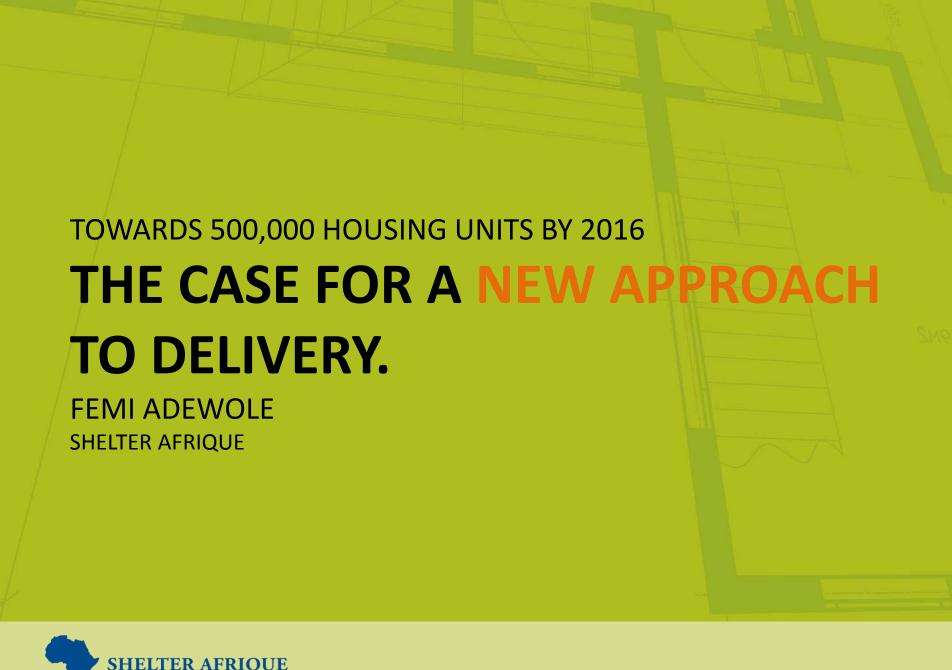


ASO HOUSING CONFERENCE + EXHIBITION

ABUJA, APRIL 2013





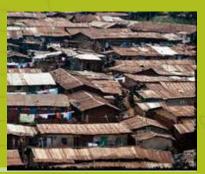
During the course of this presentation......

350 families would have migrated to one of the major cities in Nigeria in search of a new life.



By the end of the month....

25000 of them will be looking for housing they can afford.



For up to **23750** of them, this need will be met in temporary and informal settlements on the edge of our urban centres!.





Key Messages



Single minded large scale housing programme is required. Current approaches while well intended are not sufficient. We must build at an unprecedented scale.

To succeed, the challenges of technology, economic viability, and capacity must be overcome.

We believe that a decisive shift towards manufacturing based housing solutions offer the best chance of meeting the challenges.



Someone thought about this in 1908....



Model T produced in 1908 by Ford Motor Company was the first car to be manufactured by ASSEMBLY LINE PRODUCTION rather than HAND CRAFTED METHOD and became the AFFORDABLE car for mass Americans.



But in 2013...



Housing in Nigeria is still largely HAND CRAFTED block by block and layer by layer and are unaffordable to large sections of the population



Why.....?

Huge shortage of affordable housing

14 Million+

Urbanization

40% by 2025

When we Know Limited Land

Inefficient land use/finite supply

Housing Finance

Requires new products, certainty consistency and value

Low Income

85% of population earn less than US\$60/month



By 1908, the automobile industry knew that Manufacturing and Standadisation was the answer to similar challenges.

The Car



At least 7100 components in a modern car

The House



About 4000 components in a modern urban home



Different outcomes.....



Whereas the indexed cost of cars continue to decline due to continuous improvements in the manufacturing process, cost of homes are on the increase.



Standardisation

Customized = Expensive

Expensive = Not Affordable to Masses

from 160 million to 300 million by 2025

Standardisation = Affordability

Not in Control

LAND & APPROVALS

A lot of current discussion is focused on NOT IN CONTROL

In Control

PLANNING & CONSTRUCTION

Scope for INNOVATIONS and new business models



Integrating manufacturing and house building...

OFF SITE MANUFACTURE

ON SITE

COMPONENT

COMPONENT

COMPONENT

COMPONENT

COMPONENT

FABRICATION

FABRICATION

FABRICATION

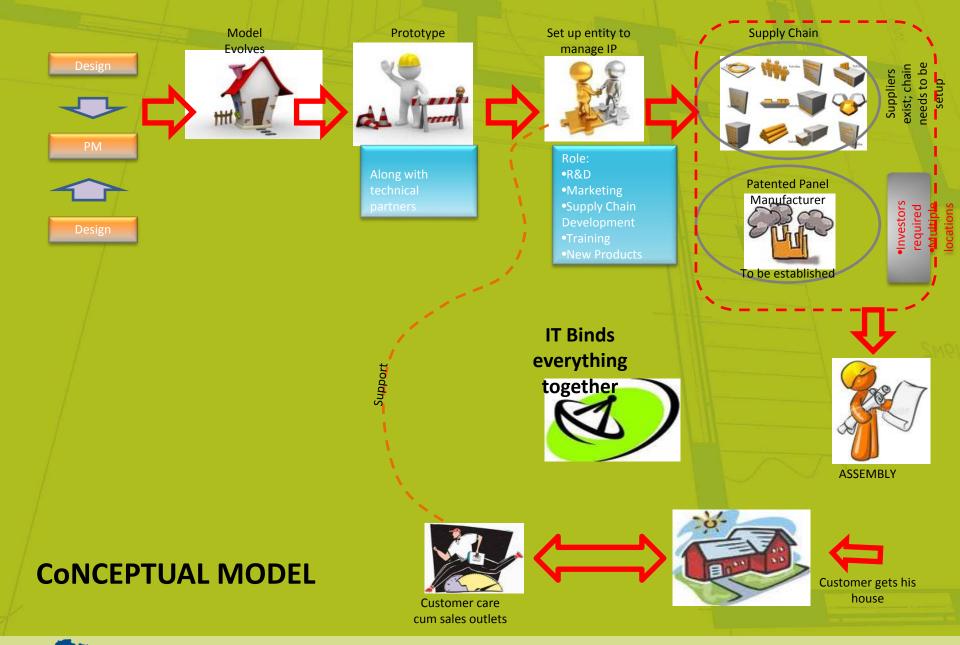
ASSEMBLY

ASSEMBLY

INTEGRATED SUPPLY CHAIN



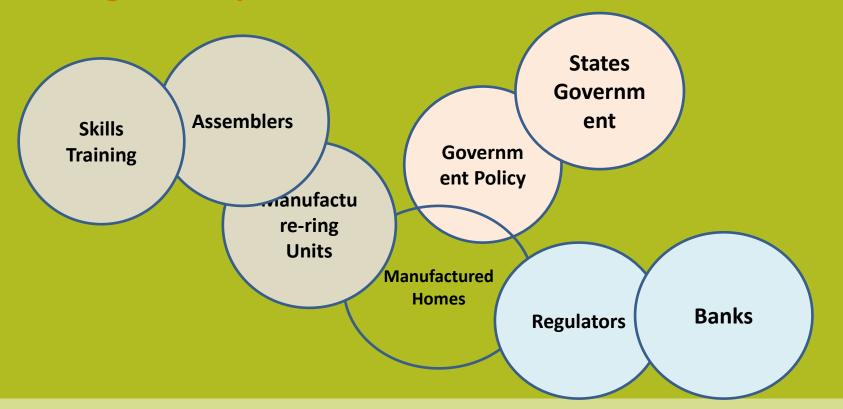






The ecosystem

Mass housing through assembly line production would require building an eco system





India Concept Home

Over 4.2m homes in 10 years with 7 "initiating directives":

- Provide a house at a maximum cost of US\$20-24/sf using a process executable on a mass scale;
- Minimum 90% off-site manufacturing;
- Achieve High Quality Finish
- Onsite Assembly in less than 6 weeks
- Eliminate the use of on-site material handling equipment;
- Buyers Options;
- Energy Efficiency Standards





Value added

Urban development Health Jobs **Education** Housing finance Manufacturing Well being



Key Messages



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