LOCATION WORKFLOWS · RESEARCH

Location data that runs itself

Academic & Scientific Research

How it works, and 13 ways teams put it to work.

300M+
POINTS OF INTEREST

1B+
DEVICE SIGNALS A DAY

54
BUILDING BLOCKS

13
USE CASES

xMap · Location Data Platform

flows.xmap.ai

Prepared for
Research groups, labs and university planners

THE PROBLEM

Location data is only useful when something acts on it.

Most location data is bought for a project, analysed once and filed. By the next quarter the outlets have changed, the report has not, and the team that needed the answer has stopped asking.

One-off

THE USUAL STUDY

A file

WHERE THE ANSWER LANDS

Stale

BY NEXT QUARTER

xMap Flows connects the same data to the systems your teams already use, on a schedule.

WHAT IS IN THIS DECK

Two parts, and where to look.

Part one is the product. Part two is what teams do with it.

	SECTION	WHAT IT COVERS
01	**The problem**	Why location data rarely reaches the people who act.
02	**Part One · The product**	How a flow works, all 54 blocks, the controls, Ask xMap.
03	**Part Two · 13 use cases**	Every use case named, then 4 worked in full.
04	**Getting started**	Three steps, and the first needs no account.

Scenarios and figures in the use cases are modelled to show what a flow produces. None describes a named customer.

01

Part One
The product

A flow is a chain of blocks. It starts on a trigger, looks at an area, gathers data, lets the AI make sense of it, applies your rules and ends in an action.

HOW A FLOW WORKS

Six kinds of block, connected left to right.

Items travel along the lines between blocks. Each block adds to them or narrows them down.

01

Trigger

A timetable, a chat message, new rows, a change near your places, or an event in one of your apps.

02

Where

Countries, cities, places found by search, polygons you draw, or a travel time.

03

xMap data

Live listings, places of 5,000+ types, residents, footfall, jobs, roads, ships and weather.

04

xMap AI

Scoring and ranking in plain words, and AI agents that answer messages using blocks as tools.

05

Your data & logic

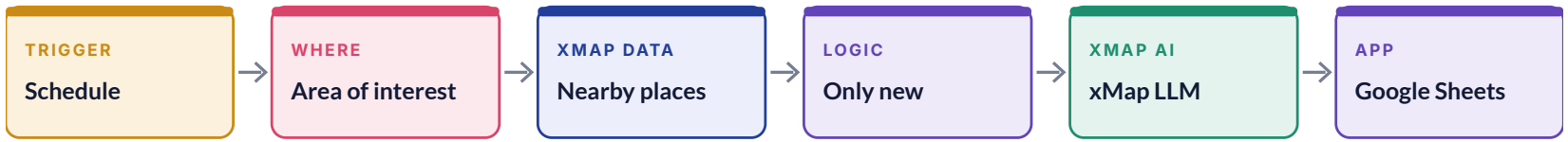
Skip what you already have and keep only what qualifies.

06

Actions

Email, a reply where they wrote, a report, a map, or any of 11 apps: a chat, a sheet.

ONE FLOW, READ LEFT TO RIGHT



No code. Every block explains itself and shows its price in its settings panel.

TWO WAYS TO DO THIS

From a one-off study to something that runs.

The data is the same in both columns. What changes is whether someone has to remember to ask for it, and where the answer lands.

DIMENSION	A ONE-OFF ANALYSIS	A FLOW
What starts it	Someone asks for a report	A schedule, a chat, new rows, an app event
Freshness	True on the day it was run	Re-run every hour, day, week or month
Effort per run	Analyst time, every time	None after the first build
Output	A file or a slide	Records, messages, rows and maps
Cost	A fixed project fee	Credits, for passed runs only
Ownership	Whoever built the spreadsheet	Shared with the team, with rights

Starting a flow, choosing where, and reading the world.

The first 23 of 54 blocks.

TRIGGERS	
Chat	Starts when someone writes in a chat page or window.
New rows	Starts when rows are added to a table or a Google Sheet.
Schedule	Starts on a timetable, in any time zone.
When something changes	Starts when a place opens, closes or drops in rating, or a road closes.

WHERE	
Area of interest	Countries, cities, places, or shapes you draw.
Find nearest	The nearest of your own points to each place.
Travel area	The area within N minutes or N km by road of each place.

XMAP DATA	
Browser	A browser in the cloud does a task on a public website. It never signs in, buys, pays or sends.
Demographics	Residents, men and women and age groups, around a place or in an area.
EV charging	Public charging stations around each place or in an area, with their power and operator.
Job postings	Live job postings by keyword and place.

XMAP DATA	
Map business scan	Live business listings, searched across an area.
Mobility Footfall	Footfall per day around each place, its busiest hours and days, as anonymous totals.
Nearby places	Any of 5,000+ types of place, around a place or in an area.
News	Stories from news feeds or a news page, kept by your words or by xMap AI, placed on the map.
Property changes	New owners, sales, values and uses from US county property records, or the owner of each place.
Regional data sources	National datasets, chosen by country.
Satellite images	The latest satellite picture of each place.
Ships (AIS)	Ships near a port or a coast, live from AIS.
Traffic Flow	Live road speeds, jam factor and closed roads around each place.
Traffic incidents	Live road closures, roadworks and accidents.
Weather forecast	Up to sixteen days ahead, by day or by hour.
Web page watch	Web pages watched for changes, said in plain words, or the new entries of a list on a page.

Mobility Footfall is live in the cities xMap's mobility data covers, as anonymous totals.

The AI, your own data, and where results go.

The next 17 blocks, and the apps.

XMAP AI	
AI agent	Answers each message, using other blocks as its tools.
Jev decision	A yes or no, a choice, or a score for each item.
Place classifier	Clean categories, duplicates merged.
xMap LLM	Scores, ranks, matches and summarises in plain words.
YOUR DATA	
Apollo	Decision makers at each company, from your Apollo account.
Database lookup	Looks each item up in your own database.
Database query	Reads rows from your own database.
Match with my table	Matches items to your table, or skips those in it.
MCP tool	Calls a tool on an MCP server you connect.
My data	Your uploaded tables and saved lists.
Save to my database	Writes the results into your own database.
Team findings	What your other AI employees found this week, against the week before.

ACTIONS	
Email	One email per run, or one per item.
Make a report	A branded PDF report or slides, emailed or saved to Drive.
Outreach	A first message and follow-ups to each person, approved first, stopped when they reply.
Reply	Answers whoever started the run, where they wrote.
Show on a map	Saves the results as a map to open or share.
APPS	
11 apps	Slack, WhatsApp Business, Google Sheets, Gmail, Microsoft Teams and 6 more.
7 app events	Starts when something happens in one of 7 apps.

Each block shows its price in its settings panel.

Your rules.

The last 14 blocks. Put logic early, so later blocks work on less.

LOGIC	
Approval	Holds the run until a person approves it.
Branch	Splits items into Yes and No paths.
Calculated field	Adds a field worked out by a formula.
Custom code	Your own JavaScript, run safely on the server.
Filter	Keeps only the items that match a rule.
Only new	Keeps only what this flow has not seen before.

LOGIC	
Remove duplicates	One item per place, phone or website.
Route planner	The best order to visit the stops, for each rep, with directions.
Run another flow	Runs one of your other flows with the items.
Sort and limit	Puts items in order and keeps the first ones.
Split by territory	Fair, compact territories for your reps, by area.
Wait	Holds the run for a while, or until a set time.
What changed	Places that closed, moved or changed since last time.
Zone alert	Items that entered, crossed or left a zone.

Only new and Match with my table remove what you already have first, so later blocks work only on the places you can act on.

WORKING AS A TEAM

Shared flows, clear roles, nothing live by accident.

A flow that sends messages and writes to your systems needs the same care as any other system that acts on its own.

ROLES AND SHARING

Private, team, or named people

Each company has its own organisation, credits and connections. A flow can be private, shared with the team, or shared with named people to view or edit.

DEPLOY CHECKS

Checked before it goes live

A flow is deployed only when every block has valid settings and a connected account. The same checks run again on the server.

RECORDS

Every run, change and credit

Each run keeps what every block returned and what it cost. Admins see an activity log and a ledger of every charge.

Sign up with a company email and a code, or with Google, Microsoft or your company's single sign-on. Free mail providers are not accepted.

ASK XMAP, THE ASSISTANT

An assistant in the app, and on WhatsApp.

It answers about the product, your flows and your results, and does the work you ask for, with your rights.

01

Builds and changes flows

Say what you want in a sentence. It builds the flow, tests it and fixes what fails.

02

On xMap's WhatsApp number

Add your number once. Then write, send a voice note or call, in one conversation.

03

Files, photos and places

Send a photo, a PDF or a spreadsheet and ask about it, or share your location.

04

Memory, reminders and tasks

Notes only you see, reminders in your time zone, a task list and follow-ups.

05

Your own files and inbox

Answers from your team's files and tables, and from your own Outlook inbox and calendar.

06

Your Yes first

Anything that changes, runs, sends or spends waits for your Yes in the chat, never a spoken yes.

Admins switch it on or off on WhatsApp for the organisation, can let it only answer there, and can download a 90-day log of what it did.

02

Part Two
13 use cases

Grouped by what the team is trying to do, so each part can go to the people who own that work. Every one can be built from the blocks in part one.

ALL 13 USE CASES

Every use case, named.

Find the one that describes a problem you have this quarter. Each has a full page in the guide for this industry.

01 Urban & social research — 3 CASES

01 Track how a neighbourhood changes
02 Measure access to everyday services
03 Study movement around an intervention

02 Field studies & data collection — 3 CASES

01 Build a sampling frame of venues
02 Know when a study site changes
03 Keep a longitudinal panel current

03 Campus & institutional planning — 4 CASES

01 Two thousand students, never stranded by a strike
02 Plan services around where students spend time
03 Choose outreach schools and community sites
04 Every new design internship in Milan, every Monday

04 Reproducible research & teaching — 3 CASES

01 Publish a refreshed dataset with every paper
02 Teach spatial analysis with live data
03 Summarise a study area for a proposal

Scenarios and figures in the use cases are modelled to show what a flow produces. None describes a named customer.

WHO IT IS FOR

31 teams, one way of working.

Each use case names the teams that usually own the flow or act on what it sends. These are the ones that appear most often.

Data stewards
2 USE CASES

Geography
2 USE CASES

Principal investigators
2 USE CASES

Statisticians
2 USE CASES

Admissions
1 USE CASE

Authors
1 USE CASE

Careers adviser
1 USE CASE

Design school
1 USE CASE

Economics
1 USE CASE

Estates
1 USE CASE

Field coordinators
1 USE CASE

Field teams
1 USE CASE

31
TEAMS NAMED

4
SECTIONS

13
USE CASES

1,000
READY-MADE TEMPLATES

Track how a neighbourhood changes

QUICK WIN

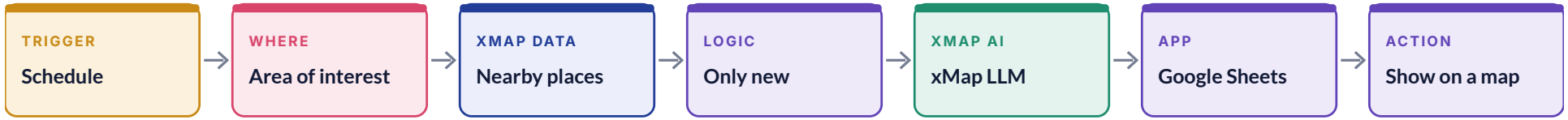
THE CHALLENGE

Studies of neighbourhood change rely on business registers that are a year or more behind. By the time an opening or a closure appears in the data, the street has already changed.

THE APPROACH

Every week Nearby places reads the study districts, Only new keeps the places that appeared since the last look, each marked as a chain or an independent. xMap LLM summarises the shift per district, and every run is appended to a sheet so the time series builds itself.

THE FLOW



Weekly
OBSERVATIONS PER DISTRICT

12 months
OF CONTINUOUS RECORD

4
DISTRICTS COMPARED

Who uses it · Urban studies · Sociology · Geography

Build a sampling frame of venues

QUICK WIN

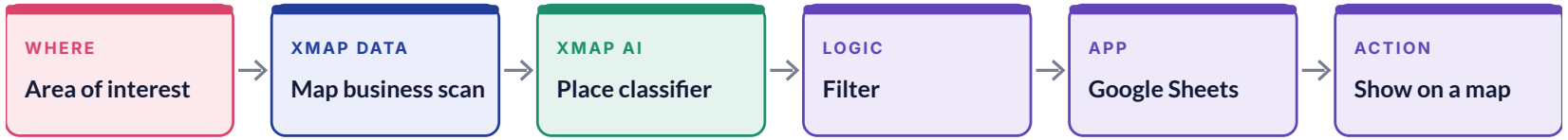
THE CHALLENGE

A survey of small businesses is only as good as its list. Purchased lists are out of date and duplicated, and the field team finds closed doors.

THE APPROACH

The flow scans the study area for the chosen categories, and the Place classifier cleans the categories and merges duplicates. A Filter keeps open venues with enough reviews to be established, and the frame is written to a sheet with coordinates for field routing.

THE FLOW



1 day
TO BUILD THE FRAME

Deduplicated
BEFORE FIELDWORK

Open only
VENUES LISTED

Who uses it · Survey teams · Field coordinators · Statisticians

Two thousand students, never stranded by a strike

QUICK WIN

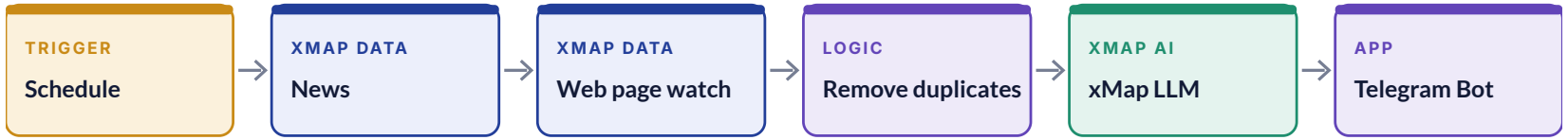
THE CHALLENGE

Transport strikes are announced in Italian, on news sites and a government calendar. New students miss them. On strike days, they wait at empty bus stops and miss exams, then fill his inbox with appeals.

THE APPROACH

With xMap Flows, Luca built Owl. Every evening at six, Owl reads the Rome news for strikes, watches the city transport agency's notices, keeps each strike once, writes a clear warning in English, and posts it to the students' channel.

THE FLOW



3
STRIKES WARNED OF LAST MONTH

2,000
STUDENTS TOLD THE EVENING BEFORE

2
MISSED EXAMS, DOWN FROM 40

Who uses it · International office lead · Higher education

Publish a refreshed dataset with every paper

QUICK WIN

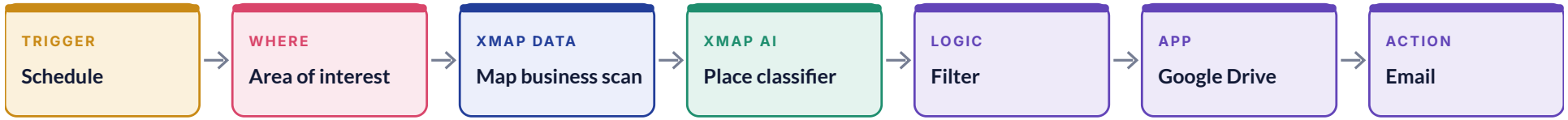
THE CHALLENGE

Replication packages contain a frozen extract and a paragraph on how it was made. Nobody, including the authors, can rebuild it a year later.

THE APPROACH

The flow is the method: the area, the categories, the cleaning by the Place classifier and the filters are all recorded. On a schedule it rebuilds the dataset and posts it to the group's shared Google Drive folder, with an email noting what changed.

THE FLOW



Quarterly
REFRESHED RELEASE

1 flow
DOCUMENTS THE METHOD

Repeatable
BY ANYONE

Who uses it · Research software engineers · Data stewards · Authors

GETTING STARTED

Three steps, and the first needs no account.

Each step ends with something a colleague can see.

DAY 1

Try it as a guest

At flows.xmap.ai pick a type of place and a city and press Run it live. Leave your work email and the list arrives by email.

WEEK 1

Put one flow live

Sign up with your company email, connect where results should go, set the schedule and deploy. The deploy check says what is missing.

MONTH 1

Make it routine

Give the flow an owner and a weekly look at what it ran and what it cost. Then add a second destination or copy it for another market.

Listings, places, jobs, road speeds and incidents, ships, satellite pictures, weather, residents, footfall and news are live. Where there is no live data for a place, the block says so.

WHERE TO GO NEXT

The hard part is not the data. It is getting it to the people who act on it.

Start with one flow whose output someone will see every week.

- Watch the one minute showcase for your industry, at flows.xmap.ai/showcases.
- Run a flow yourself on the home page, or have Ask xMap build one. No account is needed to start.
- Book a call at call.xmap.ai. Bring the use cases you marked and we will map each one to its blocks.

Scenarios and figures in this deck are modelled, not customer results.