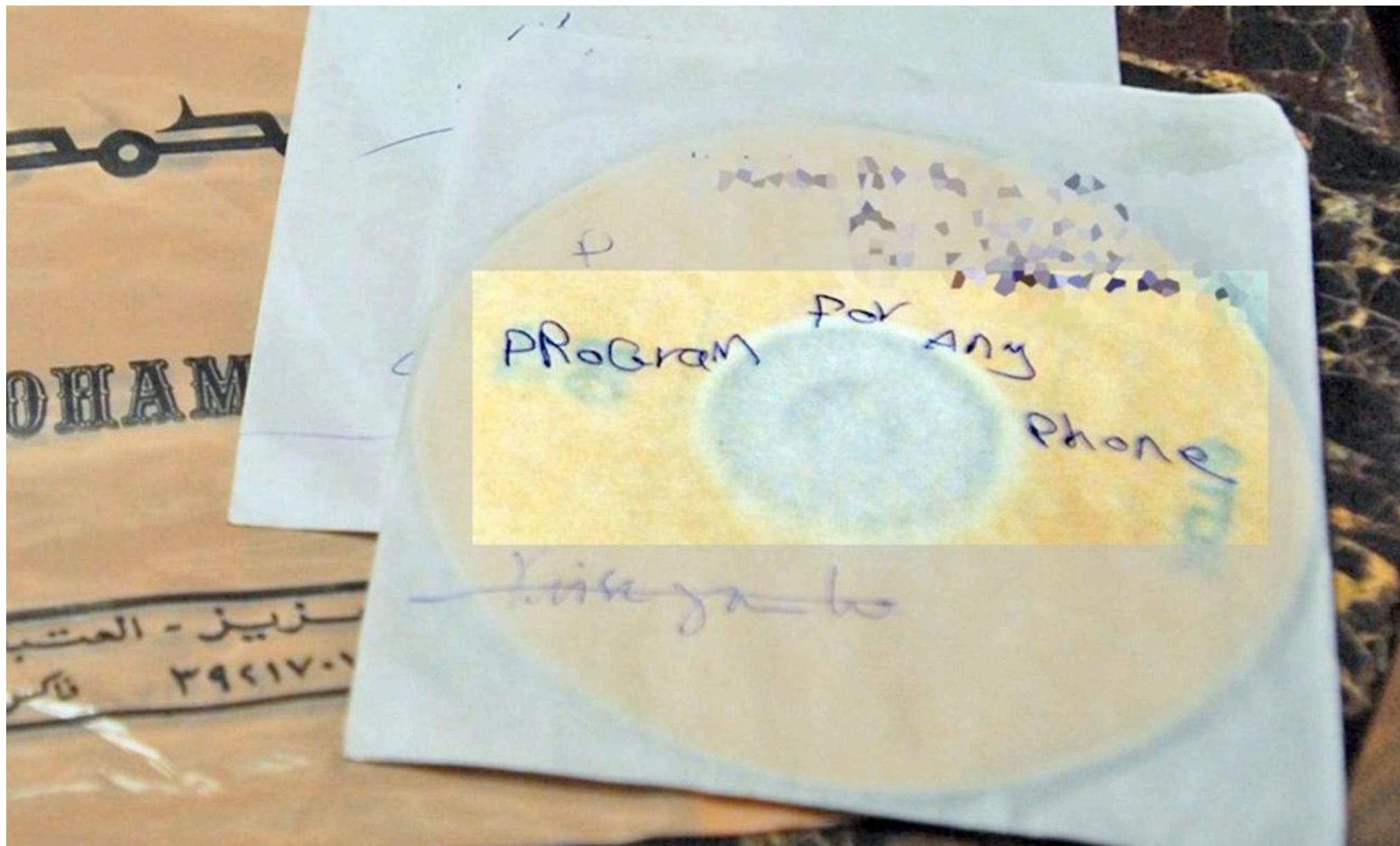




software on demand

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software on demand / Tehran

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warrantees

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trust

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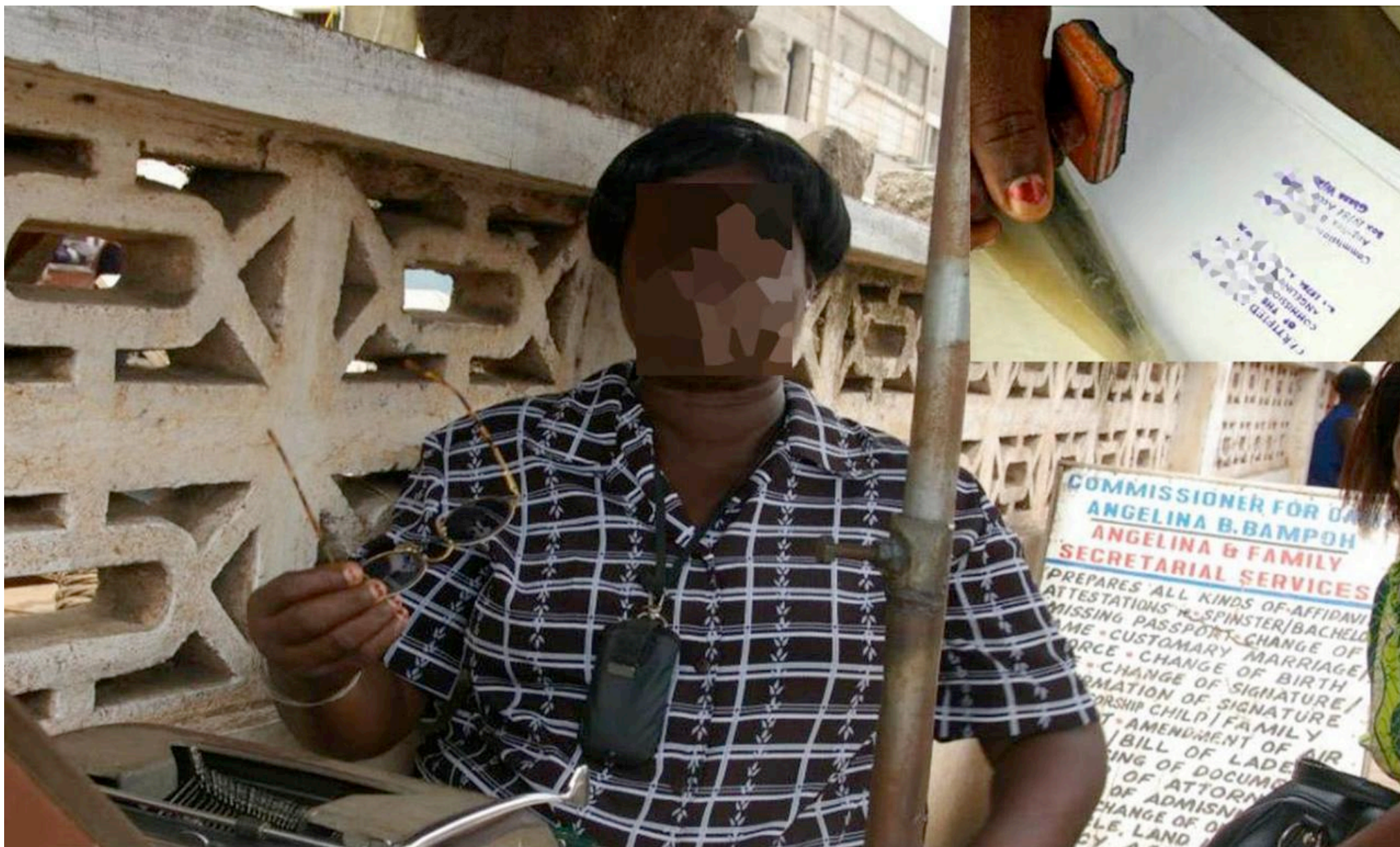




trust?

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cost = truth

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fake

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# the eco-system

critical mass of component suppliers, wholesalers, customers, knowledge













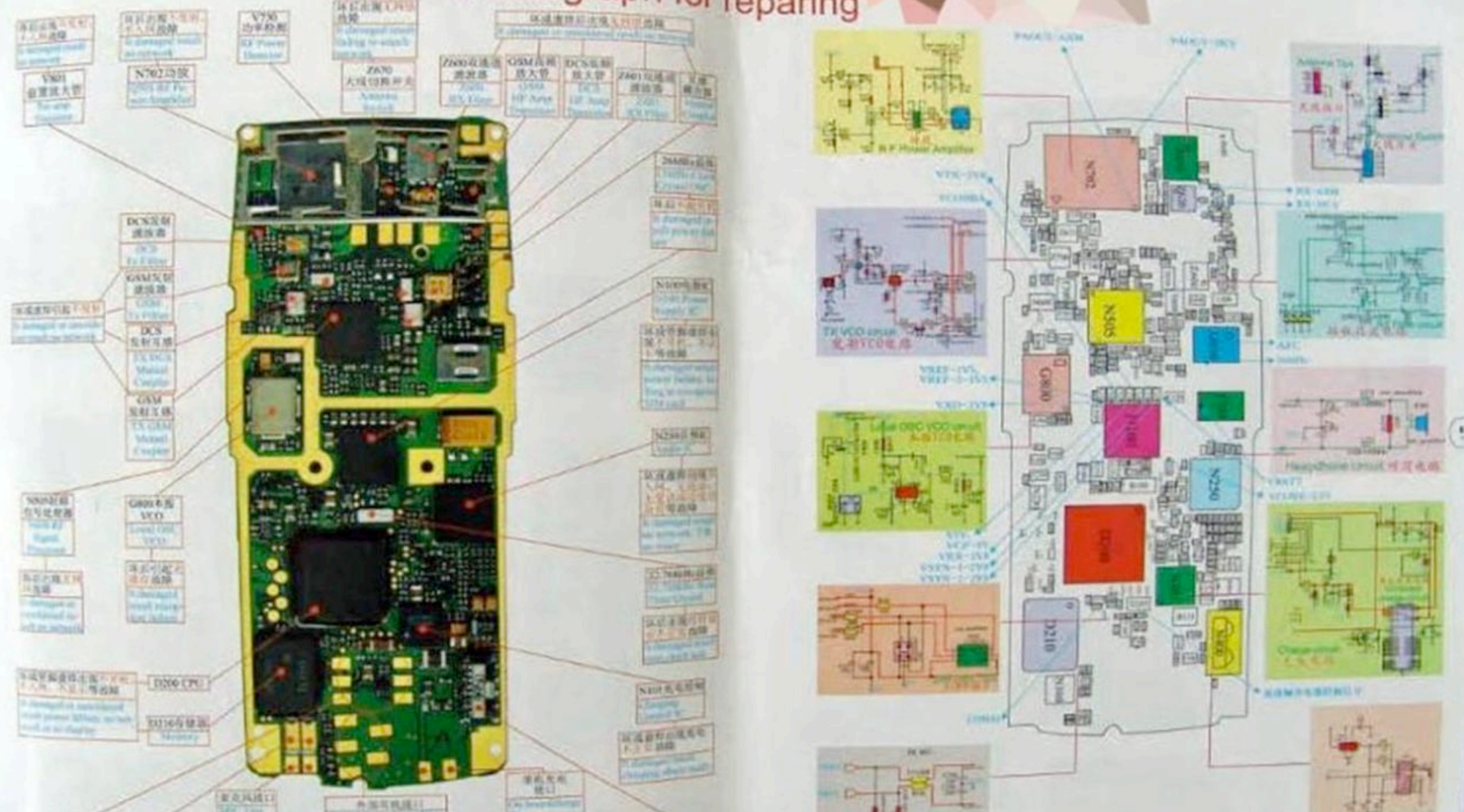


black boxes

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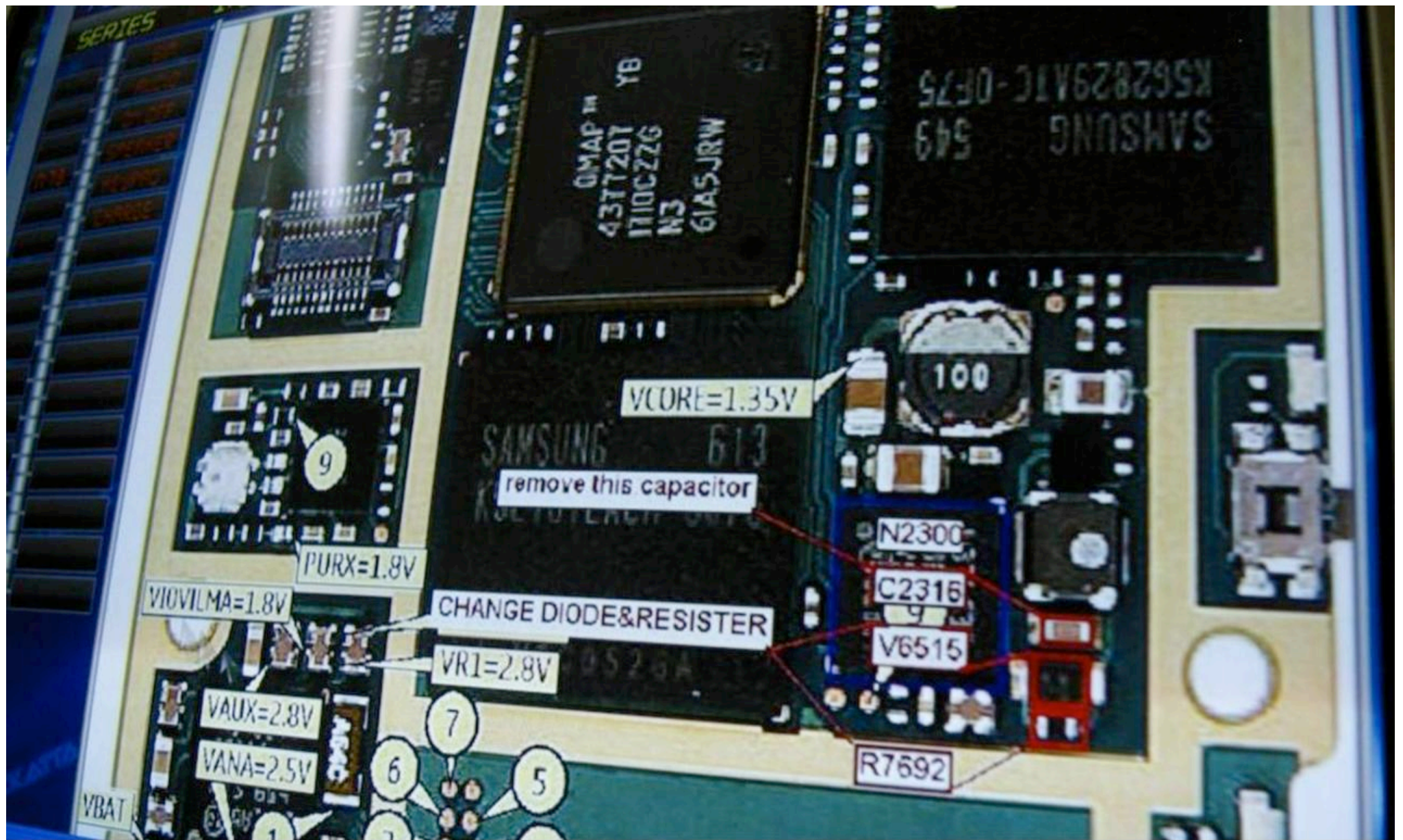
THE 1<sup>st</sup> Photograph for repairing











street hacks





# what's novel?

scale, cost, size, ubiquity of objects of repair

compare to other electronics

imported, grey market, stolen devices (?)

priority & speed of what is repaired

television vs. phone / entertainment vs communication



















# grey market elements

grey market services

fake accessories, risk of having stock confiscated

what makes a fake a fake?

phone unlocking kits, manuals

applications and content – just in time services









how to tell a fake?

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fakes

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fakes & the risk of raids

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# sente

sending money as airtime



# sente > phone as ATM

## sending money as airtime





touch points



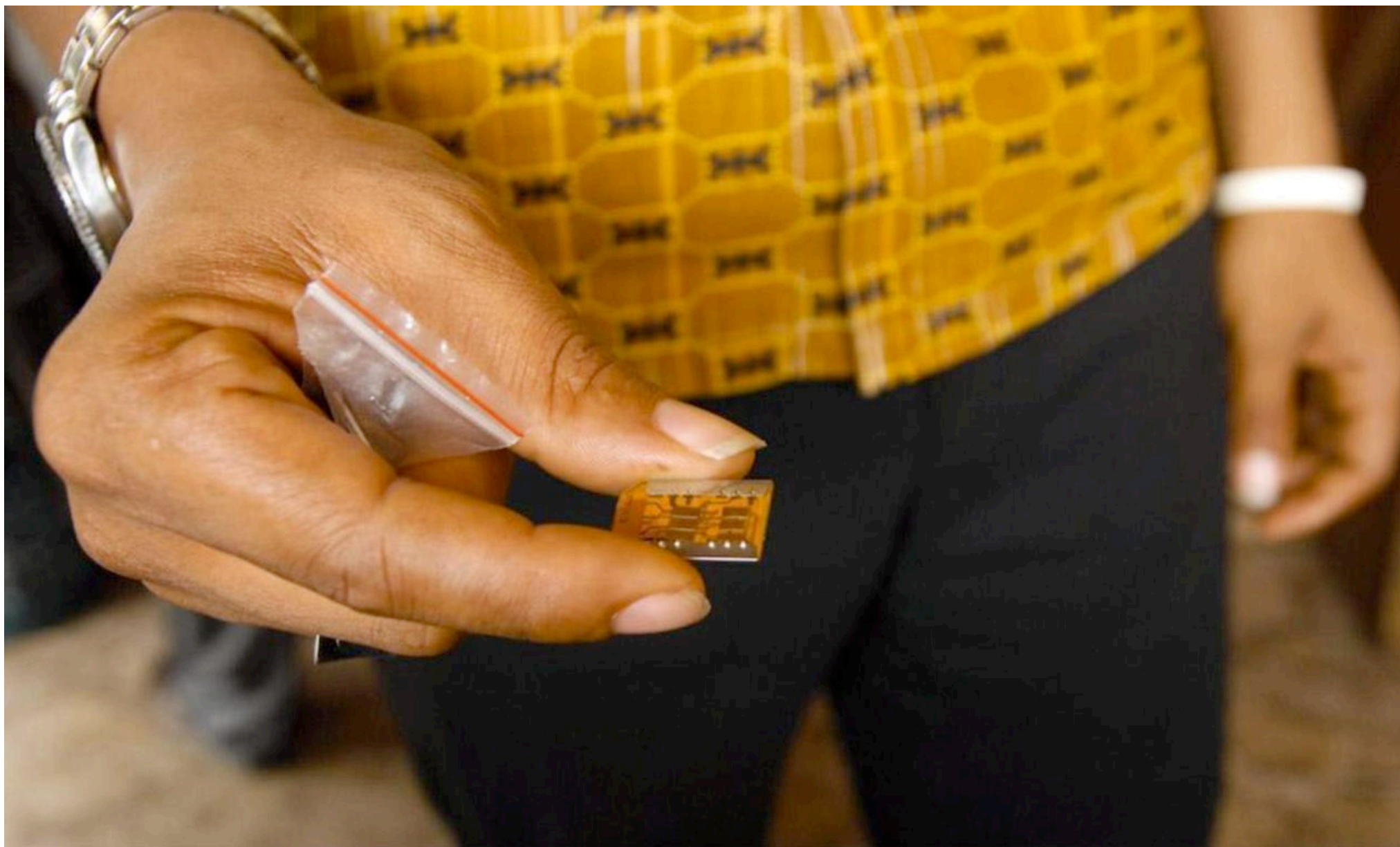
# multiple ownership

~30% Accra, ~28% Rio de Janeiro, ...

drivers: cost saving, controlling point of contact, ensuring reliable connectivity







dual, quad, ... SIM

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# implications

informal repair culture is **largely convenient, cheap** and **fast**  
reduces total cost of ownership for existing consumers  
makes phone ownership more affordable to highly price sensitive consumers  
increasing the life-time of products, lowering their environmental impact (?)  
risks

remade

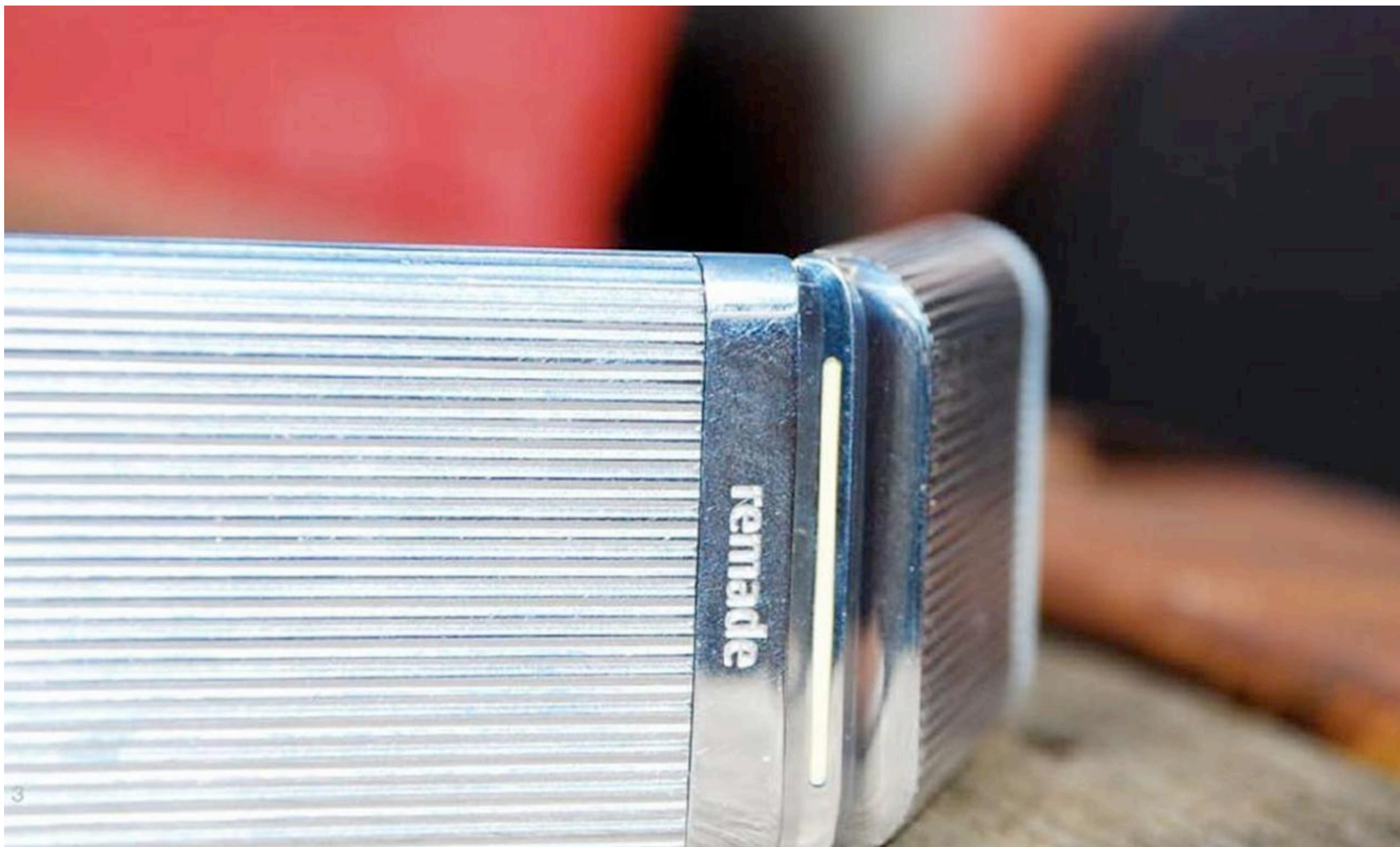






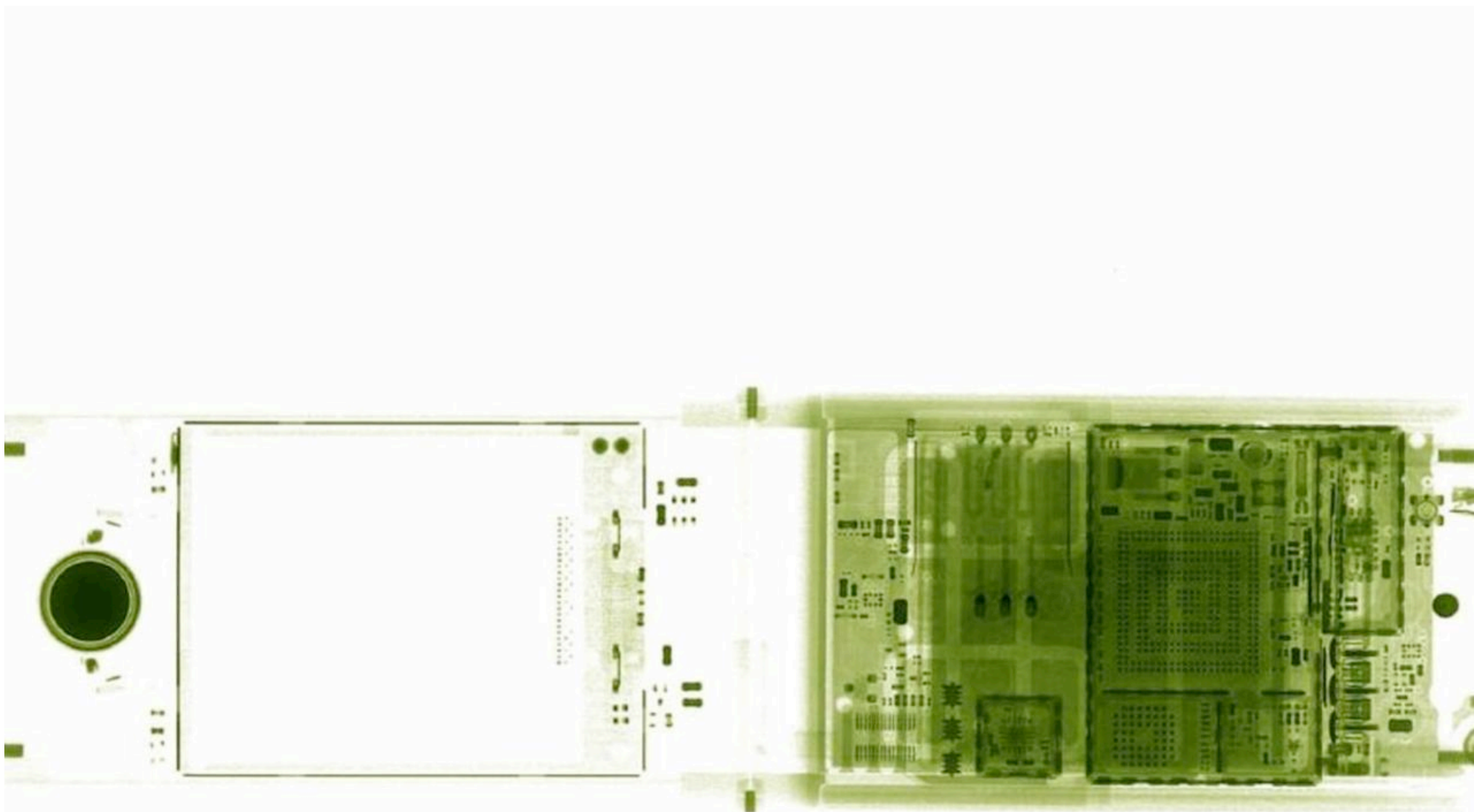


















/thanks

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