

# BringTheFood: fighting food waste with new technologies

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# ict4g.org

- find novel ways in which technologies can promote economic and **social development**
- we target, in particular, areas characterized by a low penetration of ICTs and marginalized communities



# where we are

- **FBK** is a no-profit research center (mainly) owned by the Autonomous Province of Trento
- Research in Humanities, IT, and Materials and Microsystems
- Dimension of the IT-center: about 180 people, among researchers, developers, and phd students
- Basic and applied research



# Initiatives

- Maputo Living Lab  
(innovation lab in Mozambique)
- Hackathons
- SAMO  
(social accountability in Moz.)
- ComeButta  
(help recycling better)
- BringTheFood  
(help donate food)







- two days of programming
- developing applications for social good
- thousands of man-hours
- working prototypes
- education/exposure to the topics
- survival of the fittest (solution!)

Random Hacks of Kindness



... alas, sometimes,  
it is survival of the fittest ... person





# ComeButta

in collaborazione con



# motivating example

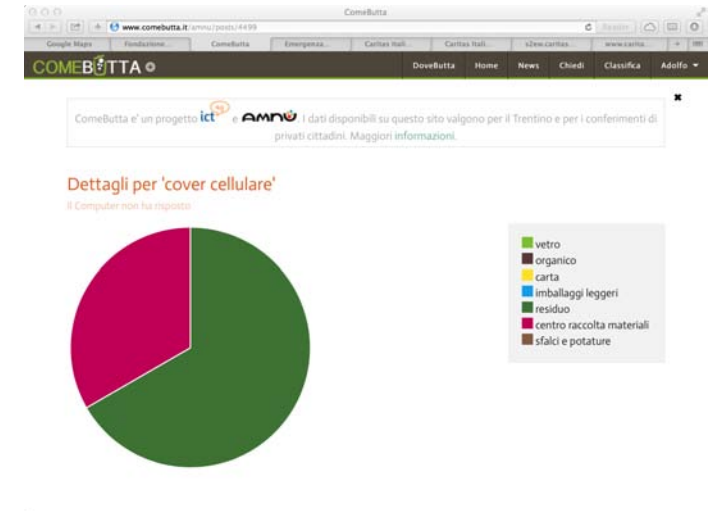
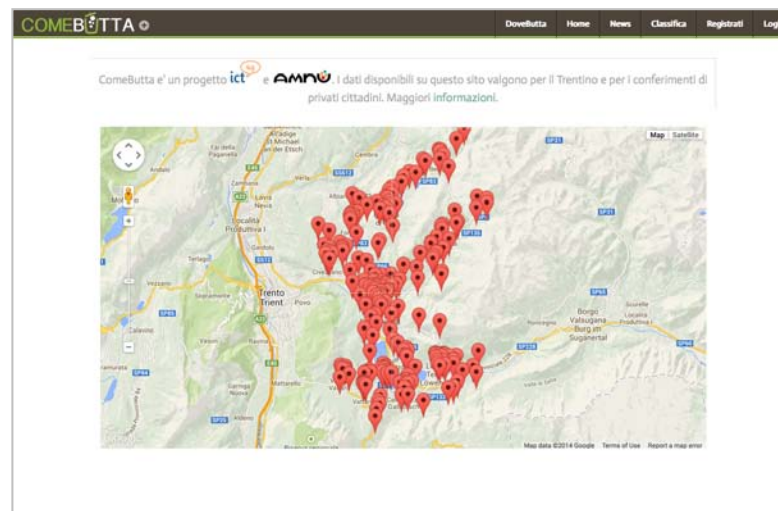
- the actual possibility of recycling batches of waste depend upon the “quality” of the collected (recyclable) waste
- two methods: pre-disposal selection or post-disposal selection
- pre-disposal selection can be problematic: ceramic vs. glass, thermal paper, ...
- goal: helping motivated people in improving waste-disposal services
- ComeButta, DoveButta, ButtaMale and ButtaMeno



# services

front-end

back-end



# approach

- involvement of middle- and high-schools students  
(they work as “vectors” in their families)
- gamification:
  - content production and classification as a  
“competition”  
(against peers and a machine-learning component)
  - geolocation as a “treasure-hunt”  
(take a picture of a bin and submit it)

# some results and next steps

- in 2013 ComeButta used by high school students in Alta Valsugana: 700+ users created ~10k posts
- in 2014 we started with ComeButta (second round) and DoveButta:
  - 2700 posts in 4 weeks
  - 2/3 of bins already “found”
- new services in the pipeline ButtaMale and ButtaMeno





# BringTheFood

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# context

- **food donations**: making food available to people in need
- according to ISTAT, in Italy in 2012:
  - **15,8% of people is on the verge of poverty**  
(~ 9.5 M people)
  - **8% is poor**  
(~ 4 M people)
- the actors: donors, vectors, receivers (often in the form of shelters, NGOs, “canteens”)
- reduction of waste is a side effect (if at all)

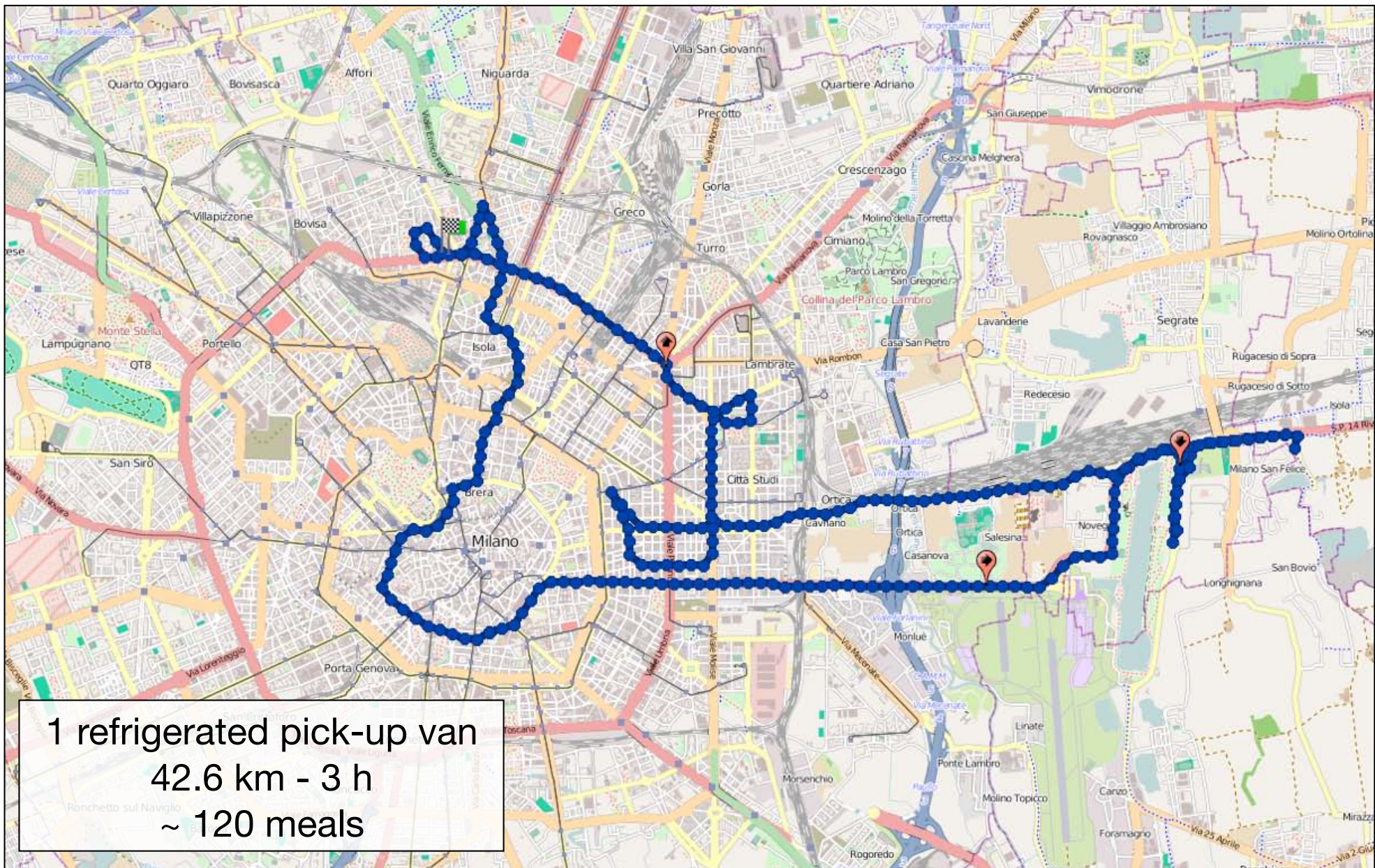


# “traditional” approach

- food collected in large quantities from processing plants, large distribution, etc.
- food is stocked in warehouses where it is then re-arranged in packages and distributed to charities





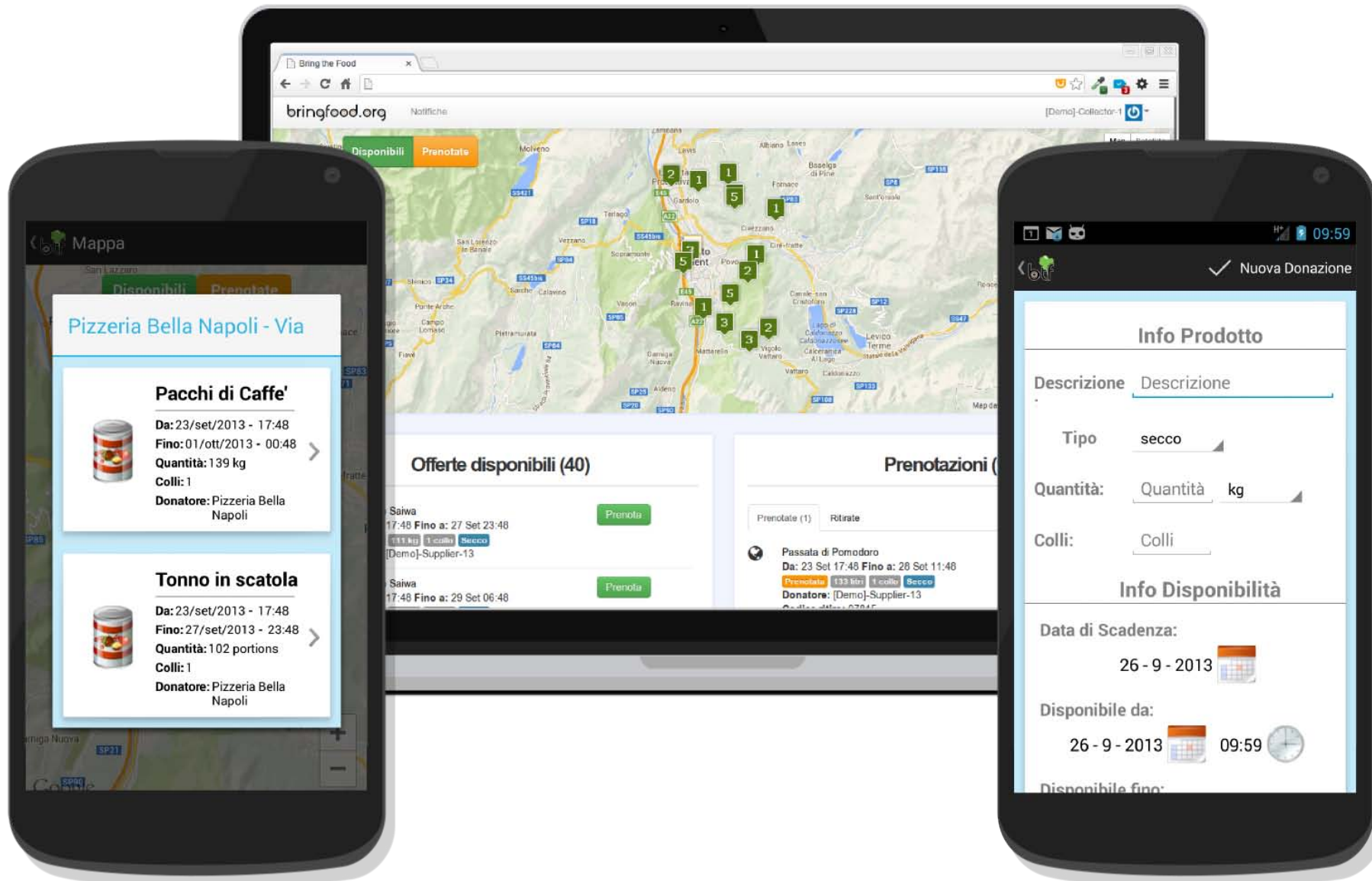


# the gaps

- gaps and inefficiencies
  - small retailers, “casual” donations, private
  - the distribution could be more efficient (the KM0 donation)
- idea:
  - use new technologies to mediate food donations
  - “BringTheFood” is the “eBay” of food donations
  - first of its kind, it has been followed by similar initiatives



# bring the food





# some constraints

- social: being a game changer without being a game “killer”
- quality: setting standards on the quality of food which is donated
- legal: allocation of liabilities, etc.

# experimentation

- approach: collaboration with the italian food bank (while keeping the app open to others to use it)
- “controlled” experimentation:
  - trentino Alto Adige Food Bank (Trento)
  - food Bank Foundation (Milan)
  - mensa di fassolo (Genoa)

# some lesson learned

- breaking the habits (SAP, ...)
- building a critical-mass: you need enough donors and receivers to make the system effective (viral communication, traditional campaigns, coordination with the food bank)
- sustainability and “business” models



# the future

- integrating peer to peer with donations to charities
- moving “up” the chain  
(small farmers, supermarkets, etc.)
- enlarge to other domains  
(donations)