The home as a service: A service and systems design approach to ownership, development and value

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Suggested citation:

The Home as a Service: A Service & Systems Design Approach to Housing

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Supported by: Nick de Leon & Qian Sun
Context

- Shift social democratic to retrospective compensation
- Orientation in housing: social rented to ownership
- Asset based welfare: home a cornerstone as individuals take responsibility for welfare needs through asset investment
  

- Affordability failure: low/middle income & young
- Home: interface to draw welfare goods
- Uncertainty, risk & complexity
Buy 25% & rent (subsidised) remaining shares
Shared Ownership

• Designed to leverage entry
• Subsidised HO: 46% of first time buyers in 2013 (2)
• “Sit[s] in the expanding affordability gap between products offered by private sector & social sector.” (3)
• Mobility & long-term affordability concerns
• Requires doubling income to own outright (4)

(2) Lloyds Bank 2013) press release.
Design for affordability

- Affordability understood as a system failure
- Shared ownership: widen access but problematic
- Service design: produce alignments service systems
- Systems thinking: complexity
- System theory & thinking under analysed in housing
- Design for services, systems design & housing

# Complexity in Systems Thinking

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<th>Operations Research</th>
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<th>Soft Systems</th>
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<td>Importance of environment</td>
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- **Operations Research**
  - Morse & Kimball (1951)
  - Systematic catalogue of problems and solutions
  - Application of mathematical models to provide scientific basis for decision making
  - Military application in WWII and Vietnam Wars

- **General Systems Theory**
  - Boulding (1956); Simon (1962); von Bertalanffy (1954)
  - Importance of environment
  - Study of hierarchy & emergence

- **Cybernetics**
  - Behaviour of machines, feedback loops & black box concept

- **Soft Systems**
  - Ackoff & Emery (1972); Checkland, (1981); Gharajedaghi (2011)
  - Multi-minded purposeful social systems
  - Focus on organisations
  - Choice over means & ends
  - Culture as DNA & operating system
  - Key design alignment of purposeful parts
Principles of Purposeful Multi-minded Social Systems

- Openness
- Emergent Property
- Purposeful
- Multi-dimensional
- Counter-intuitive

Adapted from Gharajedaghi, 2011
Openness

Manage Downward

Environment Uncontrolled Variables

System Controlled Variables

Contextual Environment Appreciate

Transactional Environment Influence

System Controlled Variables

Manage Upward

Adapted from Gharajedaghi, 2011
Purposefulness

Cultural

Dimension of Choice

Emotional

Rational

Adapted from Gharajedaghi, 2011
Multidimensional

Adapted from Gharajedaghi, 2011
Emergent

Sum of Actions

Product of Interactions

Adapted from Gharajedaghi, 2011
Counterintuitive

High land cost

Need for affordable

Public subsidy

Value

Building cost

GLA income threshold

LA income thresholds

Debt

Saving ability to buy shares

Wage stagnation

Family formation

Yearly rent service charge increases

Ability to Sell

Cross subsidy

Increases

Decreases

Increases

Decreases

Decreases

Decreases

Decreases

Decreases

Increases

Decreases

Decreases

Decreases

Increases

Decreases

Decreases

Increases

Adapted from Gharajedaghi, 2011
Design contribution

- Mapping complexity (7) (8) (9)
- Design for entities in the making (10)
- Materiality interface (11)
- Alignments, scale & perishability
- Co-production, design & creation
- Value co-creation & networks (12)
- Compound complexity

Case Study

Staff focus group
LQ Re-sales and Staircasing Team

Staff interviews
Development x 2, Finance, Sales x 3, Leasehold Management, Research, Audit

Desktop research
LQ reports, CCPR, JRF, Industry reports, academic housing and policy research

Competitor Analysis
Pocket Living, TVHA

Expert interviews
JRF, LB Greenwich, HACT, DELFT OTB, Development Trusts, CLT, Co-Housing

Customer diaries
LQ shared owners x 8
(1-3 years, 7-9 years, 11 plus)
LQ staff who are shared owners x 2

Customer research

In-depth interviews
LQ shared owners x 6
(1-3 years, 7-9 years, 11 plus)
LQ staff who are shared owners x 2

Ideation
Co-creation session
LQ shared owners x 3
(1-3 years, 7-9 years, 11 plus)
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**STAFF**
- it's ok, it is ready
- as a process we have not got much control over it
- we have too many cases & to constantly chase the solicitors
- there are 3 completely different processes to add properties to the site
- it is embarrassing we need to keep chasing them
- the different systems don’t talk to each other

**RESIDENTS**
- the pack is huge & useless apart from one page
- why can't we agree a price as if this was a sales transaction
- there is no advice available we are in the dark
- given the fees, the service & website are not to the level of an estate agent
- it is as if they wait for the 5 day SLA to expire before they do something!
- time consuming
- dealt as 2 separate transactions & you don’t know how much you have to pay until the very last minute

**Flowchart**
- info pack → staircasing advice → valuation timescale → re-sales website → NML chekcs → LQ solicitors → sales & rent account
Analysis

Entry

Affordable

- Sale
- Financial
- Re-Sale

- Sale
- Payment Plans
- Moving Support
- Asset Support

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Analysis

Housing lifecycle

Shared Ownership
Outright Ownership

£60,000 deposit
£1,000 mortgage fee
£1,250 legal fees
£9,000 stamp duty
£300,000 property price

Shared Ownership

£4,874 stamp duty at 3%
£210 staircasing fee
£225 valuation fees
£350 broker fees
£800 legal fees
£1,000 mortgage fee

£7,489 fees
£47,490 deposit *

Nil stamp duty
£210 staircasing fee
£225 valuation fees
£350 broker fees
£800 legal fees
£1,000 mortgage fee

£2,585 fees
£36,474 deposit *

* assumes 6.5% house price growth per year and requirement of 20% deposit
Benefits Map

Customers

- Help build a deposit
- Place that is my own
- Assist to get on the property ladder
- Help achieve ownership dream
- Help buy in high value areas
- Rent & service charge increases prohibit savings
- House price growth outstrips earning increases

Organisation

- ‘Second Best’ option
- Mixed and stable communities
- Achieve social mission
- Cross subsidise schemes
- Entry product vs affordable product
- Offer of a subsidised product
- Asset growth
- Subsidy, grant & recycling
- Help gain planning consent
- On average, loss of 30% to open market
- Restrictions LA thresholds & high value areas
Analysis

Ownership

Sale

Financial

Re-Sale

Staircase
Solutions

Ownership

Mobility & Affordability

- Sale
- Financial
- Re-Sale
- Staircase
Implications

• Complexity in context of scarcity
• Materiality and granularity of service design
• Contextualising human centred approaches
• Design for Policy: models of welfare
• Material manifestations
• Alignments in products and services to across systems
• Role of the designer
Thank you!

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