From ownership to service-based lifestyle: the case of joint use of power tools

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“If I am what I have, and what I have is lost, who then am I?”

(Fromm 1976)
Goal of the case

- Evaluate how the systems of shared use are organised and perceived in the society
- Evaluate when shared use reduces environmental impact
- Understand how the systems of shared use that are provided close to the final user - households - could be organised and stimulated.
Justification for the study

- Reasons of business innovation strategy
- Environmental concerns
- Justification for power tools
- Justification of actors involved
Design of the study

• Step 1: Study existing schemes of shared use
• Step 2: Define elements of such services in a dialogue with interested actors
• Step 3: Build scenarios of a tool-sharing and/or renting system
• Step 4: Test the scenarios in dialogue with interested actors (economic and environmental)
• Step 5: Improve the scenario and provide recommendations for application of such schemes on a wider scale.
Step 1: How current systems of shared use of power tools operate?

- Producers (10)
- Tool renting companies and shops (20)
- Community-based rental or sharing services of power tools (20)
- Consumers of rental and leasing services (50)
- Household attitudes to services and renting (618)
Provided services

Common services that are provided in the studied living area

- Connection to internet: 94.43%
- Washing centre: 88.03%
- Care taker: 79.34%
- Playground: 78.85%
- Grill place: 58.03%
- Common premises: 56.89%
- Sauna: 22.62%
- Help with small renovation and repair, etc.: 16.89%
- Solarium: 15.57%
- Workroom: 15.08%
- Rental of power tools: 12.62%
- Gym: 11.97%
- Help with cleaning: 8.03%
- Car pool: 5.08%
- Film rent: 3.61%
- Bank services: 1.97%
- Missing answers: 0.66%
Desired services

Services that respondents would like to have in their living area besides those that are already provided:

- Gym: 33.93%
- Rental of power tools: 31.15%
- Sauna: 29.02%
- Solarium: 23.28%
- Help with small renovation and repair, etc.: 22.95%
- Missing answers: 20.82%
- Workroom: 20.00%
- Help with cleaning: 18.52%
- Common premises: 18.20%
- Film rent: 14.75%
- Grill place: 14.43%
- Car pool: 14.26%
- Common trips and similar activities: 13.77%
- Washing centre: 7.54%
- Connection to internet: 7.21%
- Care taker: 7.05%
- Bank services: 5.90%
- Playground: 4.10%
Small repair and renovation in my house I manage ...

- By asking neighbour or friend: 9.58%
- Both myself and by hiring repair man: 13.95%
- Mostly by hiring repair man: 3.19%
- Mostly myself: 73.28%
Most often used power tools…

- Drill (40%)
- Saw (jig, circle) (15%)
- Screw puller (17%)
- Grinding and sanding machine (17%)
- Impact drill (4%)
- Other tools (7%)
Frequency of tools use

- Every month: 34%
- Every other week: 10%
- Once a year: 6%
- Twice a year: 30%
- Every week: 10%
- More seldom: 9%
- Every other week: 10%
- Every month: 34%
Power tools are usually replaced

- More seldom: 86%
- Twice a year: 0%
- Every 2-3 years: 13%
- Once a year: 1%
Power tools are replaced when ...

- When they got broken: 55.71%
- When newer models exist on the market: 0.58%
- When they are old and worn out: 29.01%
- When you need more functions from the tool: 12.38%
- When tools with better performance exist on the market: 2.32%
I think I must own the following power tools …

- Drill: 47%
- Sanding machine: 14%
- Screw puller: 14%
- Saw: 8%
- Jig saw: 8%
- Impact drill: 3%
- Others: 3%
- Lawn mover: 3%
I think I must own those power tools that I use at least ...

- More seldom: 10.13%
- Once a year: 3.16%
- Twice a year: 9.49%
- Every month: 22.47%
- Every other week: 6.33%
- Every week: 9.49%
- Every day: 3.64%
Influence of tool properties on the decision to rent tools

- Release of improved models on the market: 3.29%
- Use frequency: 43.53%
- Price: 33.66%
- Maintenance: 11%
Power tools are rented ...

![Pie chart showing the frequency of tool rental]

- Never: 64%
- More seldom: 26%
- Once a year: 6%
- Twice a year: 3%
- Every other week: 0%
- Every week: 0%
- Every month: 1%
- Every day: 0%
Why respondents never rent power tools

- To rent takes too much time: 8.87%
- I don't need tools: 30.79%
- I prefer my own tools: 15.27%
- I don't think one can rent: 4.93%
- To rent is expensive: 10.59%
- I don't know where I can rent: 19.46%
- I am afraid the tool may brake: 2.46%
- To rent is too complicated, I prefer buying: 7.64%
- I don't need tools: 30.79%
- I don't think one can rent: 4.93%
I rent because ...

- I can use the latest models
- I want to reduce environmental impact
- I want always to have functioning tools
- I can rent when I need the tools (time)
- I can get advice and hints
- It’s expensive to buy tools
- I rent only for special occasions, i.e. house renovation
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The bar chart shows the percentage of people who rent tools for various reasons. The most common reason is rent only for special occasions, such as house renovation, with 24.46% of respondents. The least common reason is they can use the latest models, with only 0.00% of respondents.
How far away is renting place from your home? (in km)

- < 1 km: 9.76%
- 1-5 km: 50.73%
- 5-10 km: 23.90%
- 10-25 km: 13.66%
- 25-50 km: 1.95%
- 50 km: 0.00%
How do you get to renting place?

- Car: 83.87%
- By feet: 5.73%
- Bus: 4.66%
- Bicycle: 5.73%
Organisation of a tool sharing system

- To be in tool pool and share with neighbours the motor driven tools
- Start tool pool on commercial grounds?
- Have working room with many tools
- My tenant company establishes such service and all can rent
- Independent entrepreneur establishes the service
- Have a repair shop in my area which also can repair at home
What services should be included?

- Cleaning: 11%
- Maintenance: 17%
- Information about choice and functions: 14%
- Tool order via internet: 15%
- Tool order per telephone: 11%
- Help of a craftsman to perform the job: 6%
- Tool delivery: 5%
- Advising: 14%
- Education: 7%
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- Tool order per telephone: 11%
- Education: 7%
- Advising: 14%
Would you prefer to pay for the service ...

- Not at all: 14%
- As a monthly fee / part of your rental payment: 4%
- Per hour you rent?: 30%
- For every day you rent?: 52%
Would you prefer that this service is run by ...
Institutionalisation of shared use

- Regulatory
- Normative
- Cognitive
Regulatory institutionalisation

- Indirect:
  - WEEE directive
  - EU-financed European projects
  - Climate Investment Programme, KLIMP in Sweden
Normative & cognitive institutionalisation

- Rental places
- Borrowing from “social network”
- Community-based tool sharing/lending services
- Collective houses with ceramic workshops, weaving rooms, carpentry rooms, paint shops, metal workshops, and renting facilities
On-going work

- Development of scenarios for sharing of power tools
- Environmental and economic evaluation of the scenarios
- Recommendations for how to develop such systems
- Factors of success
Thank you!

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