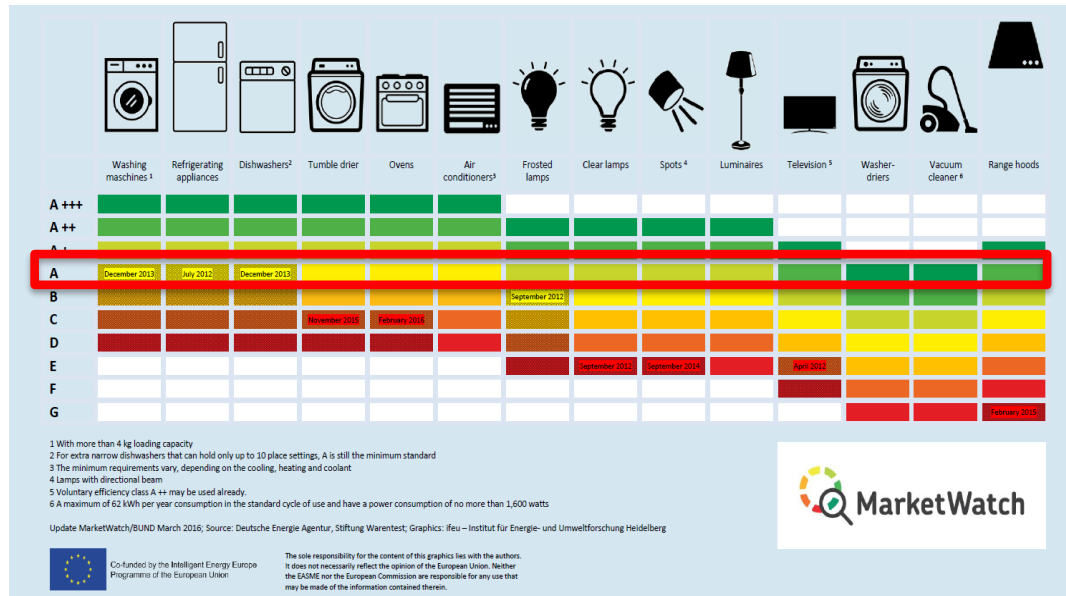# Pocket Watt
THE DIGI-LABEL PROJECT

Digital labels as the next step for informed consumer decisions - experiences from an EU field trial

ENERDAY 2019 - 13th International Conference on Energy Economics and Technology 12th April 2019

Motivation

- The **European energy label** for household **appliances** has the aim to promote more energy-efficient appliances.

- Energy label is positively received by many consumers and also well-known. However, a significant number of consumers admits that they do not understand all elements on the energy labels.

➢ **Digital labelling tools** have the potential to solve this issue.

www.newenergylabel.eu

The Digi-Label project

- **Overall aim of the project**: To make the EU Energy Label easier to understand and more readily available in-store and online.
  - Developing **digital tools ('PocketWatt')** that give consumers more and better data on the energy consumption of appliances by making comparisons between appliances possible.
  - Evaluation of the process and outcome of the tool

- Project coordinator: Energy Saving Trust
- Running from April 2016 to March 2019
- Co-funded by the European Union Horizon 2020 programme.
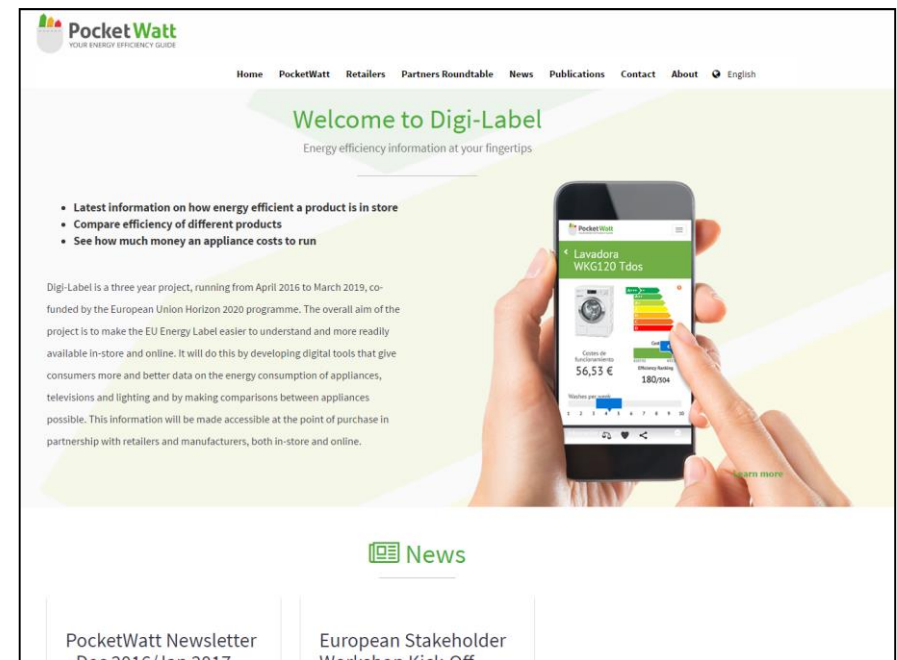
The PocketWatt tool

- PocketWatt: website and online application, designed to be used on a smartphone or similar devices during shopping.

- Contains relevant product information for appliances with energy labels on a model-by-model basis.

- Tool was implemented in selected shops in several EU countries (QR code attached to appliance in store and implementation of widget in some online shops).
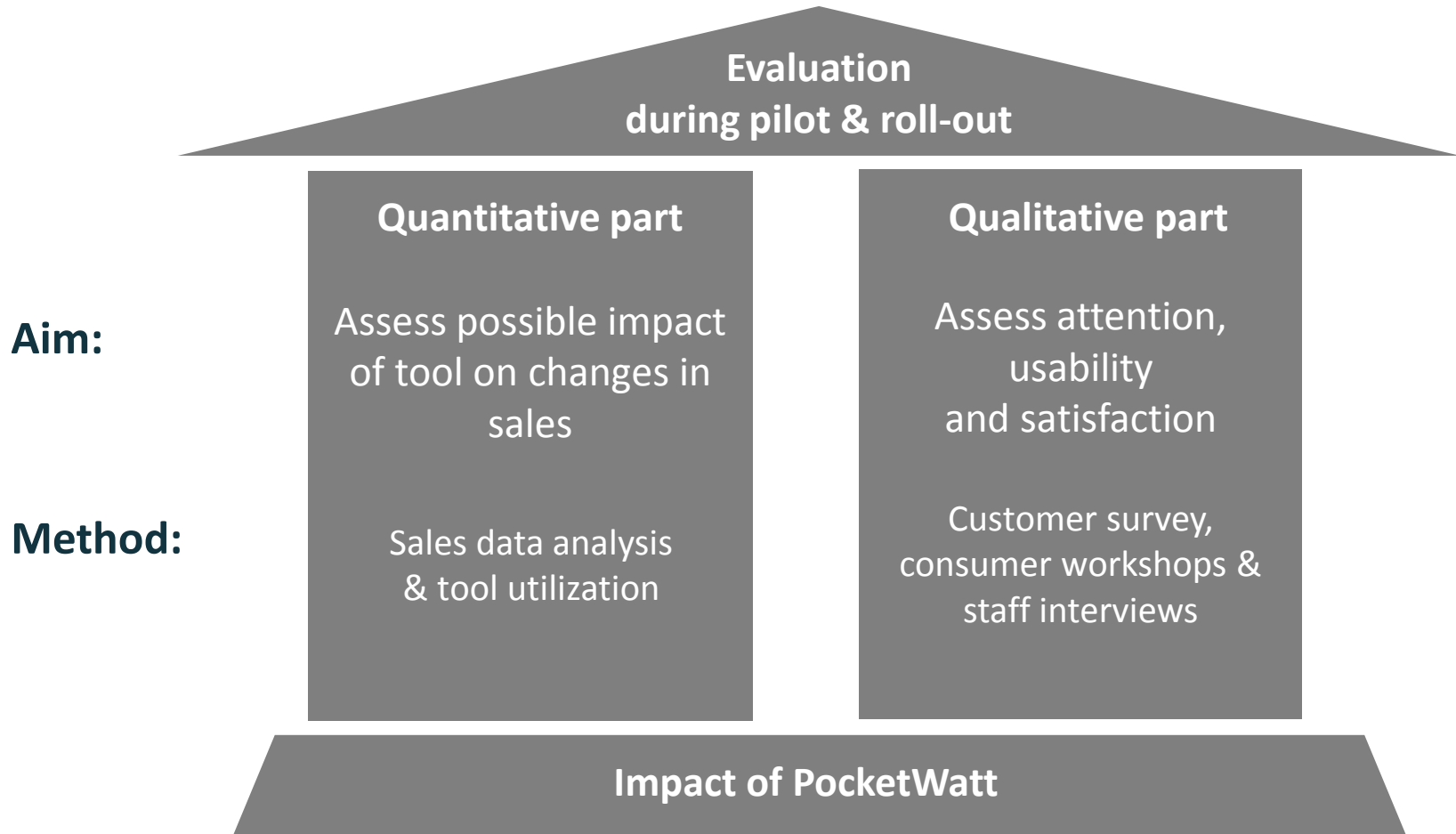
www.pocketwatt.eu

Pilot phase

- Spain + UK
- Focus on refrigeration products and washing machines.
- Completed in 2017

Rollout phase

- Czech Republic, Germany, Italy, Spain, UK.
- Additional appliances, including clothes dryers, dishwashers and air conditioners, were included.
- 2018 /2019

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Overview of the evaluation

Evaluation
during pilot & roll-out

Quantitative part

Assess possible impact
of tool on changes in
sales

Sales data analysis
& tool utilization

Qualitative part

Assess attention,
usability
and satisfaction

Customer survey,
consumer workshops &
staff interviews

Aim:

Method:

Impact of PocketWatt

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Qualitative analysis

**Evaluation
during pilot & roll-out**

|	**Quantitative part**	**Qualitative part**
Aim:	Assess possible impact of tool on changes in sales	Assess attention, usability and satisfaction
Method:	Sales data analysis & tool utilization	Customer survey, consumer workshops & staff interviews

Impact of PocketWatt

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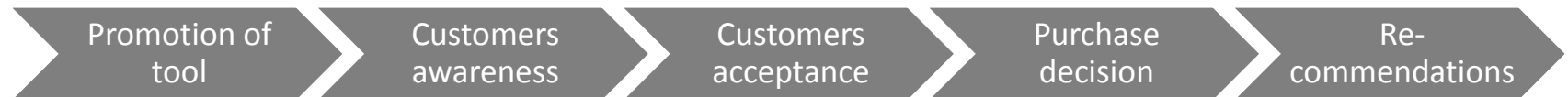# Approach for the qualitative evaluation in the rollout

Customer perspective: variety of sources

- **Customer surveys** at the point of sale (standardized interview questionnaire for approx. 5 min) *(only Spain, n=53)*

- **Additional data sources**:
  - Short online-based customer surveys in the tool and on social media (reduced version of customer survey questionnaire) *(cross-country and UK, n=21 / n=22)*
  - Short customer surveys for participants of a fair (reduced version of customer survey questionnaire) *(Italy, n=119)*
  - Additional customer workshop: group discussion with customers at the point of sale *(Germany, n=7)*

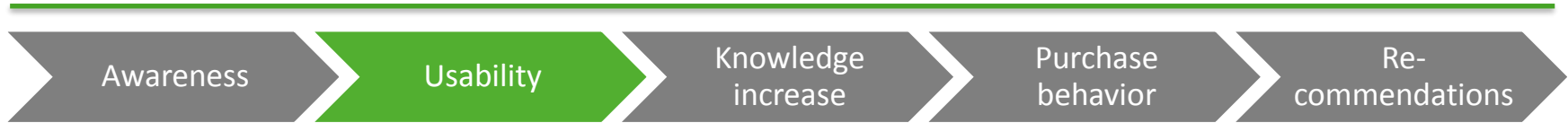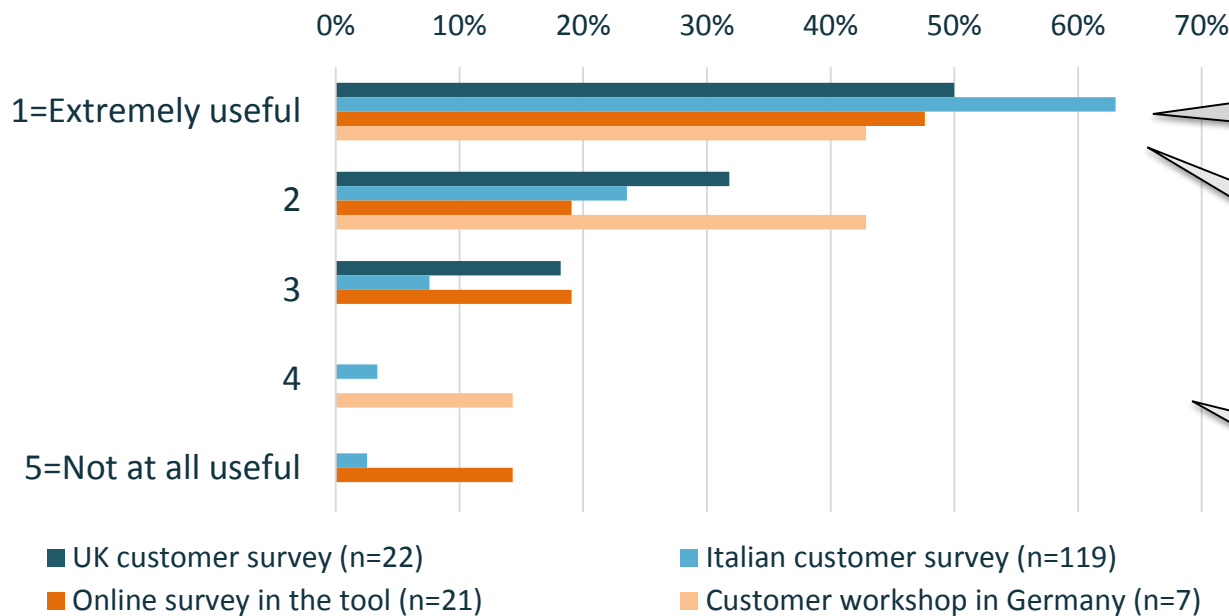| Awareness | Usability | Knowledge increase | Purchase behavior | Re-commendations |
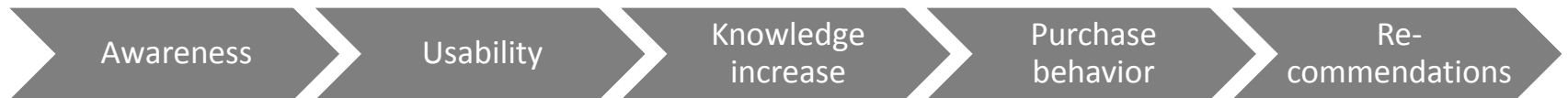
Retailer perspective

- **Interviews with shop employees**
  (interview guideline with open questions) *(Germany, UK, Spain, Czech Republic; n=19)*

| Promotion of tool | Customers awareness | Customers acceptance | Purchase decision | Re-commendations |

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Results for the customer perspective

Awareness | **Usability** | Knowledge increase | Purchase behavior | Re-commendations

Overall evaluation of PocketWatt: Results from the additional data sources

Customer workshop:

0% 10% 20% 30% 40% 50% 60% 70%

1=Extremely useful

2

3

4

5=Not at all useful

■ UK customer survey (n=22)　　　■ Italian customer survey (n=119)
■ Online survey in the tool (n=21)　　■ Customer workshop in Germany (n=7)
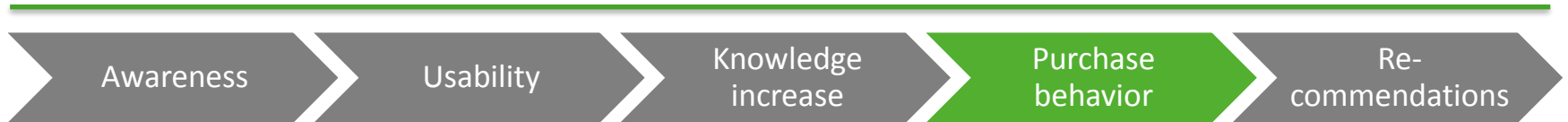
'Works immediately [...] No mistakes in it, clean app. Works.'

'Sure, great at first sight. Very user-friendly.'

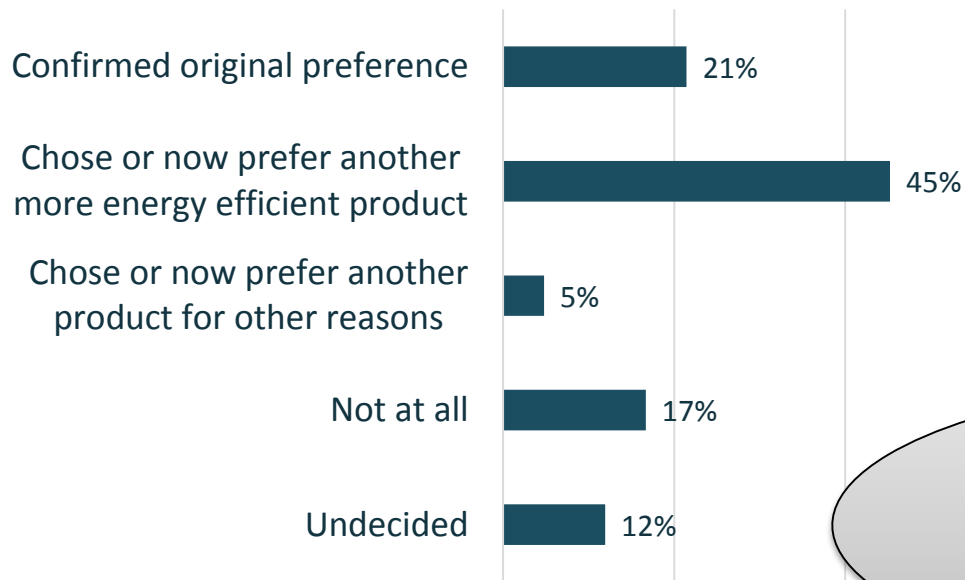*'...a few more arguments have to be added. But that's a solid basis.'*

Note: Due to the very small sample sizes, especially at the customer workshop, the percentage values are for comparison only, but not to be generalised

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Results for the customer perspective

| Awareness | Usability | Knowledge increase | Purchase behavior | Re-commendations |

How did PocketWatt influence the (planned) purchase decision?
Results from the customer surveys
(Spain, n=53)

Confirmed original preference — 21%

Chose or now prefer another more energy efficient product — 45%

Chose or now prefer another product for other reasons — 5%
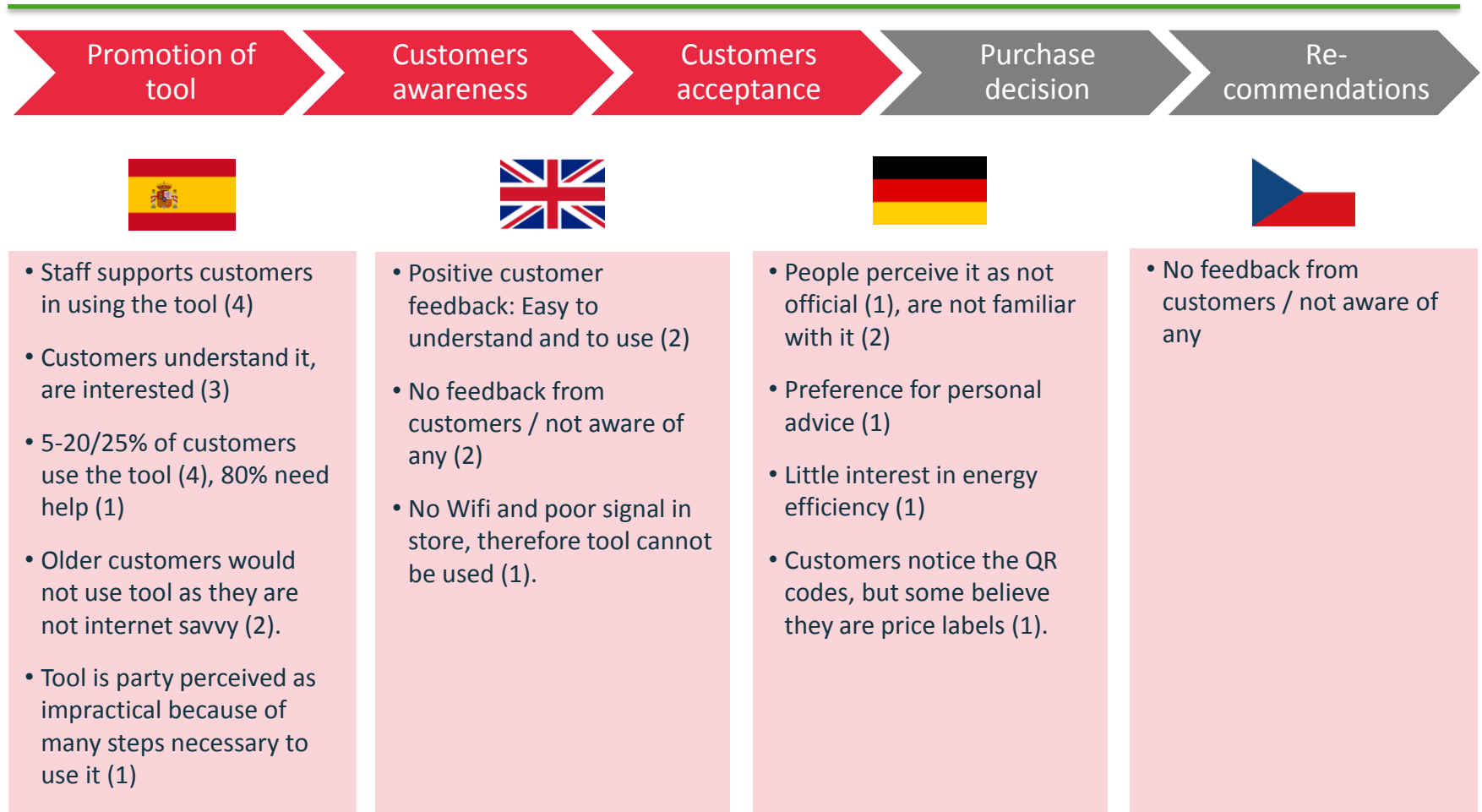
Not at all — 17%

Undecided — 12%

Results from customer survey in Spain were confirmed by the other surveys.

Expected influence on the purchase decision discussed in more detail in customer workshop:

➢ Household appliances are not bought as often and are used for a long time → purchase is well considered, variety of information sources is used.

➢ PocketWatt can act as orientation guide in purchasing process by simplifying the research process.

'I wouldn't buy [the appliance] at that moment either, but I think that simplifies the research process for the purchase. You just have everything together, [...]'

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Results for the retailer perspective

Promotion of tool	Customers awareness	Customers acceptance	Purchase decision	Re-commendations

🇪🇸   🇬🇧   🇩🇪   🇨🇿

Spain	United Kingdom	Germany	Czech Republic
• Staff supports customers in using the tool (4) • Customers understand it, are interested (3) • 5-20/25% of customers use the tool (4), 80% need help (1) • Older customers would not use tool as they are not internet savvy (2). • Tool is party perceived as impractical because of many steps necessary to use it (1)	• Positive customer feedback: Easy to understand and to use (2) • No feedback from customers / not aware of any (2) • No Wifi and poor signal in store, therefore tool cannot be used (1).	• People perceive it as not official (1), are not familiar with it (2) • Preference for personal advice (1) • Little interest in energy efficiency (1) • Customers notice the QR codes, but some believe they are price labels (1).	• No feedback from customers / not aware of any

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Results for the retailer perspective

| Promotion of tool | Customers awareness | Customers acceptance | Purchase decision | Re-commendations |

- **Increase retailer engagement:**

  - More training and support for the retailers (e.g. printing the QR codes etc.) to implement the tool

- **Increase customer awareness and acceptance for the tool:**

  - **Advertise** PocketWatt (e.g. in mass media or social media), **highlight** QR code visually

  - **Improve** the tool (include more features like break-even analysis, runtime of the appliances or more filtering options)

  - **Link** PocketWatt und EU Energy Label more closely:

    - Integrate energy efficiency class in the QR code to understand reference to energy efficiency

    - Integration of PocketWatt in EU Energy Label and make PocketWatt mandatory

    - Change names of PocketWatt to something EU related to create official and familiar character

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Conclusions from the qualitative evaluation

- Tool is perceived positively and useful by **customers**, in particular, if they receive assistance in accessing and using the tool.
- For the majority of customers using the tool leads to an increase of knowledge, that means, the **tool has achieved its objective by complementing the conventional energy label and making it more useful** for consumers
- ➢ The tool has thus the potential to have an **impact on the purchase decisions** of customers

- The **interviewed staff personnel** was more sceptical...
  – because energy efficiency is not a top priority for many customers
  – because the technical requirements (smartphone, internet connection and QR-code scanner) can make the use of the tool difficult
  – because promoting the use of the tool in the shop requires effort

  ... however, the majority is convinced of PocketWatt and believes it should be more advertised

- ➢ **Cautious assumption:** Considerable energy savings could be achieved in case of a wide deployment

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Conclusions from the quantitative evaluation

All product groups:

- Trend towards more efficient classes from reference to roll-out

  - Exception: Reversible and cooling conditioners

- General trend towards less consumption

  - Reduction in average absolute consumptions: The averages in terms of consumption per **fridge/freezer** for the rollout is approximately **-9.4 kWh/a** or about **4 % lower** than in the reference case.

  - Refrigerators increase despite slight improvement in efficiency classes; cooling conditioners decrease despite slight deterioration in classes

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Outlook

- New regulation for energy labelling framework in the EU published in 2017: **European Product Database for Energy Labelling (EPREL).**

- Data stored in EPREL could serve to feed PocketWatt or related tools in the future.

- Revision and re-calibration of energy efficiency classes.

- New labels suggested also include QR code that will offer additional information.
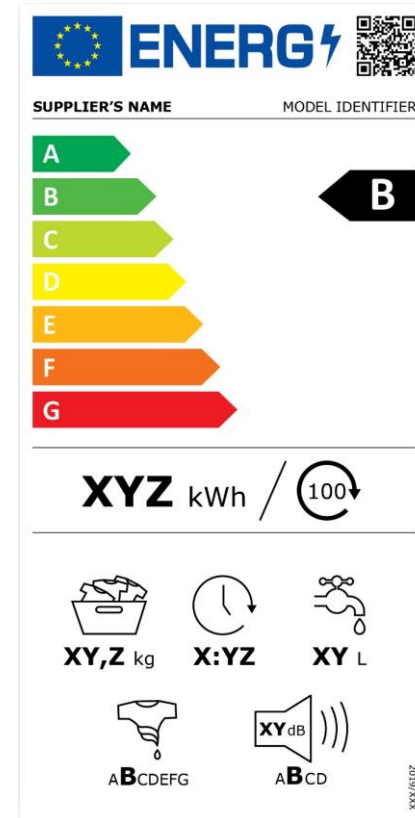
Thank you

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