

WHAT IS



KOTANATOMI?

A Framework for Informal Sector Research

Studying the role of the informal sector in cities can be very challenging. Informal enterprises are, by definition, unregistered, and yet have become a preferential business strategy for many. In Jakarta, there are many different typologies of informal businesses that are often always on the move or settle in one location only on a non-permanent basis. Therefore, understanding the role of informality in the daily lives of city residents is often limited or anecdotal in nature. Despite this, an improved understanding can improve the design and implementation of policies and regulations for the benefit of all citizens.

WHAT IS KOTANATOMI?

KOTANATOMI is a research methodology focused on the informal sector in public spaces, which aims to enhance the overall urban experience. It is based on recognition of the importance of the informal sector in the lives of millions of Jakartans, entrepreneurs and consumers alike, and the need for a new, uniquely Jakarta strategy, based on in-depth contextual knowledge. In this research, Rame-Rame Jakarta identifies the characteristics, forms, and adaptation strategies of the always dynamic informal sector as it responds to the urban rhythms of a modern city.

Primary Research Objectives

- 1. Understand the use and sharing of public space in Jakarta.**
- 2. Identify the unique strategies used by informal enterprises**
- 3. Understand the role of informality in the daily life of Jakarta and its citizens**
- 4. Providing useful knowledge for policymaking, regulation, or collaboration regarding the issue of urban informality.**

To address the challenges of informal sector research, KOTANATOMI uses a range of innovative strategies for data collection, quantification and assessment:

Stage 1 - Observation and Preliminary Data Collection

For this stage we used a variety of instruments, namely:

1.) Video

- Focus: Collecting data using the video recording method.

Purpose: To gather a complete picture of informal activities and their context within the study location.

2.) Time

- Focus: Adjusting for the fluctuating habits and behaviors of informal sector actors, data collected over a one-week period at various times throughout the day. The recommended time slots are as follows:

Tue	2.00 AM	7.00 AM	12.00 AM	6.00 PM	10.00 PM
Wed	2.00 AM	7.00 AM	12.00 AM	6.00 PM	10.00 PM
Thu	2.00 AM	7.00 AM	12.00 AM	6.00 PM	10.00 PM
Fri	2.00 AM	7.00 AM	12.00 AM	6.00 PM	10.00 PM
Sat	2.00 AM	7.00 AM	12.00 AM	6.00 PM	10.00 PM
Sun	2.00 AM	7.00 AM	12.00 AM	6.00 PM	10.00 PM

- Objective: To capture a complete picture of informal phenomena and business actors over seven days based on daily/hourly fluctuations.

3.) Route

- Focus: Divide participants into 2-person surveyor teams, corresponding to 4 recording routes per 1 session. Each route follows 1 side of the sidewalk. Each team starts the survey from the midpoint between all survey locations as shown below;



- Purpose: To capture the phenomenon of informality from the perspective of pedestrians.

4.) Equipment

KOTANATOMI uses simple methods that do not need expensive tools. The recommended video recording device is an action-cam model, connected to a smartphone via an application. Each team should have the same recording quality.

Stage 2 - Video Data Mapping

1.) Typology

KOTANATOMI uses several typologies of informal enterprises (usinf) which are identified based on the characteristics of their interactions with public spaces in Jakarta. The typology used is:

- a) **Asongan** - usinf which walk around on foot
- b) **Kios** - usinf settled but without permanent buildings
- c) **Motor** - usinf who use a motorized vehicle to get around
- d) **PKL** - usinf who get around using a cart
- e) **Sepeda** - usinf driving around non-motorized vehicles
- f) **Tenda** - usinf that use non-permanent but immobile structures
- g) **Terpal** - usinf selling their goods directly on the street floor
- h) **Warung** - usinf operating from a permanent building

2.) Parameters

To better describe the characteristics of each user, KOTANATOMI uses parameters based on the interaction between the usinf and the daily activities going on around them, specifically their size and the commodity they sell. The classifications are as follows:

Size	Explanation
S - Small	Less than 1m/sq, +/- the size of a single person
M - Medium	1-1.5m/sq, +/- the size of 2-3 people
L- Large	1.5-2m/sq, +/- the size of 3-4 people
X - Very Large	More than 2m/sq, +/- large enough to enter

Commodity	Explanation
A - Food Only	Food prepared by the seller
B - Drinks Only	Drinks prepared by the seller
C - Food & Drinks	Not including snacks & pre-package food& drink
D - Other Products	Package drinks/snacks, phone credit, cigarettes etc
E - Services	Services, Performances etc.

Other Parameters - the result of using video recordings as the method for collecting research data means that KOTANATOMI has the potential to make additional assessments using other parameters based on the same material. Rame-Rame Jakarta invites other parties to collaborate in exploring the daily life of Jakarta.

3.) Mapping

Mapping is conducted by entering usinf position points and giving each a code according to its typology and parameters. Altogether there are 35 different maps corresponding to the recording sessions across the 7-day period. This mapping should be done online using Google MyMaps so that it can be accessed publicly.

Stage 3 - Map Data

1.) Formatting

Data originating from Google MyMaps will be exported in tabular .xls and google sheet format. The tabulated data will be reviewed again to check for input errors in the process of stage 2. After that, each column in the table will be sorted by typology, parameter, hour, route, and day.

2.) Data Visualitazion

Data originating from Google MyMaps will be exported in tabular .xls and google sheet format. The tabulated data will be reviewed again to check for input errors in the process of stage 2. After that, each column in the table will be sorted by typology, parameter, hour, route, and day.

Stage 4 - Modeling and Visualization

1.) Data Animation

The formatted tabulated data will be processed back into the parametric design software and 3-dimensional modeling to show the movements of informal business activities during the data collection period.

2.) 3D Modeling

The formatted tabulated data will be processed back into the parametric design software and 3-dimensional modeling to show the movements of informal business activities during the data collection period.

3.) Dimensional Visualization

The two models that have been created are combined into one file. The aim is to better understand the response of informal businesses to the surrounding urban environment and its strategies according to time as determined in stage 1.

Stage 5 - Assessment and Publication

1.) Assessment of the Characteristics of Informality

This study will produce short reports based on a combination of charts and data visualizations that have been previously made. This research will also form new conclusions on a broader scale and help identify phenomena, locations, or other features that may be useful for further research in the form of academic reports and simulation models.

2.) Dissemination

The main objective of this publication is to raise public awareness of the role of informality in Jakarta's economy. In addition, this publication is an opportunity to expand the KOTANATOMI network and new collaborators to develop this research especially for other researchers who focus on urban and social-economic issues.

3.) Publication

Publication will be in the form of a public knowledge archive from the collaborators involved and disseminated through various online media such as articles, social media, websites, and public events.