

INNOVATION INTRODUCTION & PLANNING FOR SCALE

Applications for new housing product introduction

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TODAY'S TALK

- 1) Frameworks for new product introduction
- 2) Demand-side versus supply-side considerations
- 3) Examples of applying demand-side lens to new building material introduction

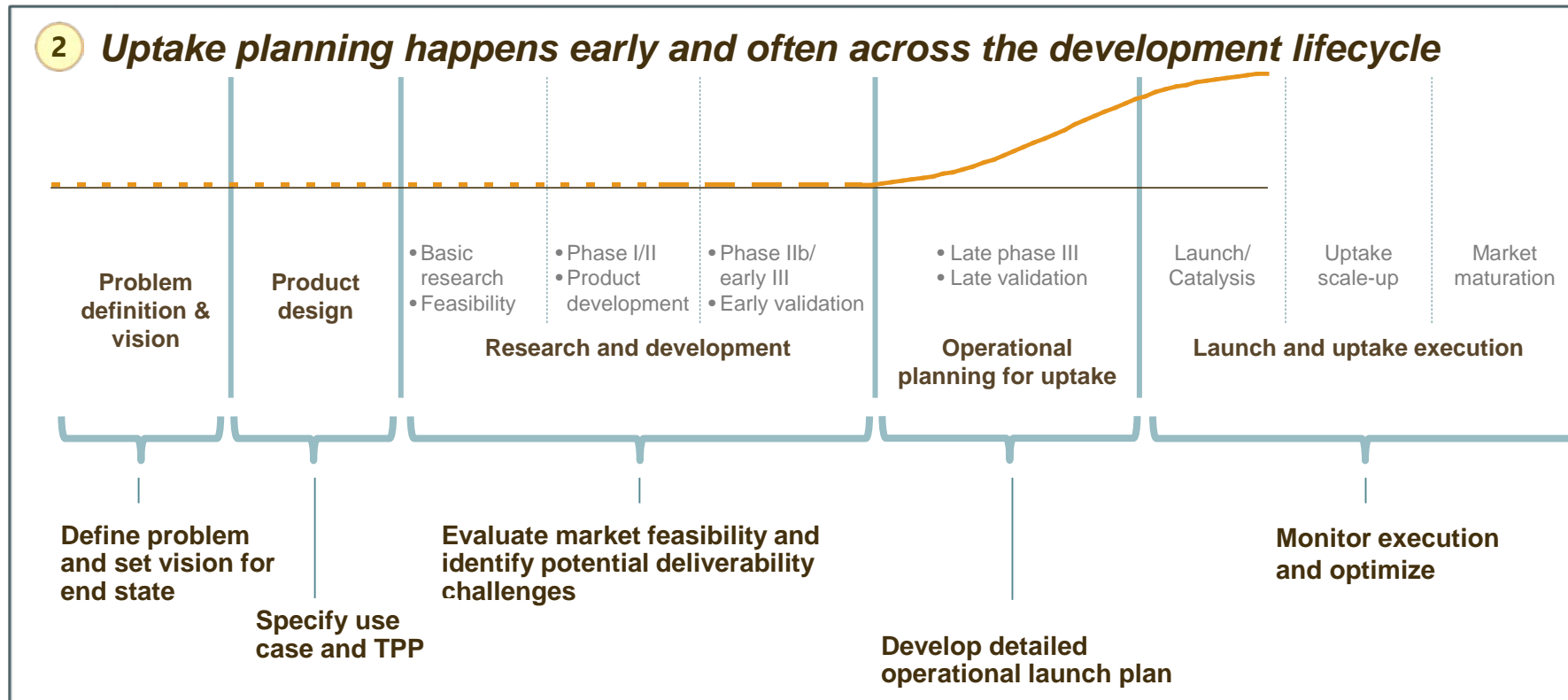
RELATIONS: HOUSING & HEALTH

	Windows	Doors	Walls	Floors	Roofs	Cooking	Water	Sanitation	Storage
Malaria	X	X			(X)	(X)	(X)		
Dengue	X	X					(X)		
Diarrheal				X		X	X	X	X
Acute Respiratory inf.	X					X			X
Tuberculosis	X							X	
Anaemia				X				X	
Asthma	X		X			X			X
Water-borne disease				X			X	X	
Chagas			X						
Cancers				X		X			
Strokes						X			
Poisoning									X
Injuries		X		X		X			

THREE PRINCIPLES OF SUCCESSFUL UPTAKE PLANNING

1 *The vision the of mature product marketplace is set even before Target Product Profile*

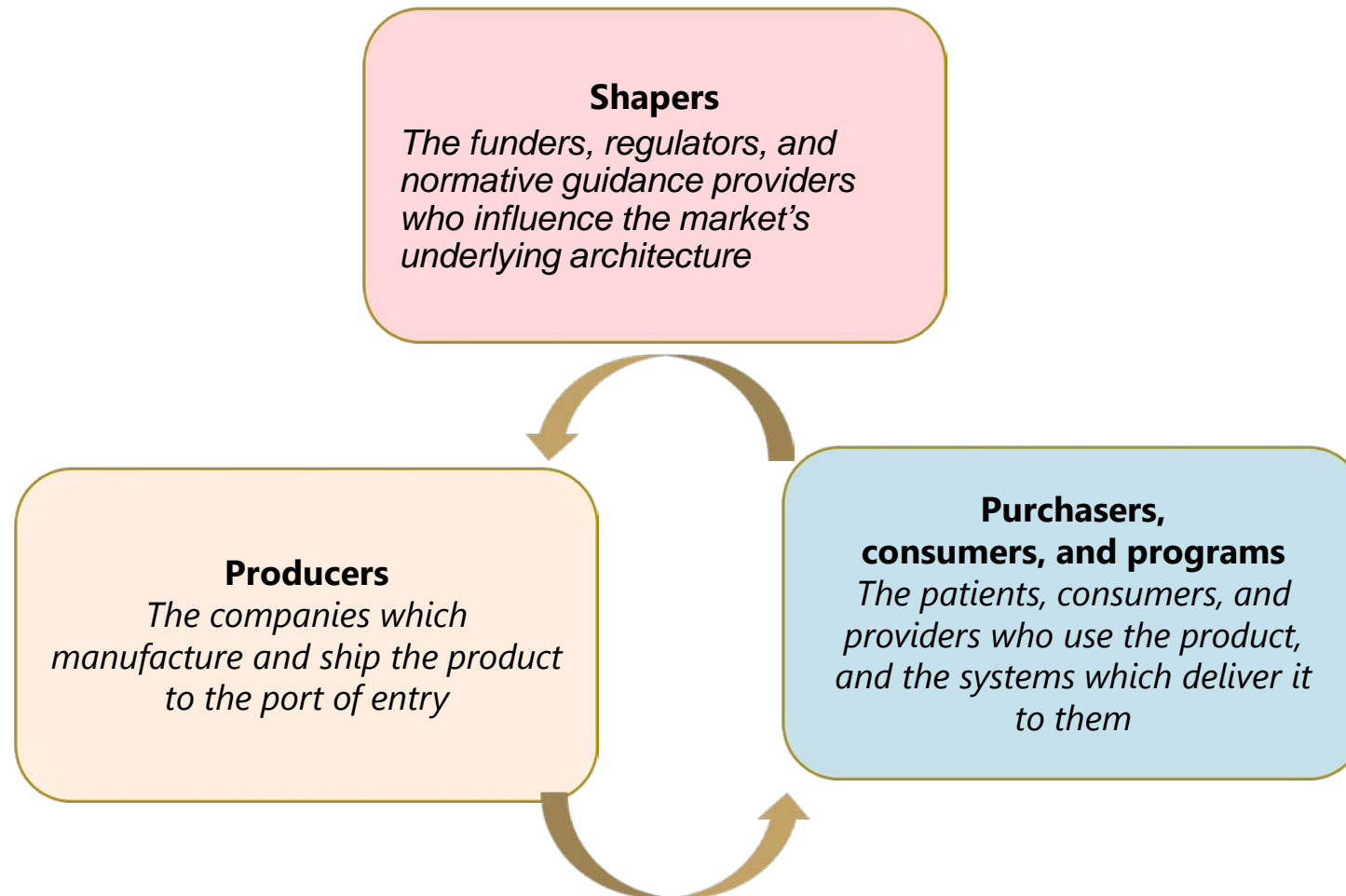
2 *Uptake planning happens early and often across the development lifecycle*



3 *Early assumptions get pushed, validated, and revised throughout*

SUCCESSFUL UPTAKE PLANNING AND EXECUTION

requires addressing all the actors in the marketplace





SUPPLY AND DEMAND ARE INTERCONNECTED





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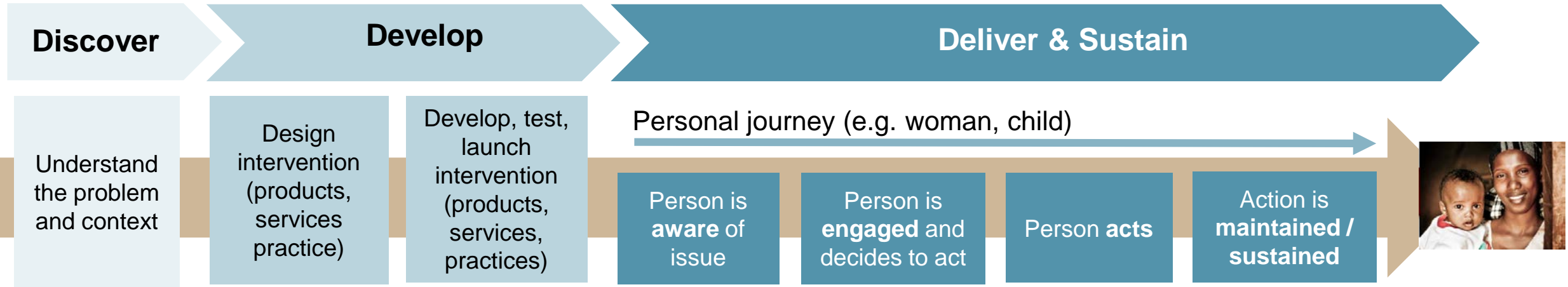
Demand influences supply:

Information, education, counseling, marketing and removing financial barriers results in effective uptake that would otherwise not be achieved

Supply influences demand:

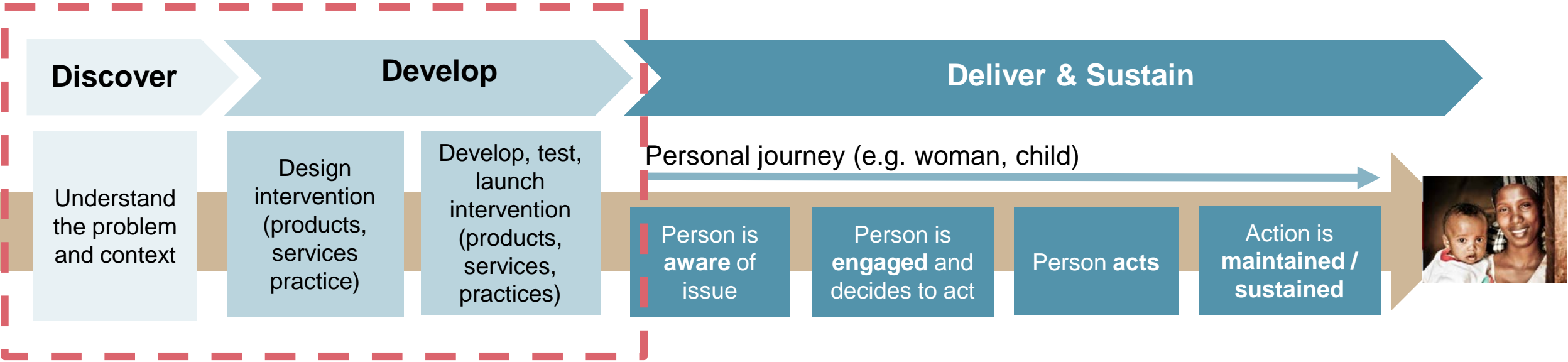
Poor supply (unacceptable product design, quality of service, stock-out) affects demand.

DEMAND-SIDE CONTINUUM



*An area we have previously underexploited is **developing and applying a deeper understanding of our users/customers** to the design of programs, services and products/interventions.*

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DISCOVER: PRIORITIES OF SMALL HOLDER FARMERS

Segment	TANZANIA: Top three priorities	MALI: Top three priorities
Competent optimists	<ul style="list-style-type: none">• <u>Buy or improve house (38%)</u>• Buy more land to expand cultivation (14%)• Pay school fees for children (12%)	<ul style="list-style-type: none">• Buy modern farm equipment (41%)• <u>Buy or improve house (21%)</u>• Buy additional livestock (10%)
Contented dependents	<ul style="list-style-type: none">• <u>Buy or improve house (32%)</u>• Buy more land to expand cultivation (15%)• Start/invest in off-farm business or activity (10%)	<ul style="list-style-type: none">• Buy modern farm equipment (45%)• Buy additional livestock (13%)• <u>Buy or improve house (11%)</u>
Frustrated escapists	<ul style="list-style-type: none">• <u>Buy or improve house (35%)</u>• Pay school fees for children (18%)• Buy more land to expand cultivation (9%)	<ul style="list-style-type: none">• Buy modern farm equipment (36%)• Buy more land to expand cultivation (13%)• <u>Buy or improve house (12%)</u>
Independents	<ul style="list-style-type: none">• <u>Buy or improve house (45%)</u>• Pay school fees for children (17%)• Buy more land to expand cultivation (12%)	<ul style="list-style-type: none">• Buy modern farm equipment (33%)• <u>Buy or improve house (25%)</u>• Buy improved livestock (8%)
Traditionalists	<ul style="list-style-type: none">• <u>Buy or improve house (36%)</u>• Pay school fees for children (13%)• Buy more land to expand cultivation (11%)	<ul style="list-style-type: none">• Buy modern farm equipment (43%)• <u>Buy or improve house (18%)</u>• Buy additional livestock (12%)
Trapped	<ul style="list-style-type: none">• <u>Buy or improve house (42%)</u>• Pay school fees for children (11%)• Buy more land to expand cultivation (10%)	<ul style="list-style-type: none">• Buy modern farm equipment (42%)• Buy additional livestock (13%)• <u>Buy or improve house (11%)</u>

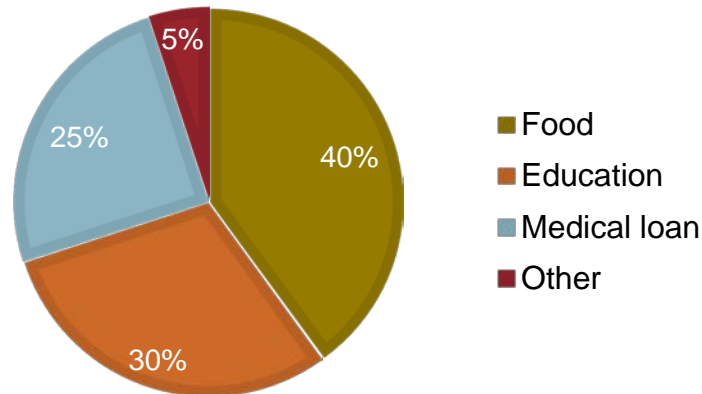
DISCOVER: HOUSING NEEDS OF THE URBAN POOR, INDIA

Family members: Akahila (wife), Yadagiri (husband), Lakshmi (Mother in Law), Jamadha (Father in Law, died of TB), Nikita (daughter, 8 y/o), Deeksha (daughter, 6 y/o), Lohath (son, 4 y/o)

Household earnings: Yadagiri is a driving earning \$102 per month, Lakshmi works as a tea vendor earning \$44 per month

Income level: \$0.81 USD per person per day

MONTHLY EXPENDITURES BREAKDOWN



Lakshmi and Akahila

DEVELOP: IDENTIFYING A SOLUTION

User preferences

- Low-cost
- Durable
- Standard install
- Keep homes cooler

Technical requirements

- Water absorption
- Load bearing capacity
- Fire resistance
- Thermal conductivity
- Energy requirements
- Durability



DEVELOP: SOLUTION TESTING

- 25 projects, 100+ people
- **Willingness-To-Pay**
 - WTP surveys
 - Paying customers
- **Distribution Models**
 - B2C channels
 - B2B channels
- **Measuring Impact**
 - Heat-related impact
 - Impact on productivity, health, energy usage



FINAL THOUGHTS

- 1) Thinking about our users/customers and the demand-side at the outset for successful uptake
 - 2) Identifying market-based models which can scale (financing, distribution, production)
 - 3) Generating evidence to understand the impact of the built environment and what works
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“Innovation is the thing that produces better, faster, cheaper and more broadly used results. Most of all – it’s about mass adoption.

There is wisdom in the crowds and an idea becomes a true innovation when others start adopting, copying, or iterating it. It is only with others start saying YES that it really matters.”

-Maura O’Neill, former Chief Innovation Officer, USAID

THANK YOU