The New York Times, 2012

Community repair: enabling repair as part of the movement towards a circular economy

Initial findings from a survey of participant experiences at community repair events in London

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Context

- Waste electrical and electronic equipment (WEEE) is a fast-growing global waste stream (Baldé et al., 2015)

- Many products develop simple faults which can be challenging to repair (Green Alliance, 2015)

- Increasing repair and reuse are central strategies in attaining a circular economy (European Commission, 2016)


The Restart Project, 2016

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Material and energy demand

- Materially-rich lifestyles exert ever-increasing demands on the planet (Trentmann, 2016)

- Design, production, use and disposal of products account for a significant proportion of the UK's energy and material demand (Salvia et al., 2016)

- Products embody carbon (Allwood & Cullen, 2012)

- Products also contain critical raw materials (Parker and Arendorf, 2012)
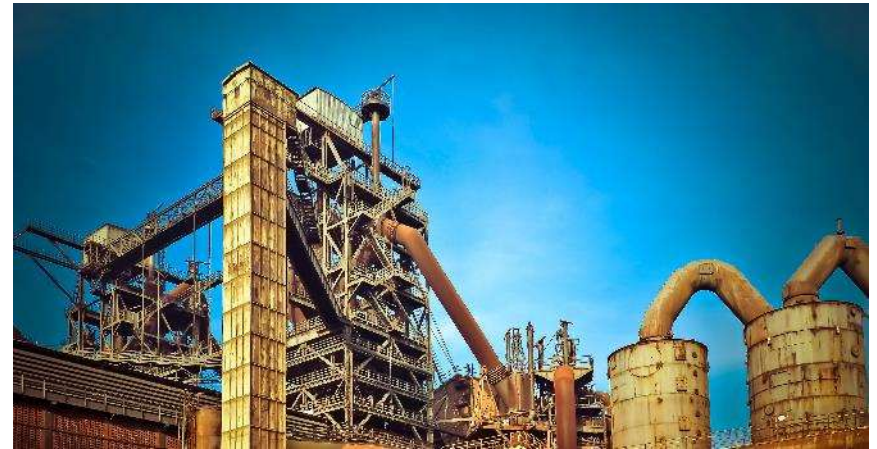
Community repair

- Availability of online resources (e.g. iFixit) that provide manuals, tools and parts (Raihanian et al., 2016)

- Some consumers lack the confidence to repair on their own (Gregson et al., 2009)

- Repair events facilitated by community organisations aim to overcome the barriers to repair (Charter & Keiller, 2014, 2016)
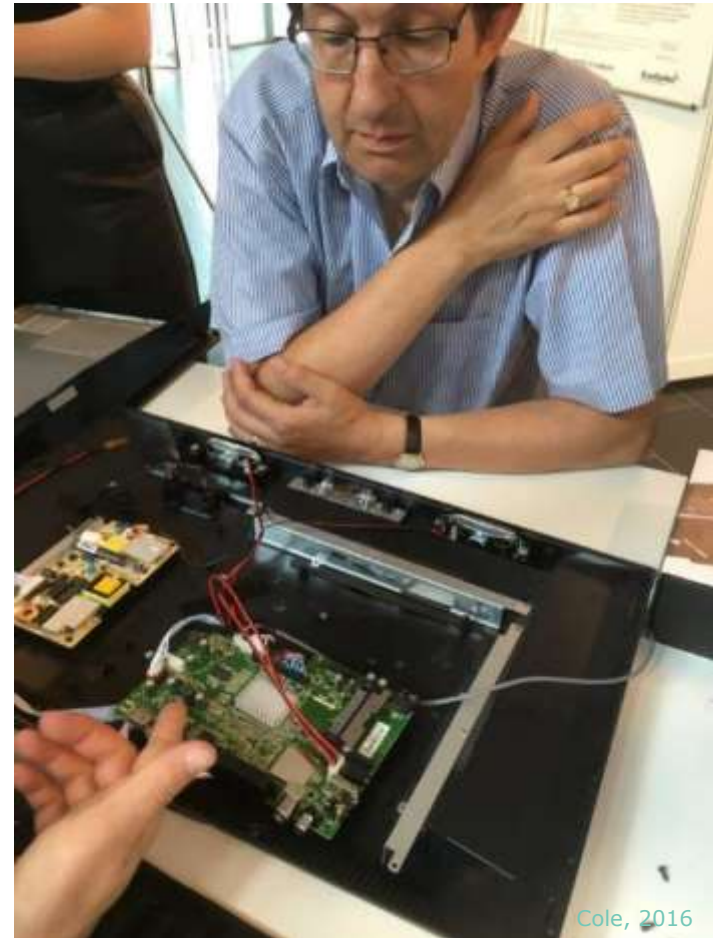
Cole, 2016

Aim and research questions

- To identify and evaluate the potential of community repair events to contribute to the circular economy

  – What are participants previous experiences of repair?

  – What are participants current recycling and repair behaviours?

  – What are participants experiences at community repair events?

  – What aspects of community repair have the potential to contribute to the circular economy?


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The Restart Project

- The Restart Project is a London-based Charitable Incorporated Organisation established in 2013

- Between 2012 – 2015 they organised 85 Restart Parties, preventing:
  - 1270 kg e-waste
  - 25.8 t CO_2 emissions
    (The Restart Project, 2015)

- The Restart Project have been awarded a number of grants by local authorities to promote waste reduction

The Restart Project, 2015

restart

Methods

- Survey included open and closed questions

- Data was collected through:
  - Online surveys
  - Paper-based questionnaires
  - Face-to-face interviews

- Participants self-selected to participate in the study

- Data was collated and coded by The Restart Project

- An initial analysis was undertaken at NTU (Cole & Gnanapragasam, 2017b)

The Restart Project, 2016

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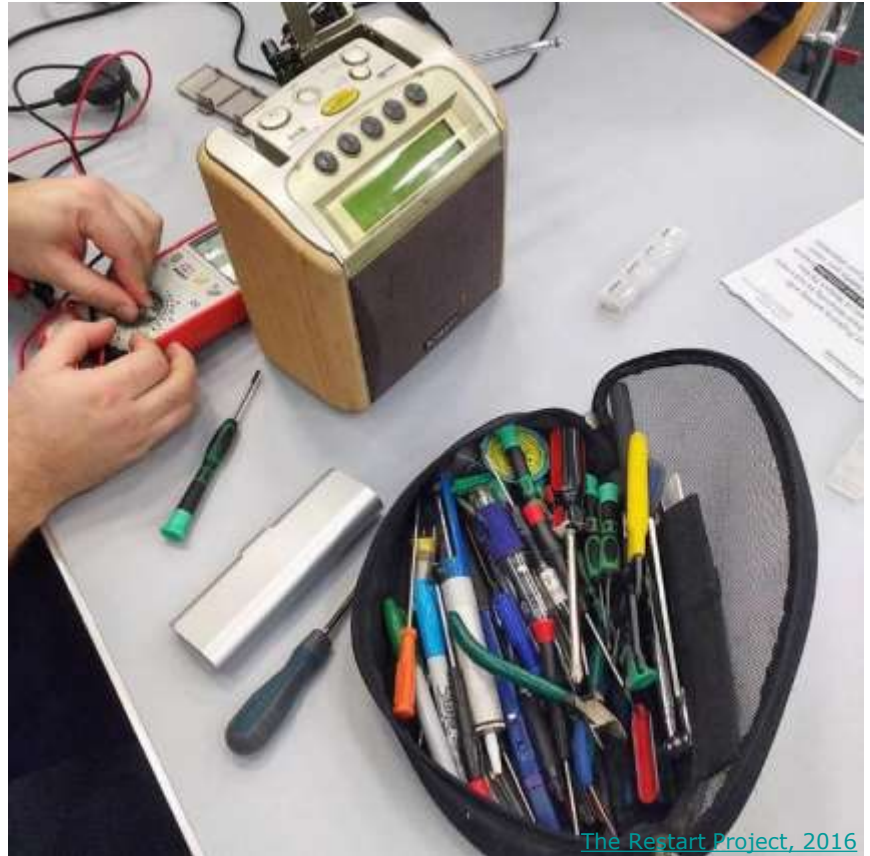
Sample characteristics

- In terms of gender, 56 women and 34 men were interviewed

- Over half of the participants (51) were aged over 44

- One participant had no formal education, 30 were educated below degree level and 52 were educated to degree level or above

- Fifteen participants noted they were financially 'tight' or 'struggling'

Table 1: Sample characteristics, gender (n=99)

Gender	n
Female	56
Male	34
Other, please record	0
Prefer not to say	9

Table 2: Sample characteristics, age (n=99)

Age	n
18-24	4
25-44	33
45-64	26
65+	25
Prefer not to say	11

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Commercial repair

• Cost

"Electricals and appliances are getting cheaper. I would rather repair than replace" (Women aged 45-54, Merton Restart Party)

• Availability

"Just individual repair persons, difficult to find, word of mouth really" (Participant aged over 74, Havering Restart Party)

• Trust

"This is the problem. I do not really trust them. Sometimes they are overpriced" (Woman aged 45-54, Westminster Restart Party)

"We are trusted because we are not selling anything" (Ugo Vallauri, Business Development Lead, Co-Founder, The Restart Project)

Table 3: Participants' responses when asked to name a commercial repair service they trusted (n=99)

Response	n
Cannot name a commercial repair service	44
Named independent shops	14
Named large retailers, brands and/ or manufacturers	14
Has no need for commercial repair services	10
Named online service	5
Does not trust commercial repair services	3
Not recorded	9

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Skills and confidence

- Most of the participants (55) had previously undertaken repairs at home

- Seven participants said their attempted repairs were never successful

- Most participants reported some level of knowledge and skills (67) and confidence (64) with regards to repair
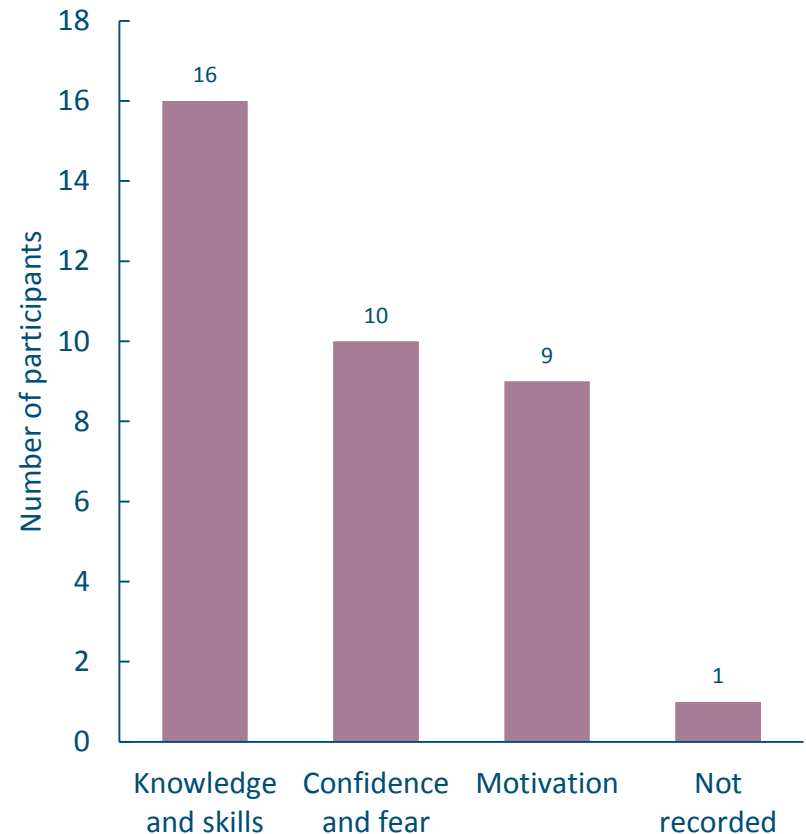
Figure 1: Reasons for not attempting repair in the past (n=33)

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Recycling and reuse

- Most participants (91) stated they recycled

- Reported recycling rates were lower for WEEE than other waste streams

- Most participants (81) donate products for reuse

- Only 12 participants stated they always sought out second-hand products, 56 stated that they might
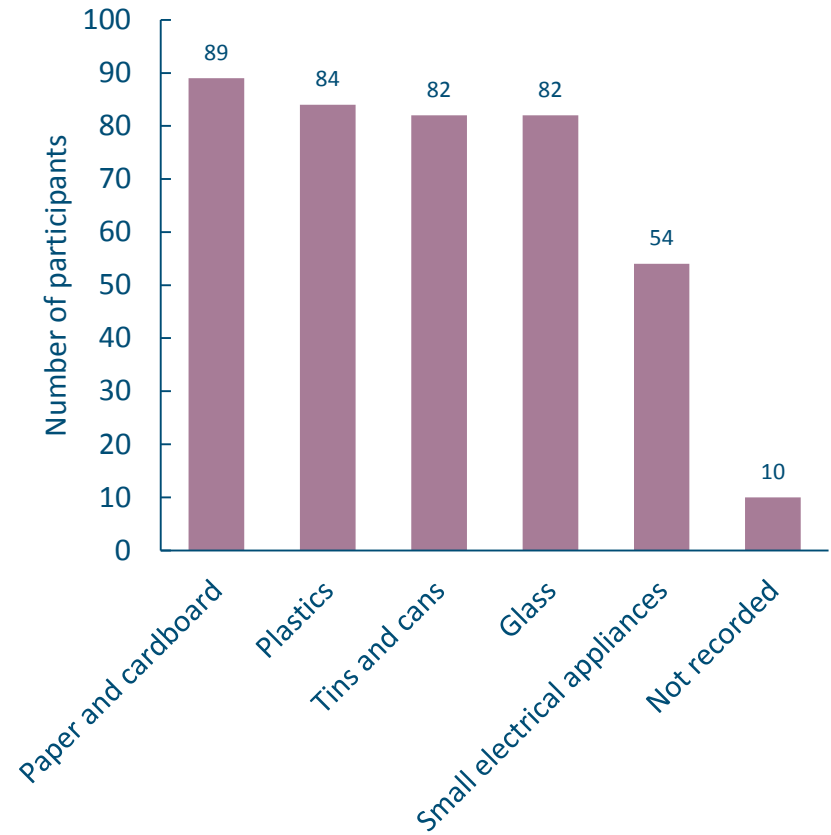

Figure 2: Participants' levels of recycling (n=99)

Community

- ● Social learning

"I wanted to find out what was wrong with my hoover and now I know. The mix of people is fascinating and interesting, seniors and young students" (Woman aged 35-44, Romford Restart Party)

"It is very useful because if you only have basic knowledge, here you find people with more expertise" (Woman aged 45-54, Merton Restart Party)

- ● Philanthropy

"I like that people are here to help with no commercial purpose" (Participant aged over 74, Havering Restart Party)

- ● Positive experiences

"Very happy people are trying even if our problem is not solved" (Man aged 65-74, Corydon Restart Party)

The Restart Project, 2016

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Discussion

Aim: To identify and evaluate the potential of community repair events to contribute to the circular economy

- Overcoming barriers to repair
  - Events provide social learning environments in which participants can strengthen their knowledge, skills and confidence
  - Events provide access to tools and advice on where to acquire materials for repair
  - Community organisations can raise awareness and confidence in commercial repair provisions (3 criteria to help people search for a repair business, see The Restart Project, 2017)

- Raise awareness of recycling and reuse provisions
  - Partnerships between community organisations and local authorities can divert broken and/ or unwanted electrical and electronic equipment from landfill

- Campaign for policy reform in areas such as design for repairability, and access to tools, parts and instructions

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Conclusion

- Product lifetime extension through repair and reuse is integral to establishing a circular economy (Cooper & Salvia, 2017)

- Successful repairs contribute towards slowing and closing resource loops (Bocken et al., 2014; Moreno et al., 2014)

- Community-based organisations appear ideally positioned to challenge the prevailing linear economic model of 'take, make, dispose'

Cole, 2016

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For more information

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Thank you for your attention

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Matumula, 2012

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