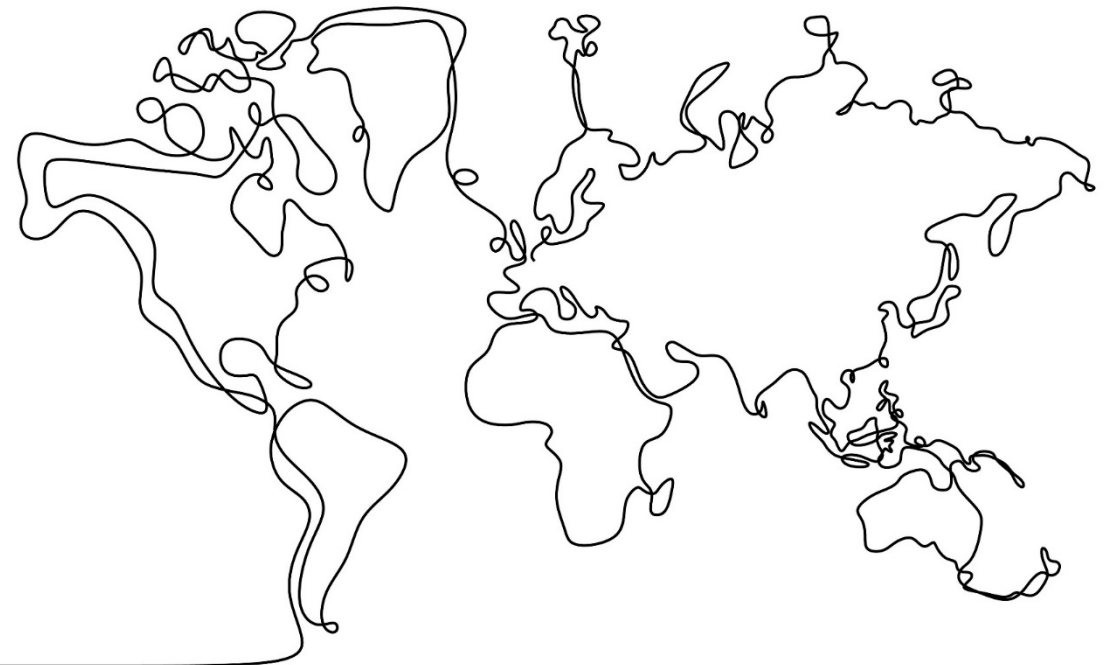


# GEOGRAPHY, STRATEGY AND DECISION MAKING

Enabling Subnational IGR Growth, Facilitating Social  
Inclusion and Underpinning Community Cohesion

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# Introduction

## NOTES

**THEMATIC:** Geography as a catalyst for economic growth and social cohesion

**PLACE HOLDERS:**

- The administration of Internally Generated Revenue (IGR) is delineated by geography
- Population distributions and their socio-economic traits are better depicted using geography
- We can better understand income constraints and citizen expenditure patterns, also with geography

**SOME THOUGHTS:**

- Every day geography - Landmarks or Point of interest references
- Interactive geography - Directional navigation and street references
- Contextual geography - Cultural origins, language and ethnic references

### MISCONCEPTIONS

- Geography and positive financial performance, have no correlation
- Geography is mostly about maps
- Geography and its derivatives need complex technical expertise

### UNBUNDLING RELEVANCE

- Every sphere of life and profession intersects geography
- Geography is mostly about the recognition of patterns and their distribution
- Technology, if used to interpret geography, does not make one an expert

### THIS PRESENTATION

- Present a geography walkthrough, context and relationships
- Offers a geography led strategy bias and its impact on decision making
- Builds up from a series of connected contexts to explore the IGR dynamics of a state
- Use demonstrations and use-case to contextualize opportunities

# Attributions

**DEMONSTRATION RESOURCES:** Building footprints and digital base-map service

**SOURCE:**



<https://bit.ly/3JKSPqZ>



**OpenStreetMap**

<https://bit.ly/3PgV9XU>



<https://bit.ly/3dopPJA>

## NOTES

### REMINDERS:

- Geospatial data repositories should be reviewed every 3 months or earlier
- Administrative boundaries are managed by state and federal institutions
- Geographic data needs to be collected based on defined use case and accuracies



Time and scheduling reference



Geography and spatial data reference



Technology resource reference

# GEOGRAPHY



# The Building Blocks

**THEMATIC:** Enabling Subnational IGR Growth

**OVERVIEW:**

- Our ad hoc approach to evaluating IGR opportunities limits its effectiveness and derived value
- Data should ideally not be examined for IGR prospects, devoid of location and population traits

## SPATIAL CONCEPTS

- Modifiable Unit Area Problems (MAUP)
- Dasymetric Mapping
- Feature Class, Layers and Geometry
- Unit Areal Geography or Postcode

## DATA INTERACTIONS

- Network and Spatial Analysis
- Point in Polygon
- Address Gazetteer Framework
- Spatial/ Geospatial Database
- Projection Coordinate System

## TECHNOLOGY

- Global Navigation Satellite System (GNSS) Infrastructure
- Geospatial Map Services (base map)
- Mobile and Digital Mapping

## NOTES

**POPULAR GEOGRAPHY TERMS:**

- Geographic Information Systems/ Science
- Geographic Positioning Systems (GPS)
- Geospatial Envelope

**REFERENCES:**

- MAUP - <https://bit.ly/3Q9JOKm>
- Dasymetric Mapping - <https://bit.ly/3BOVQon>
- Postcode - <https://bit.ly/3bJV15k>



# Geography

SHOMOLU LGA

## Public Sector Engagement

**PROJECT:** National Infrastructure Advisory Facility (NIAF) National Economic Modelling

**SUMMARY:**

Lead the team tasked with producing an infrastructure map for the country and leveraging the regional insights it offered, to develop a national economic model on behalf of the federal government of Nigeria



## Private Sector Engagement

**PROJECT:** The Imo Economic Mapping and Competitiveness Study

**SUMMARY:**

Partner the academia, private and public sector to explore and develop a state socio economic model for targeting investments and interventions that improves prosperity across Imo state, on behalf of the Chief Economic Advisers' office





# IGR Relevance

**OPPORTUNITY:** Sub-National Economic Modelling

**IMMEDIATE CHALLENGES:**

- No definitive source of geographic data available or leveraged in economic model building
- Multiple debates persist on what data sources are viable to model Nigeria's economic contexts
- Organizations and institutions continue to fail at collaborating to produce data ecosystems
- States are yet to evolve a holistic framework to assess regional economic prospects and banding

**SCENARIO DEMONSTRATION:**

- Examine how geographic components help model IGR
- Explore components within unit geographic clusters
- Review the influence of MAUP on socio-economic data

## NOTES

**SOME ACTION POINTS:**

- Data standardization and centralization
- Define a unified unit area of geography
- Refine geospatial data projection frame
- Feature transformation and translation
- Establish a geodata and storage standard

# STRATEGY





# Reflecting and Forecasting

**THEMATIC:** Facilitating Social Inclusion

**OVERVIEW:**

- Understanding how households are clustered into groups helps better localize interventions
- It is important to know that Nigeria's biggest spenders are mostly '*aspirational buyers*'
- Categorizing regions based on visual traits can obstruct the identification of hidden opportunities

## DATA CONNECTEDNESS

- Street name and referencing
- Administrative extents

## GEOGRAPHIC DISPERSAL

- Service coverage or area
- Unit geographic area or postcode

## DERIVED INSIGHTS

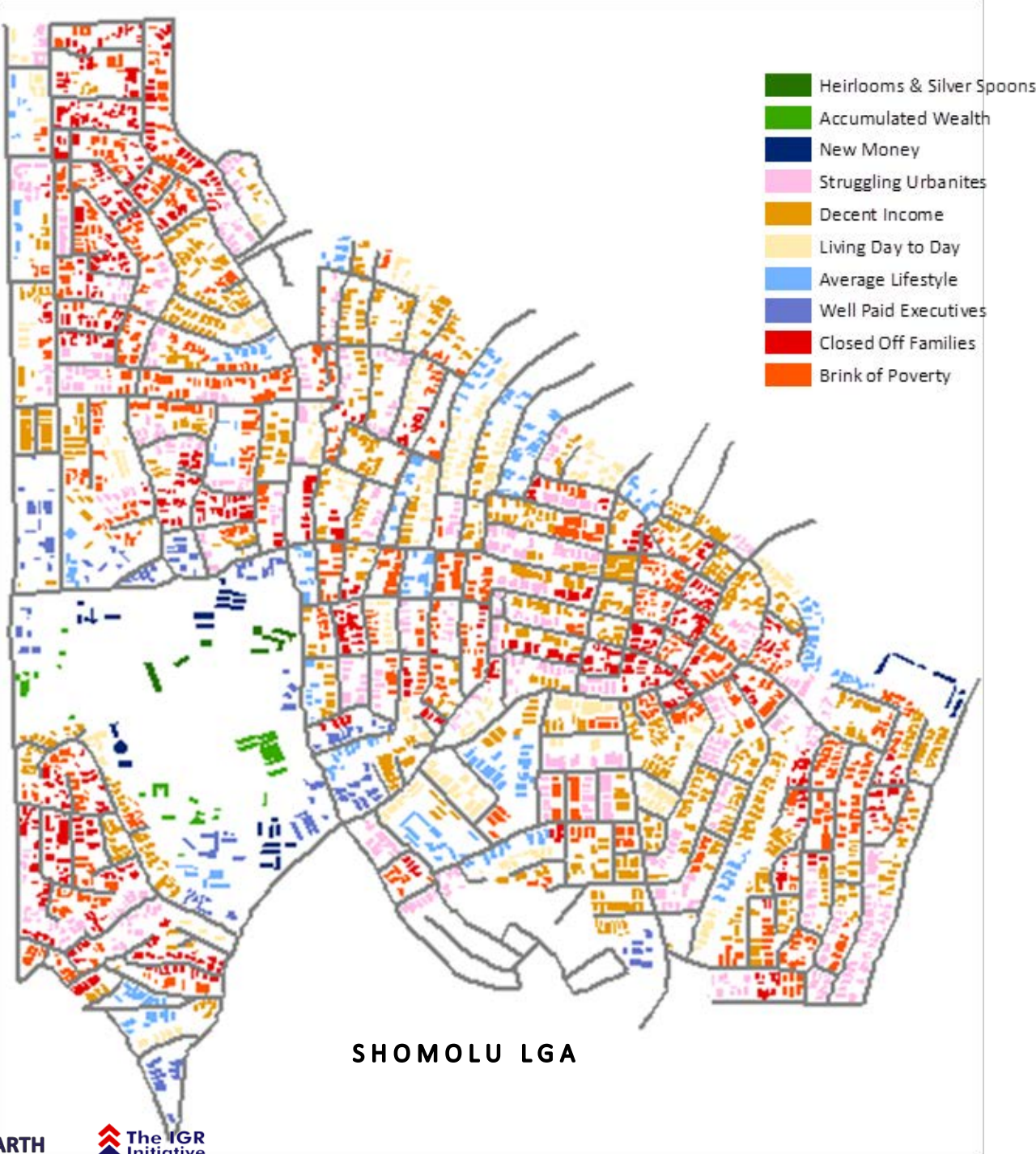
- Economic and social clusters
- Distribution and circulation patterns

## NOTES

**TERMS TO REMEMBER:**

- Geodemography and pen portraits
- Geomarketing and target marketing
- Customer/ consumer segmentation
- Catchment regions

# Strategy



## Public Sector Engagement

**PROJECT:** Operate an Institutional Service Management (ISM) Strategy with geomatics and geospatial communities in Nigeria

**SUMMARY:**  
Coordinate strategies focused on aiding professionals, organisations and institutions to commodify geospatial infrastructure and resources, whilst developing a collaborative support network across the community



## Private Sector Engagement

**PROJECT:** WEY Consumer Targeting Strategy and Service Framework

**SUMMARY:**  
Coordinating the development and delivery of dynamic consumer targeting services and its digital repositories (e.g. WEY Job; WEY Rewards etc.)



# IGR Relevance

## NOTES

**OPPORTUNITY:** Understanding Communal Dynamics and its Economic Influences

**IMMEDIATE CHALLENGES:**

- Typical economic and market assessments are based on large and inconsistent areal contexts
- Market segmentation and consumer profile development still incapable of household targeting
- Service providers still adopt fuzzy customer differentiation models - rich/ middle income/ poor
- Several service providers are unaware aspirational buyers are the bulk of their customers

**SCENARIO DEMONSTRATION:**

- Visualizing pen portraits and their geographic distribution
- Market sizing using geodemographic profiles

**SOME ACTION POINTS:**

- Focus on desired outcome not tech use
- Think tech agnostic, leverage on context
- Visualize thematic spatial distributions
- Keep in mind, maps are static. Data is not



# DECISION MAKING



# Objective Milestone-Pathways

**THEMATIC:** Underpinning Community Cohesion

**OVERVIEW:**

- Building and safeguarding communal continuity requires understanding everyone is different but yet similar
- Citizenry access to and payment for public and consumer services should be better thought through

## THEMATIC VS. COHORT

- Distributing utilities and services
- Accessing healthcare services
- Engaging in consumer marketing

## THE LEAKY BUCKET

- Present individuals an alternative
- Understand individual transaction patterns
- Avoid a one-size fit all approach
- Objectively associate cohorts

## TENURE VS. OUTCOMES

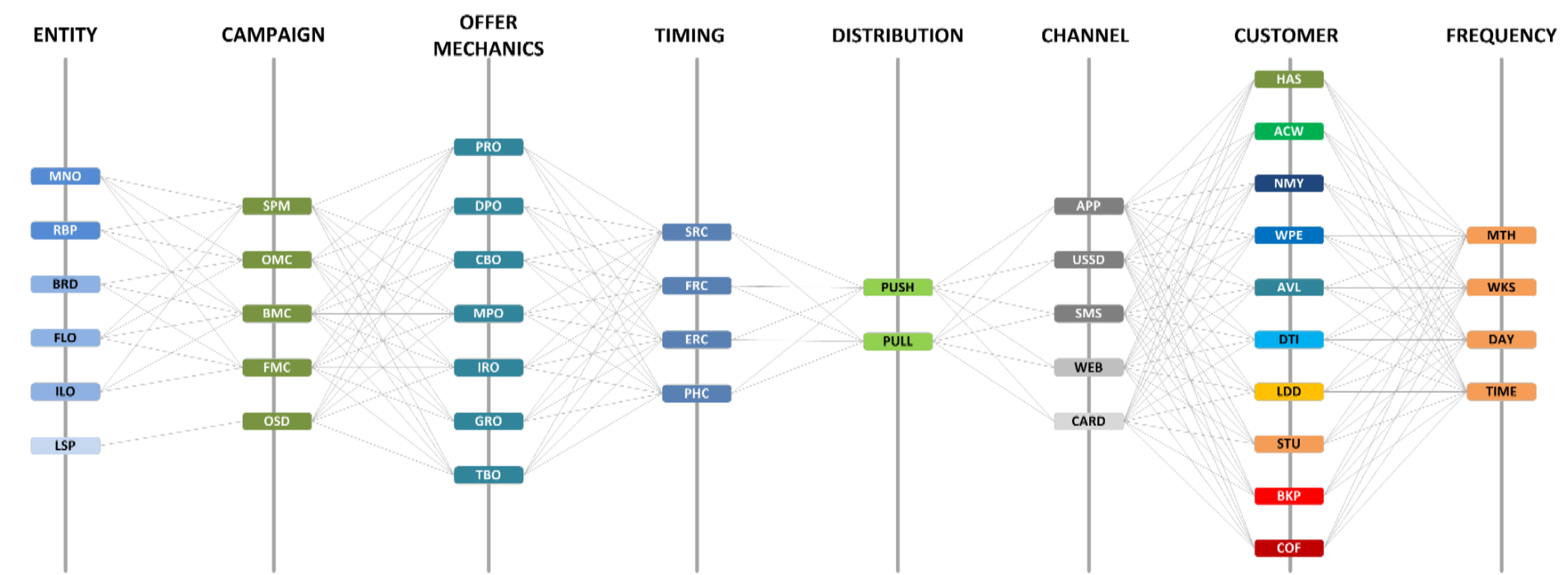
- Health phenomena intervention
- Public services, e.g. bin collection

## NOTES

**TECHNICAL TERMS:**

- Data indexing and decision trees
- Adjacency and spatial auto-correlation
- Origin destination matrices
- Point in polygon and geo-fence routines

# Decision Making



## ACRONYMS

<b>ENTITY</b>	MNO	Mobile Network Operator	<b>OFFER MECHANICS</b>	PRO	Points & Rewards Offering
	RBP	Retail Banking Provider		DPO	Discounted Product Offering
	BRD	Brand Enterprise/ FMCG		CBO	Cash Back Offering
	FLP	Formal Lifestyle-Service Provider		MPO	Multi-Purchase Offers
	ILP	Informal Lifestyle-Service Provider		IRO	Instant Rewards Offering
	LSP	Lifestyle Support Provider		GRO	Gamification Reward Offers
				TBO	Time Based Offers
<b>CAMPAIGN</b>	SPC	Service Provider Marketing	<b>TIMING</b>	SRC	Season Related Calendar
	OMC	Own Marketing Campaign		FRC	Faith Related Calendar
	BMC	Brand Marketing Campaign		ERC	Event Related Calendar
	FMC	Fulfilment Marketing Campaign		PHC	Public Holiday Calendar
	OSD	One-Off Service Delivery	<b>DISTRIBUTION</b>	PUSH	Service Delivered via Network
<b>FREQUENCY</b>	MTH	Calendar Month, 4 weeks		PULL	Service Requested by Consumer
	WKS	Calendar Week, 7 Days			
	DAY	Calendar Day, 24 Hours			
	TIME	Period within a Day			

## LEGEND

ENTITY/ Service Provider

ENTITY/ Brands and Merchants

ENTITY/Individual Service Providers

CHANNEL/ Web API's

CHANNEL/ Card Linked Marketing

**Visual Earth** GROUP **The IGR Initiative**

## Public Sector Engagement

**PROJECT:** Text Based Incident Reporting, Dispatch and Positioning for LASAMBUS

**SUMMARY:**  
Engineered the geo-locating of USSD callers and reduced ambulance dispatch times for emergency call out to well under 5 minutes, from over 20 minutes.



## Private Sector Engagement

**PROJECT:** Supporting Start-ups Build and Operate Intuitive Market Strategies

**SUMMARY:**  
Empowering start-up founders review the appeal and prospect of their propositions, whilst identifying their most likely cohort of patrons, their patterns and its impact on their expected earnings.



Enabling Subnational IGR Growth, Facilitating Social Inclusion and Underpinning Community Cohesion



# IGR Relevance

## NOTES

**OPPORTUNITIES:** Geography Led Policy Formulation and Execution

**IMMEDIATE CHALLENGES:**

- Policy efforts are mostly devoid of knowledge about where prospective beneficiaries reside or who they are
- The interdependency of lost or reduced earnings and public works is rarely examined
- Data and service partnerships between States and the private sector can be difficult to negotiate
- State engagements with its economic sectors needs to be better directed and not based on rule of thumb

**SCENARIO DEMONSTRATION:**

- Service pricing based on catchments
- Modelling prospective state earnings
- Impact of public works on state income

**KEY ACTION POINTS:**

- Avoid quick-wins not tied to your long term goal
- Explore data partnerships, reducing cost to deepen insights and expand context
- Adopt process flexibilities in structure
- Be aware largest transaction count will originate from aspirational buyer cohorts

# Conclusion

**CONSIDERATION:** Leverage Location as an Anchor for Prosperity and Development

## OPPORTUNITIES AHEAD:

- State economic efficiencies are easier to achieve where geography is utilized
- Productivity monitoring of public services are easier to track using geography
- Policy success is easier to measure, realign if needed and visualize with geography
- A robust view of IGR prospects, requirements and operational context can be laid out with geography

## NOTES

### LAST THOUGHTS:

- Put less focus on the technology but pay more attention to underlying contexts
- Data creation may be easy but ensuring its continued maintenance can be hard
- Develop data partnerships, leveraging data and geospatial contexts

# THANK YOU

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