HOUSING + MIT LCAU
3 MAY 2018
Community Building

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THE SA CONTEXT

- South Africa
- 56.6 million people (Stats SA 2016)
- 34.4 million urban population (62%)
- Approximately 45% of urban population (15 million) live in informal settlements and in backyard informal dwellings
Housing Stats

1994
Backlog: Number of households
1.5 m

1994-2010
Subsidised housing units produced
2.3 m

2010
Backlog: Number of households
2.1 m

1994-2016 Mar
Subsidised housing units produced
3,029,745 m
From 2010 produced
929,7465

2016
Backlog: Number of households
2.2 m
Informal settlements are an emergency

- Nationally 10 shack fires each day, over 200 deaths p.a.
- 7% HIV annual incidence rate - 1.8% in urban formal areas
- Diarrhoea-related infant mortality up to 10 times higher than urban formal areas
- Official estimates over 40% unemployment compared to 28% national average
IKHAYALAMI

Ikhayalami is a Nonprofit Organisation that was established in 2006 as a response to conventional approaches in dealing with informality, which are unsustainable and painstakingly slow.

Ikhayalami’s primary aim is to develop and implement affordable technical solutions for Informal Settlement Upgrading to be embedded in people’s driven processes and scaled up with the support of the state.

Ikhayalami has a long history of facilitating community engagement and implementing urban development projects.

Since inception Ikhayalami has been at the forefront of innovation – from shack upgrading, to re-blocking, to the Empowershack, to creating new digital urban upgrading tools.
Using Design as a Tool for Community Building

1. Re-blocking
2. Empowershack
3. New digital tools
Re-blocking
Community led spatial reconfiguration
Re-blocking

Community led spatial reconfiguration of shacks located in informal settlements into a more rationalised layout, enabling:

• Shack upgrading
• Community building through design
• A far safer environment: public and semi-public spaces, thoroughfares and roads
• Emergency services access
• Mitigation of future disasters
• Easier access for the provision of infrastructure and basic services
• An immediate solution
• Side stepping bureaucracy, red tape, zoning and building regulations
• Partnering with the State
• Improved possibilities for tenure security
Shack upgrading

Upgrading of shacks was invented by poor people

But our criteria included:
• East to transport
• Quick and easy to build
• Fire and flood resistant
• Durable and flexible
• Affordable
Participative Planning Tools
Design Fosters Community Building: Spatial Planning
Affordability

- Provision of infrastructure is free
- Cost of shack upgrading ranges from initially US $ 300 (now 600) to US $ 500 (now 1 000)
- In SA context the NGO contributes 80% and the community 20% because of subsidy environment
Opportunities

• It is a powerful tool for the urban poor
• Re-blocking methodology puts the community at the forefront
• All assumptions in the initial brief were met
• Influenced policy
• Secured provision of services on a one to one ratio
• It is an immediate, effective and affordable solution
• Side steps bureaucracy, red tape, zoning and building regulations
• It ameliorates the threat of eviction and paves the way towards tenure security

Challenges

• Co-producing a solution is not easy but vital
• Partnering and accessing resources from govt is tedious and challenging
• The placement of upgraded shacks creates ‘permanent’ plots and does not take into account the potential for using formal building methods as a mechanism towards long term formalisation
EMPOWERSHACK
IN PARTNERSHIP WITH URBAN THINK TANK/ETHZ,
BT SECTION COMMUNITY & CITY OF CAPE TOWN
Initial Brief

- Go vertical
- Modular double story shack upgrade that is easy to build
- Community building through design
- Same methodological approach and strategy as single story re-blocking
- A quick and effective solution
- Designing reconfigured layout with permanent footprint in mind for future formalisation
- Engage with and partner with the State
- Provision of services on a one to one household ratio in line with the newly won re-blocking policy
- Livelihoods and micro financing scheme
## Unit Description, Price List and Acceptance Form

**BT 4.01, Cluster M, Area 1 - 50.8 m². LRC value: R 25,410. New units purchased in Area 1.**

### Two Story - Single Family Configuration

<table>
<thead>
<tr>
<th>Building Type</th>
<th>ID</th>
<th>Floor</th>
<th>Footprint</th>
<th>Size m²</th>
<th>Bott m²</th>
<th>Top m²</th>
<th>Loft m²</th>
<th>Price</th>
<th>Discount</th>
<th>LRC</th>
<th>Net Price</th>
<th>Advance</th>
<th>% Price</th>
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<td>R 7</td>
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<td>R 1,916</td>
<td>R 103</td>
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How did we get from this?

To that?

Images courtesy UTT
How did we get from this?

To that?

Images courtesy UTT & Ikhayalami
Or from this?

To that?
# BT North: Unit Type Prices

## Unit Pricing

<table>
<thead>
<tr>
<th>Type</th>
<th>Unit Area M²</th>
<th>Rand</th>
<th>US Dollar</th>
<th>Structure choices</th>
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<td>R83 420,00</td>
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<td>R197 400,00</td>
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<td>R280 870,00</td>
<td>23 405,83 $</td>
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<td>D6</td>
<td>83</td>
<td>R364 380,00</td>
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<td>----------</td>
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INCREMENTAL TO COMPLIANCE

CORE AND SHELL
HOUSING SUBSIDY NON-QUALIFIERS
FIT FOR PURPOSE CERTIFICATE

INCREMENTAL DEVELOPMENT

UPGRADED UNIT
HOUSING SUBSIDY QUALIFIERS
BUILDING CODE COMPLIANT
Opportunities

• Created a blue print for future upgrading projects
• Replicable upgrading methodology that provides greater emergency access, increased safety, and improved infrastructure
• A permanent footprint with a serviced sanitation core in each unit, block fire walls with secure temporary lightweight facades offers a framework for incremental upgrading
• Pushed govt building regulation boundaries – incremental to compliance
• Shift in policy towards further subdivision
• There is still an opportunity to do a project as per our initial brief

Challenges

• Initial brief and current outcome are completely different
• Got tied up in bureaucracy, red tape, zoning and building regulations
• Less affordable, back to the subsidy conundrum
• Co-producing a solution is not easy but vital
• Partnering and accessing resources from govt is tedious and challenging
NEW DIGITAL TOOLS FOR COMMUNITY ENGAGEMENT & PLANNING
3D and 2D perspectives
An Innovative Urban upgrading Tool that can be repositioned to any Urban context

• For example: The Empowershack
Opportunities  using design as a medium for community building

- Impact has been profound
- Helped resolve a number of previously unresolved issues
- Significantly increases community involvement
- Broadened and further democratised community participation
- Generated wide scale interest about the implementation
- Opportunity for creating a digital enumeration tool
- Opportunity to reposition the application for any urban context
- Coproduction worked well

Challenges

- Encountered technical glitches and challenges that had to be ironed out quickly and effectively
- Need more time and funding to do more such as:
  - design a digital enumeration tool,
  - take into account cadastral boundaries and infrastructure provision,
  - as game play progresses allow for the inclusion of different typologies such as double story shack upgrades and Empowershack type dwellings
Potential for scalability and replicability of community building processes

• Design is a powerful tool for community building
• Social organisation is a critical aspect of design
• Co-production is an essential part of the solution
• Setting precedents as proof of concept for future scalability and uptake by others is critical
• Influencing the hearts and minds of poor communities and the state is critical
• Through setting precedents start to challenge old assumptions and building regulations
• Work with others, share and follow the thinking that everything in this sector belongs to the commons
Thank you

Andy Bolnick

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