



Programme Area: Buildings

Project: Building Supply Chain for Mass Refurbishment of Houses

Title: Appendix 1 Summaries for the 10 Customer Segments – Unconvinced

Dependent

#### Abstract:

Please note this report was produced in 2011/2012 and its contents may be out of date. This document is an appendix of deliverable D4.1 of the Optimising Thermal Efficiency of Existing Housing Project.

#### Context:

This project looked at designing a supply chain solution to improve the energy efficiency of the vast majority of the 26 million UK homes which will still be in use by 2050. It looked to identify ways in which the refurbishment and retrofitting of existing residential properties can be accelerated by industrialising the processes of design, supply and implementation, while stimulating demand from householders by exploiting additional opportunities that come with extensive building refurbishment. The project developed a top-to-bottom process, using a method of analysing the most cost-effective package of measures suitable for a particular property, through to how these will be installed with the minimum disruption to the householder. This includes identifying the skills required of the people on the ground as well as the optimum material distribution networks to supply them with exactly what is required and when.

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#### **Unconvinced Dependent - Vulnerable young parents needing substantial state support.**

- Single *females* (very evident gender split not seen so obviously in other groups)
- Age 18-40
- Lone parents with 3+ dependent children
- High unemployment
- Length of residency evenly split across all variables
- · Likely to be found in urban fringe areas of the Midlands
- · High on the Index of Multiple Deprivation ranking
- No savings, no assets, struggling on income
- · Social grade DE
- 80% Social Housing
- Benefit claimants; lone parent, incapacity/disablement, housing and CT benefit, income support, jobseekers allowance, child benefit and child tax credit.
- Responsive to face-to-face communications
- Not interested in green issues or political issues. Education re Green issues might help coupled with other incentives
- Wasteful lifestyles goods and energy
- Unconvinced of arguments and not interested in doing more
- Some price-sensitivity to green goods which are perceived to be more expensive

#### **The Mathias Grid - Perceptions**

| Self perception Now                                  | Would like to be                            |
|--|---|
| Focussed on my children                              | Wealthy                                     |
| Financially challenged                               | More independent                            |
| Doing my best  | Socialise more                              |
| Socialise around the children                        | Greater connection with the wider community |
| Bored  | Motivate myself to Reduce my bills          |
| No car, use public transport                         | More energy conscious                       |
| Not very environmentally aware                       |   |
| Personal issues more important than wider social and |   |
| green issues   |   |

| Perception I believe Others have of me | Would like others to see me as |
|--|--------------------------------|
| Financially strapped – state dependent | Trying my best                 |
| Apathetic                              | Sociable and communicative     |
| Single parent                          | Bright with prospects          |
| Insular                                | Careful with resources         |
| Low achiever                           | A Person in my own right       |
| Not connected to the wider community   |                                |
| Wasteful of resources                  |                                |
| Dead end and harassed                  |                                |

#### **Benefits and Sacrifices**

|               | Benefits                            | Comments              | Sacrifices                            | Comments                     |
|---------------|-------------------------------------|-----------------------|---------------------------------------|------------------------------|
| Doors and     | Security (inc fire)                 | Overall low hassle as | Weather impacts ?                     | Mess and hassle from         |
|               | Aesthetics, choice and              | landlord sorts it     | Loss of personalisation               | work men. What damage        |
| Windows       | personalisation                     |                       | Short term security risk              | will I be left with?         |
|               | Increased comfort (thermal and      |                       |                                       |                              |
|               | noise)                              |                       |                                       |                              |
|               | Lower bills                         |                       |                                       |                              |
|               | Healthier                           |                       |                                       |                              |
|               | Easier to livewith (cleaning)       |                       |                                       |                              |
|               | Less ongoing hassle with            |                       |                                       |                              |
|               | maintenance                         |                       |                                       |                              |
| Insulation    | Loft + cavity low hassle, reduced   | Overall better for my | Do I have to move stuff out of loft   | Will I need to move out, or  |
|               | bills, improved comfort             | kids                  | space?                                | stay in? Uncertainty over    |
|               | Wall insulation as above +aesthetic |                       | Loss of space for internal insulation | benefits. Will I be          |
|               | improvement to home.                |                       | and big disruption.                   | compensated?                 |
|               | House looks different, personalised |                       | Can I still hang pictures etc?        |                              |
|               | Proud of my home                    |                       |                                       |                              |
| Hot water and | Saving money on bills               |                       | Having to change the way I use my     | Will my rent go up ? Loss    |
|               | Hopefully easier to use             |                       | home.                                 | of control as Landlord is in |
| heating       | Hot water on demand. Maybe more     |                       | Change to space eg. Airing cupboard.  | charge. Danger to my kids    |
|               | space if tank removed               |                       | Will I lose open fire?                | during works. My routine     |
|               | Increased comfort, reliability      |                       | Complexity of new system.             | disrupted                    |
|               | No need to get land lord out        |                       | Can I dry clothes on radiators?       |                              |
|               |                                     |                       | Who is coming into my house?          |                              |

### **Value Proposition**

|               | Through Life  | Installation   | Sale (Consent)   | Survey  | Pre Sale   |
|---------------|---|--|--|---|--|
| Functionality | Simple. Don't have to learn new stuff. Fit and forget. Maintenance free. No lost space. Safe and sound Don't want overheating | Three people max. One point of contact More liaison than PM. Decorations also done in making good Show how everything works Safe for me and kids. Reflect sale agreement Linked up process | Liaison officer is a trusted individual but doesn't need to come in "it's not my sale" I want control over consent | Is it needed? Can it be done from a sample? Non invasive – don't rip off plaster or do anything to my house! No need to pre-heat or move stuff. Why do I need it? | Involved in selection process of contractor, or at least decided with my interests at heart. Non intrusive.  Visualise it. |
| Speed         | On demand when I need heat and hot water. Infrequent service period   | Quick (and keep on time) Five days, mon-fri No delay for commissioning   | One Hit – combine with survey? But I want time to think about it.  | Takes an hour (if it needs to happen)   | Don't tell me we're doing it in 5 years time   |
| Dependability | Guaranteed low rate of breakdown Don't want unintended consequences eg. Condensation, mould                                   | Landlord knows what's going on. Dependability in meeting promises time wise and right first time.  Don't leave till it works  No snagging, no damage to my stuff                           | Options available Guarantee of code of conduct and schedule  | No hidden extras Gets all the info right first time.  Certified an No need to talk to talk about my lifestyle   | Someone can explain it clearly to me daccredited   |
| Flexibility   | Future proof but possibly able to upgrade (with minimal hassle) to get more savings   | Mainly due to timings Can fit around my schedule and routine Work schedule, communicated up front Choice of aesthetics   | I want to give consent<br>when I'm ready. No<br>pressure   | Can happen when I want  | A range of ways to show me – demonstrating, pictures, face to face available nearby.                                       |
| Price         | Half bills.  No rent increase. Should all be cost negative  | Free + associated costs covered (decorating) Loss of earnings if time off, compensation for loss of heat and hot water, energy used by workmen.  | Free<br>(+ free add ons)   | Free. Paid for inconvenience (do I have to have time off ?)   | Free   |

|               | Assembly                                      | Product approval  | Design   | Survey  | Bespoking  |
|---------------|---|---|--|---|--|
|               |   | / testing   |  |   |  |
| Functionality | Lean, cost effective Meets standards          | Fit for purpose,<br>warranted, independent<br>accrdited | Simple repeatable modular  | Pprep work done, eg. Google Street views. Landlord info, can inform strategy for distribution | Informs Consolidation. Works with residents to design schedule |
| Speed         | Adaptable to demand.<br>High speed production | Acclerated + responsive to new tech.                    | Available measures   | 1 hour  | Plug in survey results for instant bespoking fast              |
| Dependability | Right first time. Fit and forget              | Trusted, independent tried and tested                   | Technically proficient Design  | Close link to landlord database   | Accurate, automated from survey                                |
| Flexibility   | Innovation responsive to demand               | Responsive to new tech. Can meet change in regulation   | Can adapt to new technology + application. Support innocation. Waste elimination | Potential to group properties to save time and cost   | N/A but plot specific!<br>Waste elimination                    |
| Price         | Minimised                                     | Industry cost   | Ongoing. Built in or built out   | Built in  | Costed   |

## **Supply Chain Building Blocks**

|               | Consumables                                     | Inbound logistics   | Consolidation  | Install  | Certification  |
|---------------|---|---|--|--|--|
| Functionality | Readily available<br>Standardised               | Coordinated, secure<br>Potential direct delivery if<br>consolidation not needed | Off site assembly<br>maximised. Work with<br>LA's or RSL's | Multi Skilled workers Single point of liaison Bring generating capacity, Solar van                     | Building management system? Self certified for competency but warranties independently assured. Info for householder |
| Speed         | On hand   | 24 hours  | Minimised. Space is at a premium                           | Quick 5 days<br>Turnaround<br>On time delivery   | At completion  |
| Dependability | Readily available                               | Clear transfer +<br>ownership   | Crucial, depends heavily<br>on suppliers, well<br>managed  | Well managed Programme manager Local availability of additional products                               | Fully tested. Teach resident how to use kit and leave instructions for later residents                               |
| Flexibility   | Included in pack (Ikea) or in standard tool box | Minimise suppliers or consolidate them. Responsive                              | Local, easily accessible                                   | Can Manage problems<br>arising, Call in the Hit<br>squad . Can decorate if<br>interior insulation done | None   |
| Price         | Built in – bought in bulk                       | Built in  | Built in   | Fixed Price per<br>Retrofit  | Built in   |

### **Supply Chain Building Blocks**

|               | Waste  | Through Life                                       | Disposal   |
|---------------|--|--|--|
|               |  | Support  |  |
| Functionality | Minimised – designed out<br>Segregated, secure. Reuse<br>and recycle | Offer package of advice through landlord           | 100% recyclable Local  |
| Speed         | Removed daily  | 24/7 availability 24hr response                    | Quick and easy   |
| Dependability | Accredited clear accountabilities                                    | Guarantees. Limited maintenance (Supplier related) | Regulated product Performs at high standard for duration of its life |
| Flexibility   | Joined up waste plan   | Uograde packages available (ESCO model ?)          | Local  |
| Price         | Minimised as designed out  | Fixed  | Incentivises   |

### **Supply Chain Enablers - Resources Processes and Values**

|           | Assembly | Product approval | Design | Survey   | Bespoking   |
|-----------|----------|------------------|--------|--|---|
|           |          | / testing        |        |  |   |
| Resources |          |                  |        | Accurate Stock info. Trainers                              | Designers. Quality input info                                     |
|           |          |                  |        |  | Technology to deliver package proposals                           |
| Processes |          |                  |        | Training. Standardised survey process Access Communication | Link up with survey process                                       |
| Values    |          |                  |        |  | Customer focus. (Choice) Maximising performance / minimising cost |

### **Supply Chain Enablers - Resources Processes and Values**

|           | Consumables                                       | Inbound logistics                                     | Consolidation                                 | Install   | Certification   |
|-----------|---|---|---|---|---|
| Resources | Suppliers manufacturers<br>of identified products | Suppliers transport<br>storage distribution<br>system | Space (Big) distribution technology transport | Multi Skilled workers Existing trades Train Transport Generators Solar vans Colleges Hit squad of problem solvers                           | Trainers. Qualified practitioners Independent assessors   |
| Processes | Auto re-stocking                                  | Clear possession<br>recording (admin)                 | IT solutions to link up logically             | Training (Multi skill) Apprenticeship schemes Repeatable Simple Standardised process for installers   | Training Rationalise certification schemes Communications process for resident engagement New process for EPC |
| Values    |   | Partnership working<br>between suppliers              | Partnership working with Local Authorities    | Incentivise the market New approach to health and safely: common sense But safe Guaranteed work Recognise "retrofitter" As a trade / career | Standardised level of quality (hallmark?)   |

### **Supply Chain Enablers - Resources Processes and Values**

|           | Waste  | Through Life | Disposal |
|-----------|--|--------------|----------|
|           |  | Support      |          |
| Resources | Transport / lorries Network of waste co's recycling centres. Site access                                   |              |          |
| Process   | Recycling processes Waste plan. enforcement  |              |          |
| Values    | Waste recycling legislation / policy specific to retrofit. Aim for Zero to kandfill. Value low waste brand |              |          |

# **Supply Chain Map**

