REFURBISHING AND REMANUFACTURING IN THE BASQUE COUNTRY: FROM HOME APPLIANCES TO INDUSTRY

T-REX - 15th september 2016

ACEDE – Cluster del Hogar
H-Enea Living Lab
- An old planet: a new way to understand living in it
- Circular Economy (CE) as a solution or as a way to last
- Remanufacturing as the CE expression to mitigate industrial effect
- Remanufacturing has already a long tradition, specially in ‘heavy industries
The challenge: creating a new ‘emerging REMAN’ reality
FOREGROUND— The challenge: creating a new ‘emerging REMAN’ reality

Finding the context:
- WHY: Remembering where the concern comes from (ecosystem) we should NOT forget the main THREE aspects of the challenge and the solution:
  - ECONOMIC
  - ENVIRONMENTAL
  - SOCIAL
- WHAT: Available resources and conditions for a new market: need, demand, knowledge (market and industry), capacities

Helping to create the context
- HOW: Communicating, finding and dinamising key and committed stakeholders to collaborate
FOREGROUND— The challenge

Is a reman product more sustainable than a new one?

RESOURCES USE

ENERGY EFFICIENCY

FULL LIFE CYCLE

Could other than economic reasons generate an innovative ‘REMAN’ market??
DEVELOPMENT – Breaking down the challenge

Breaking down the challenge in its three main components: the REMAN tripod

<table>
<thead>
<tr>
<th>Social</th>
<th>Environmental</th>
<th>Economic</th>
</tr>
</thead>
</table>

REMAN
- The remanufacturing industry worldwide has been showing some clear patterns and lesson learned.

- As Remanufacturing comes from Industry culture, it has followed the traditional value chain innovation flow…

- Driven by VALUE
DEVELOPMENT—The Economic Factor: basic needs to create a REMAN market

- Basic conditions for REMAN Home Appliances:
  - Market existence
  - Access to cores
  - Manufacturing and servicing knowledge
  - Market potential:
    - ability to provide quality refurbished products (with warranty)
    - ability to supply them at an affordable Price
    - Use cost viable (energy costs)
  - Innovation potential to adapt to a very aggressive market: Jugaad innovation vs traditional innovation funnel
DEVELOPMENT – The Economic Factor: what goes on in BC that could make HA REMAN economic?

- Every industry has been learning from their markets for long years: knowledge (Q and €/unit) and adaptation to each market (i)
DEVELOPMENT– The Economic Factor: what goes on in BC that could make HA REMAN economic?

- Home Appliances (HA) industry has done and is doing so, in the Basque Country for more than 50 years:
  - several global niche market leaders supplying and collaboratng with top worldwide brands: technological and manufacturing knowledge (Q, i and €/u)
  - Understanding the home appliance AND the user expectation priorities product, service and market knowledge

- Knowledge to provide cost competitive solutions in product, service to a global and market (very low profit margin, mass production)

- Still components, system, products and services created in Basque Country are competitive worldwide

- This knowledge is today into several ACEDE cluster associated companies.
A class products started to be frequent sellers since 2011, today’s remanable products

<table>
<thead>
<tr>
<th>Clase</th>
<th>Desviación sobre el consumo medio</th>
<th>Consumo de energía anual [KWh]</th>
<th>Coste económico de la energía 15 años [€]</th>
<th>Coste de adquisición [€]</th>
<th>Ahorro al sustituir por un A++ [€]</th>
<th>Recuperación de la inversión (Años)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A++</td>
<td>&lt; 30%</td>
<td>170</td>
<td>306</td>
<td>693</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A+</td>
<td>&lt; 42%</td>
<td>241</td>
<td>434</td>
<td>660</td>
<td>95</td>
<td>11,62</td>
</tr>
<tr>
<td>A</td>
<td>&lt; 55%</td>
<td>325</td>
<td>585</td>
<td>453</td>
<td>39</td>
<td>-</td>
</tr>
<tr>
<td>B</td>
<td>55 - 75%</td>
<td>436</td>
<td>784</td>
<td>430</td>
<td>215</td>
<td>-</td>
</tr>
<tr>
<td>C</td>
<td>75 - 90%</td>
<td>533</td>
<td>960</td>
<td>409</td>
<td>369</td>
<td>-</td>
</tr>
<tr>
<td>D</td>
<td>90 - 100%</td>
<td>637</td>
<td>1,147</td>
<td>388</td>
<td>536</td>
<td>-</td>
</tr>
<tr>
<td>E</td>
<td>100 - 110%</td>
<td>704</td>
<td>1,267</td>
<td>369</td>
<td>637</td>
<td>-</td>
</tr>
<tr>
<td>F</td>
<td>110 - 125%</td>
<td>788</td>
<td>1,418</td>
<td>351</td>
<td>770</td>
<td>-</td>
</tr>
<tr>
<td>G</td>
<td>&gt;125%</td>
<td>838</td>
<td>1,508</td>
<td>333</td>
<td>842</td>
<td>-</td>
</tr>
</tbody>
</table>

(1) Suponiendo un coste de la energía de 0,12€/KWh

Much lower purchasing Price makes ROI new A++/ROI reman A > 20 yrs
DEVELOPMENT – The Environmental Factor

- New climate change concern → New Directives → New state laws
- In Spain concerning WEEE → RD 110/2015
- This RD is in force since beginning of 2016 and requires the efforts to enlarge the life of 4% of commercialised EEE products
- To do so, Centre for Preparation of Reusage (CPR) are proposed
- It also is a law against the obsolescence of home appliances: some manufacturers are considering today to design their NEW products to last longer and think in other business models closer to servitisation
• Important consumption habits modified during last 7 years of crisis (HA market continuously decaying since 2007 until 2013.
• From Gauss Bell shape consumption to M shape type
• Old needs recovered for new emerging situation: 25% unemployment rate, finance scarcity…
• But still there is a need to have Access to functions to ease life
• Emerging market for functions to ease chores at affordable prices… with warranty (educated customers: exigent)
• Similar model running and evolving in France since 2008: today offering 3 years of warranty(!)
• The RD points at Social Oriented Agencies as the ones to lead the CPR
• Apart from knowledge jobs, assembly, cleaning and other type of Jobs for people in exclusion risk are proposed
• These jobs are designed to give training, learning and bring back dignity and self assurance to long term unemployed people.
• Also it closes the selling and the consumption circle (‘local market’)

DEVELOPMENT— The Social Factor: employment and new economy creation)
DEVELOPMENT – The Social Factor: employment and economy creation

• Fundación EMAUS GIPUZKOA proactive to collaborate with industry for new social job creation in Basque Country

• Fundacion EMAUS today has several used Home Appliance selling points: re-used and recycled market knowledge

• EMAUS approaches ACEDE to find real options for a new economic activity on Circular Economy principles in collaboration with a HA Industrial agent.
DEVELOPMENT – REMAN knowledge and network

Understanding the FULL ‘REMAN’ CYCLE and the AGENTS
DEVELOPMENT – REMAN knowledge and networks

• Sareteknika S.Coop is a reborn new Company servicing home appliance in all Spain:
  • About 1000 technicians over the whole Spanish geography
  • Knowledge on home appliance repair and maintenance for more tan 20 years
  • Training sector professionals in Spain and abroad
  • Servicing over 500,000 appliance per year

Sareteknika, as a Coop, has a will to cooperate with other social entities to have a social impact

• Sareteknka, as a bussiness, needs to see that there is a profitability of the activity to last

• Sareteknika has the knowledge to set boundaries and thresholds of when a home appliance can be repaired, refurbished… or remanufactured.

• Saretekniika has the knowledge for REMAN assessment in core access
DEVELOPMENT – IS THERE A CONTEXT FOR HOME APPLIANCE ‘REMAN’ IN BASQUE COUNTRY?

CONCLUSION: THERE IS A CONTEXT OF RESOURCES AND CONDITIONS
- Market
- Knowledge and capacities
- Environmental sense
- Legislation
- Social need (value proposition and job generation)
- Agents and Companies with will to promote new REMAN activities

TO CREATE A NEW CPR PILOT ACTIVITY FOR HOME APPLIANCES IN THE BASQUE COUNTRY UNDER IMPORTANT SUSTAINABLE TERMS
DEVELOPMENT— creating a new ‘emerging REMAN’ reality with agents

Helping to create the context
- HOW: Communicating, finding and dinamising key and committed stakeholders to collaborate

- HOW IS ABOUT WHO-s!!

- KEY ROLE OF A ‘NEUTRAL’ BUT INVOLVED FACILITATOR: IN COLLABORATION IS ABOUT DINAMISING AND FACILITATING – NOT MANAGING! – P2P

- LEAN AND JUGAAD APPROACH

- IMPORTANT TOO: THE DINAMISER TO UNDERSTAND THE KEY FACTORS OF THE INITIATIVE TO SIMPLIFY AND CONDUCT ACTIONS
DEVELOPMENT – creating a new ‘emerging REMAN’ reality with agents

Collaborating and refining the ‘1st REMAN’ approach through 2 partner collaboration
DEVELOPMENT—creating a new ‘emerging REMAN’ reality with agents
DEVELOPMENT – Setting the new ‘REMAN’ business conditions

- Market: quantities, qualities, services and selling prices

- Access to cores: quality and assessment

- Defining the activity: resources, alliances, steps

- Making the business case

- DECIDING TOGETHER!
OUTCOMES–

- There is a market to absorb the refurbished products in BC
- There is a case to sustain a ‘REMAN’ activity in BC
- Collaboration agreement signed: EMAÚS, SARETEKNIKA and ACEDE
- New activity created: WEEE PaR setup in MONDRAGON
- Commitment to start at shared risk the pilot phase in Mondragon
- If pilot phase results real meet viability study estimate, progressive expansión of the model
CONCLUSION

If there is a ‘REMAN’ case in Home Appliances… Providing there is a market potential (depending on each sector and geographic area), REMAN can be extended to industry by other mean: **Reversing the innovation flow (Jugaad = Reverse Innovation)**
From this experience, and with some of the REMAN context knowledge we learnt in the Basque Country, together with ACLIMA cluster (Environment Industries Cluster) we are starting to call for a ‘table’ of ACTIVE AGENTS in REMAN in Basque Country to start dinamising it and:

- Learn from experiences: errors are bery much appreciated!
- Find patterns
- Linking to other REMAN nodes
- Support old and new REMAN initiatives

Are you one of those? Talk to you later! You are very welcomed
ESKERRIK ASKO!

THANKS A LOT!