bioGLOT Ventures

Introduces for the ***Greece*** and ***Cyprus***

ThinkFlow by AGILIS AI solving for x

build low cost, low code prototypes with meaningful data

ThinkFlow makes it easier to spend more time with your data and less time coding, whether you are a professional whose spreadsheets are creaking under the weight of data, an experienced engineer who needs a faster route to prototype, or a data scientist who just wants to code less and explore data more.

Built on a hyper-scalable platform, ThinkFlow can help you to explore your data, test hypotheses and build scalable applications in hours, rather than days. It is designed to be the ideal platform to enable your organisation to radically reduce the cost and risk of innovation.

ThinkFlow

Rapid low cost, low code prototyping of software systems

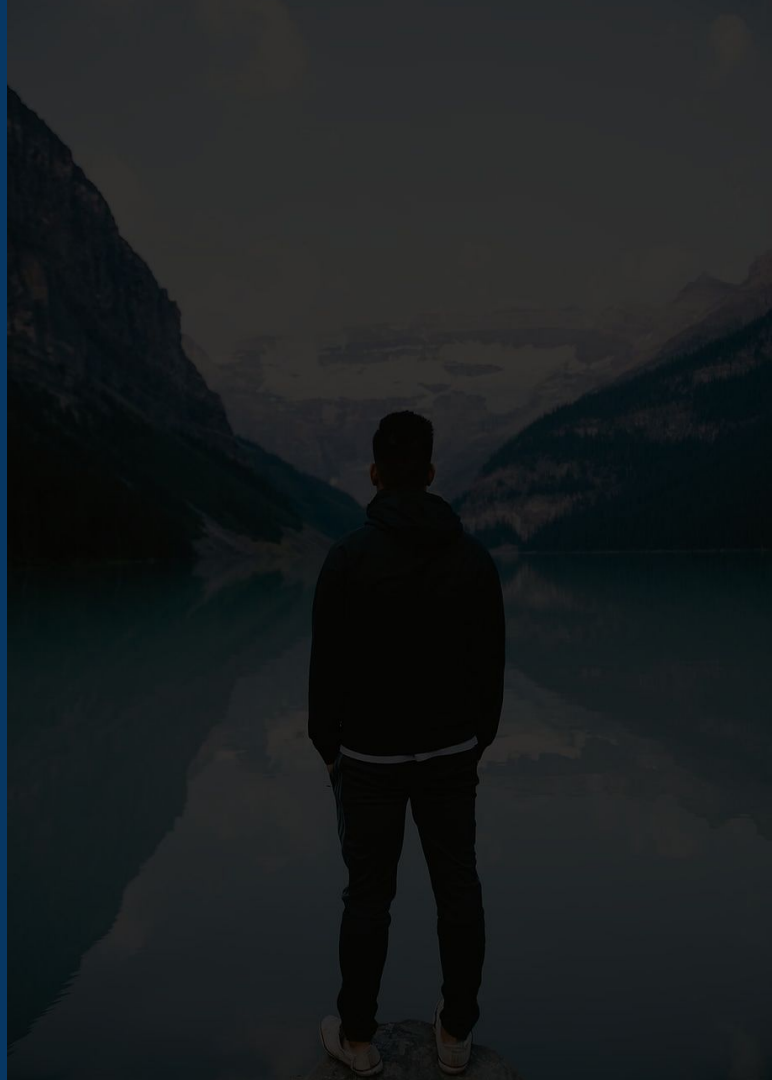
AGILIS AI
solving for x

What problem are we solving?

Software systems are difficult to test in their real environment until much later in the development process… at which point any required changes become much more costly and time-consuming to fix.

Precisely defining a software system's functionality and accuracy at an early stage is hard, especially when prototypes do not incorporate the data that they will ultimately be using.

Finally, for cost and time reasons, it is often unfeasible to trial enough iterations of early stage prototypes to be sure that product performance meets final requirements.



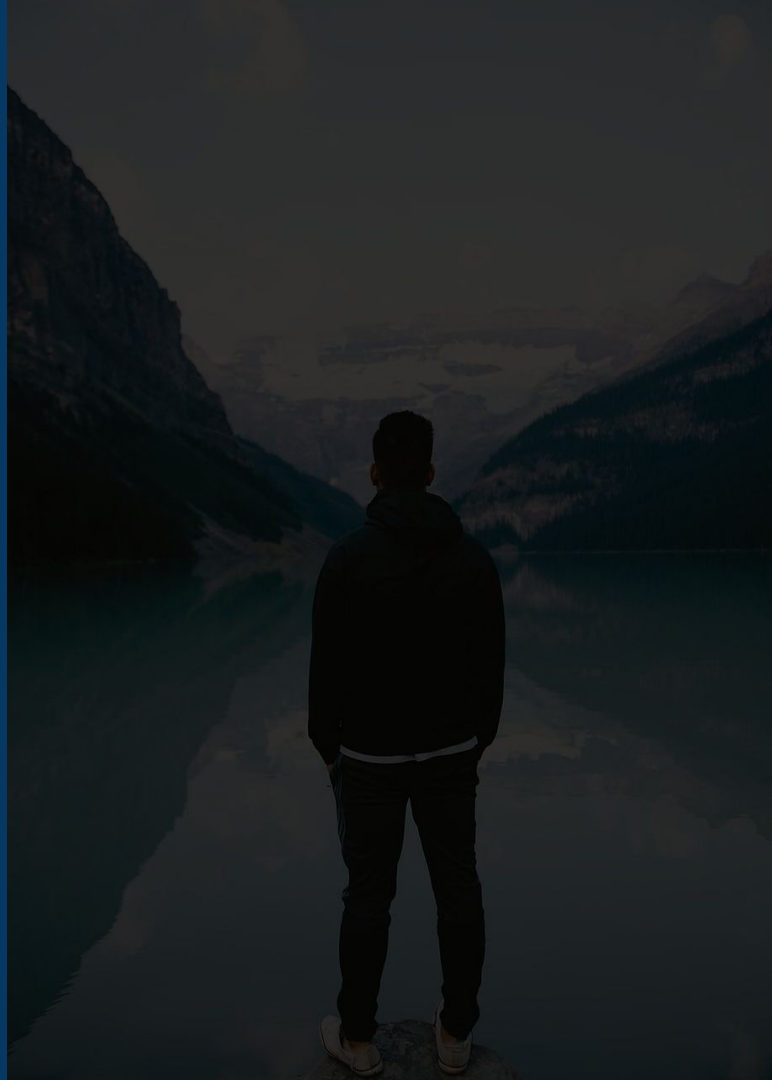
How do we solve this problem?

ThinkFlow is a lightweight visual low code prototyping software system that can be used on any hardware

It allows organisations to trial multiple iterations of a system as rapidly as possible to enable early optimisation

It allows non-programmers to understand and contribute to the software development process

Combined with our decades of product development experience, ThinkFlow helps de-risk your product development cycle



Benefits...

ThinkFlow allows the use of meaningful data from the start of a project

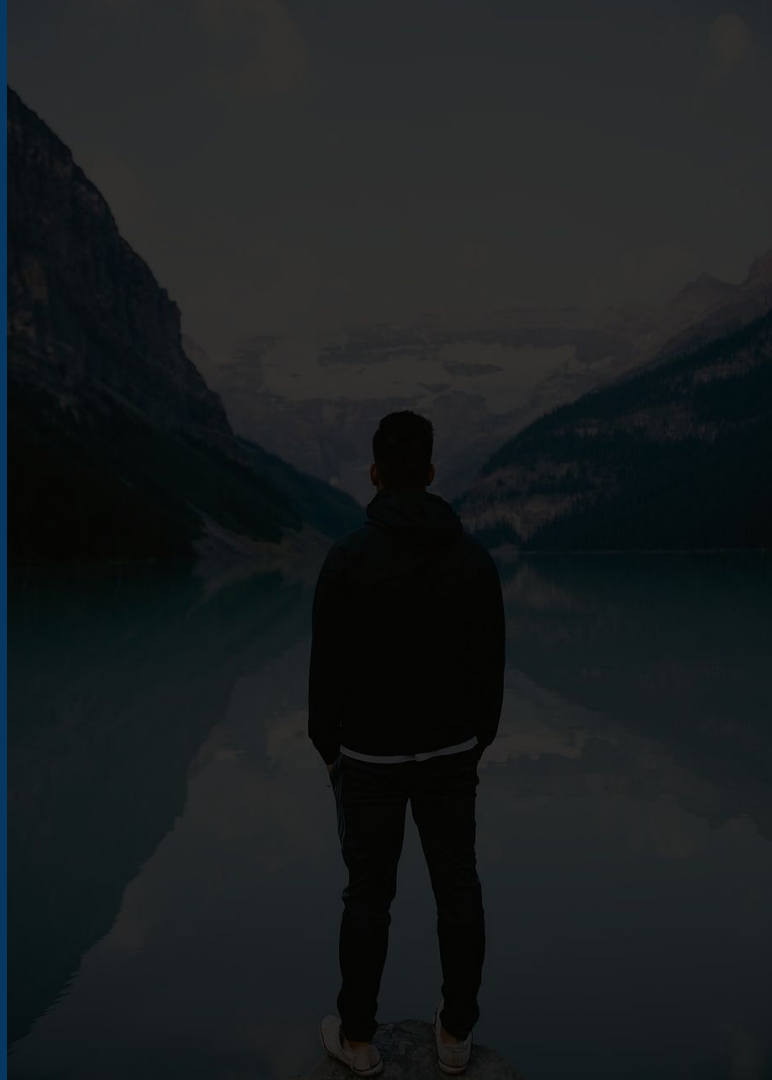
Missing system requirement and errors can be spotted at the very beginning of the development cycle

The product development process can be dramatically sped up

Multiple iterations and features can be tested

Cost and risk of product failure is dramatically reduced

New prototype platforms can be ready to go in minutes



The research...

- Inaccurate user requirements consume up to 80% of project rework costs

- Nearly half of discovered defects originate as requirement errors

- Fixing errors once in production can cost 100 times initial cost

- Up to 45 percent of delivered software product features are never used

When dealing with emerging technologies that use Machine Learning and Ai, the challenges are even harder in cases where business executives aren't fully conversant with these techniques

Relative Cost to Correct a User Product or System Requirement Error

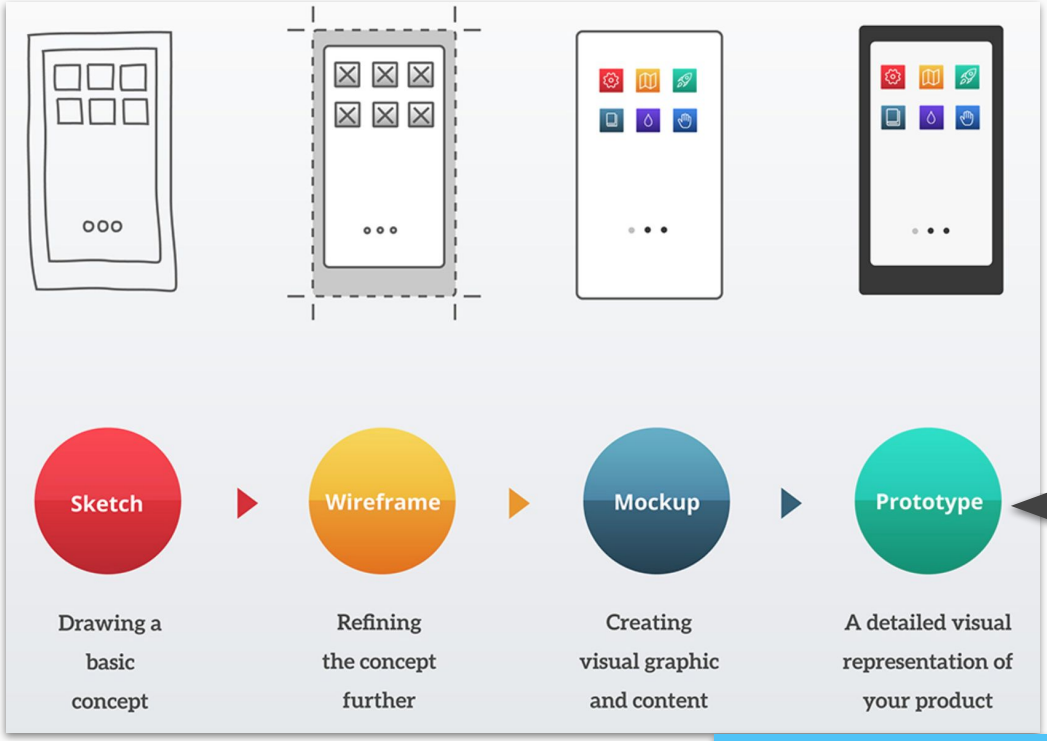
Stage Error Is Discovered	Relative Cost to Correct
User Product and System Requirements Development	x 1
Design	x 2 - 3
Construction	x 5 - 10
System or Acceptance Test	x 8 - 20
Operation	x 68 - 110

Why graphical mockups don't necessarily solve this problem...

Mockups are a fantastic user experience design tool, but they have no backend, and no data flow

In other words, they fall short of providing a real experience of the power of an application - especially if that application is all about data...

Prototyping - from a UX designer's viewpoint…



A visual representation is not a prototype...

Why ThinkFlow is different...

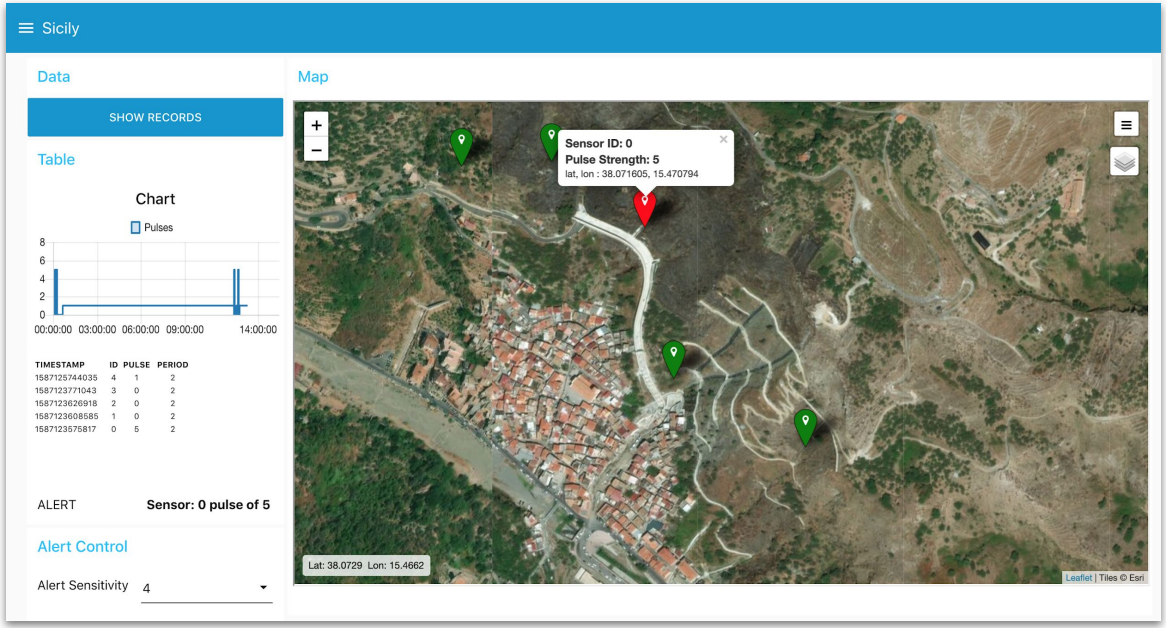
ThinkFlow fills in a critical gap in the product development process:

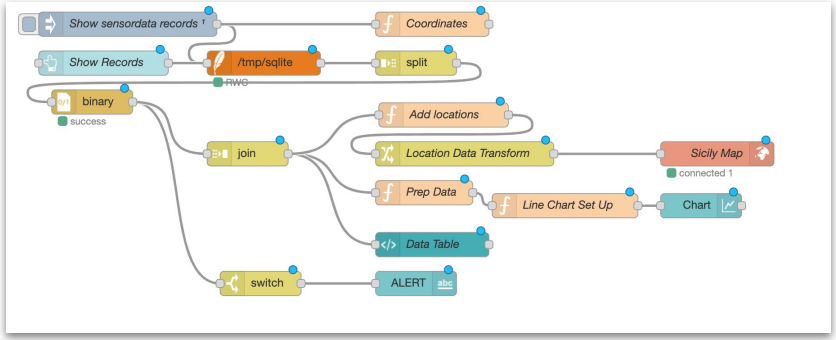
It allows *working* prototype applications with meaningful data from day one

Users can experience an application prototype which they can genuinely assess

The product team can elicit faster, higher quality and more accurate feedback

Build engineers then have a fully working model to see and experience the precise system and user requirements from the very beginning of the product cycle





Sicily Seismic Activity Prototype

See next slide for details

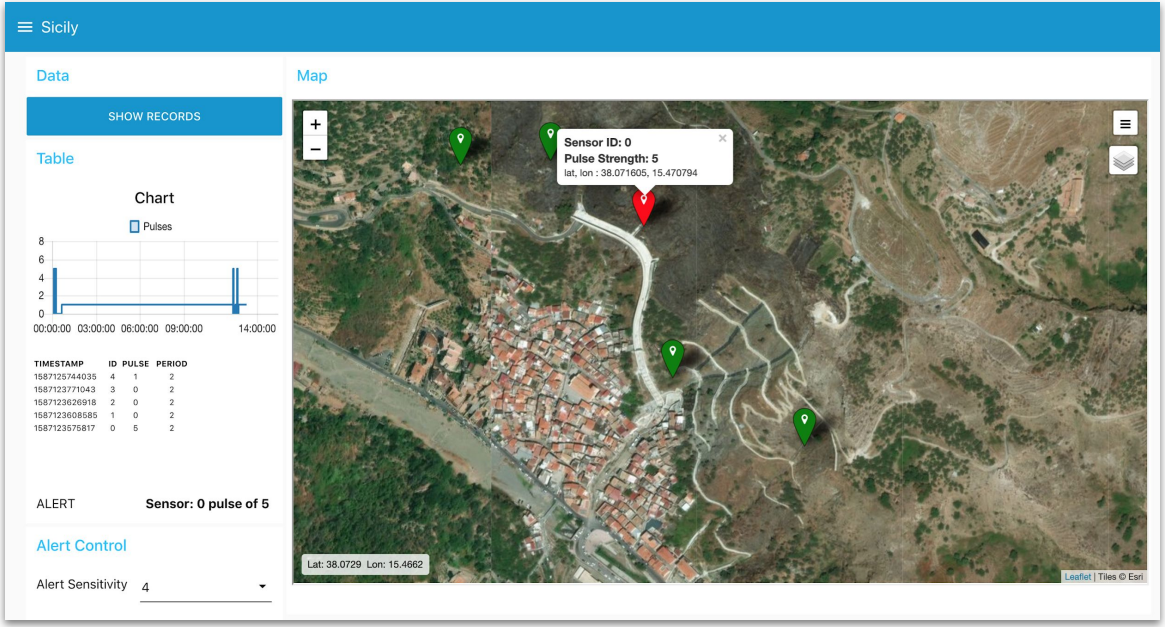
Use Case Example: *Prototype Earthquake Early Warning System*

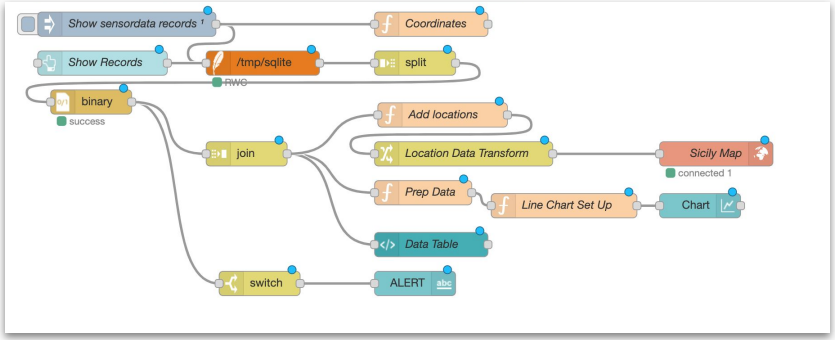
What does this example do?

- Collects data from IOT seismographs
- Feeds into a lightweight database
- Transforms binary application data to JSON
- Maps geolocation data and seismic activity to a real time map in Sicily
- Sends warnings to secure messaging API

Background

This prototype was designed in less than half a day for an EU project to demonstrate the feasibility of a sustainable low-code approach to data aggregation for a village at severe risk from mudslides on Mt Etna

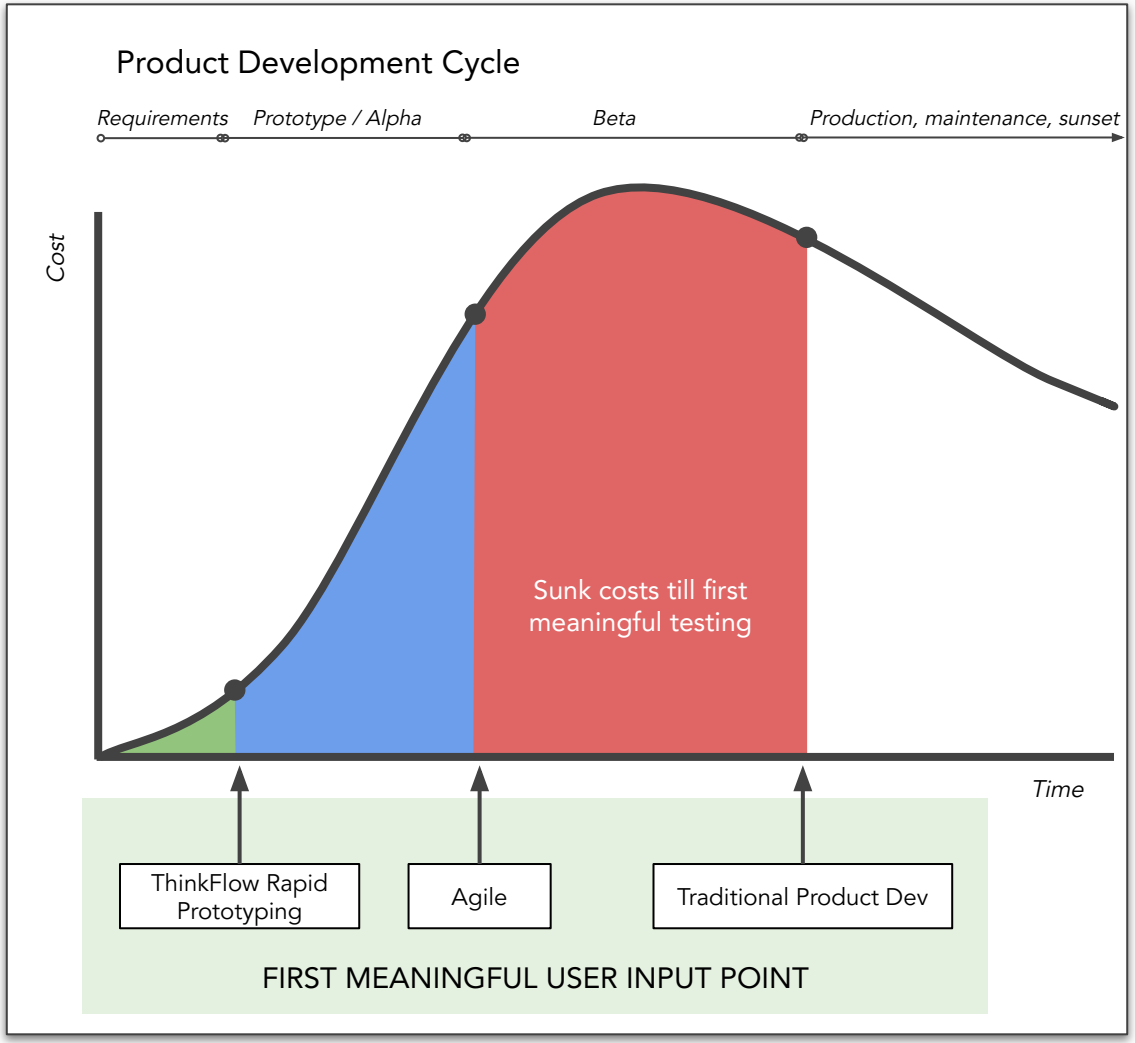




ThinkFlow
Rapid Prototyping

Our Rapid Prototyping solution and Value Analysis Process allows companies to conduct ***first meaningful tests*** of working applications in hours or days, rather than weeks or months.

This de-risks the product development cycle and reduces later crises caused by failure to analyse user requirements accurately.

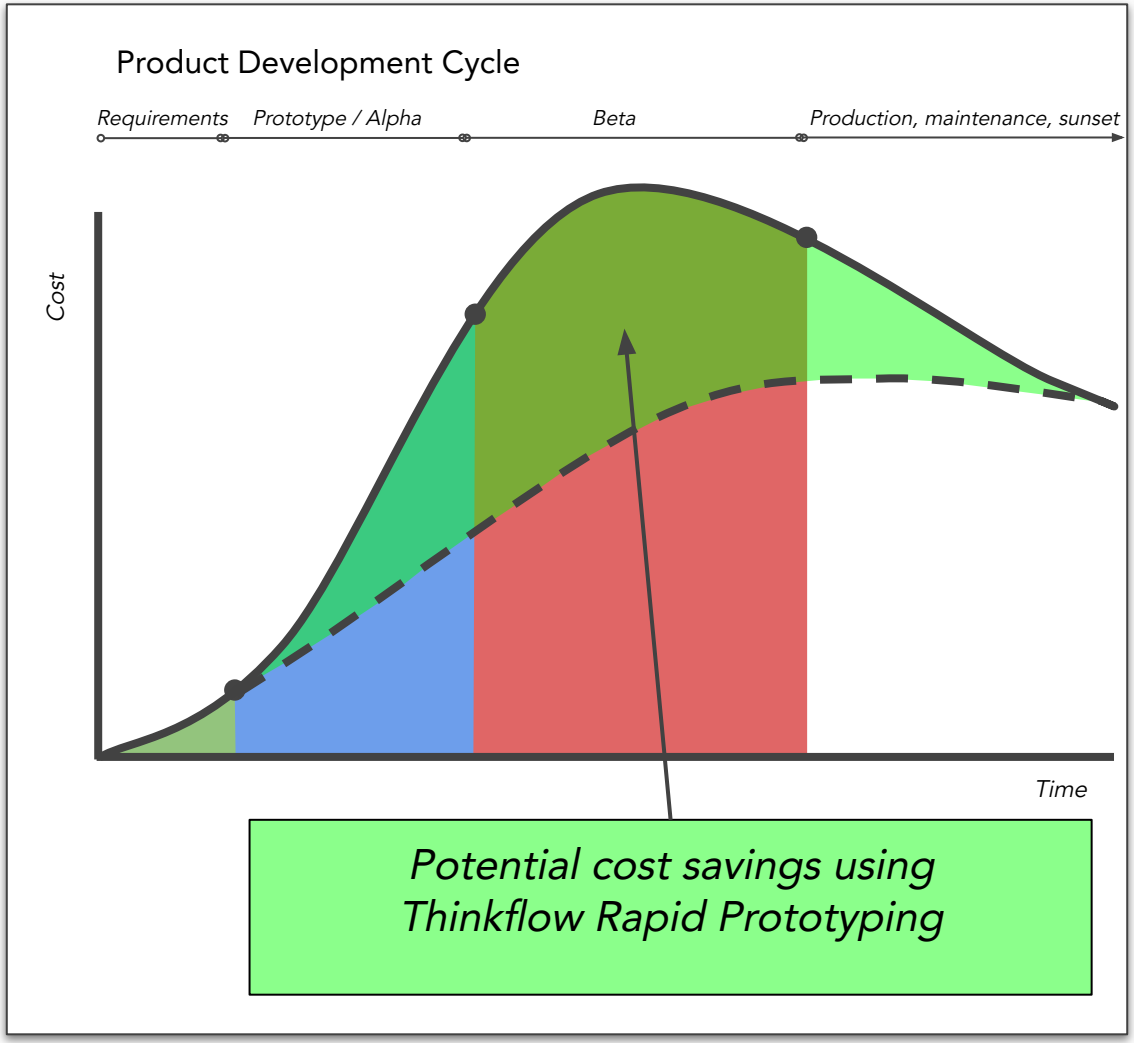


ThinkFlow
Rapid Prototyping

ThinkFlow Rapid Prototyping allows better user requirement testing at an earlier stage in the cycle

Optionally, use our Value Analysis methodology to define user requirements so only desired feature sets are built

- Build costs are reduced
- Cost of fixing errors in production is reduced
- Speed to market increases



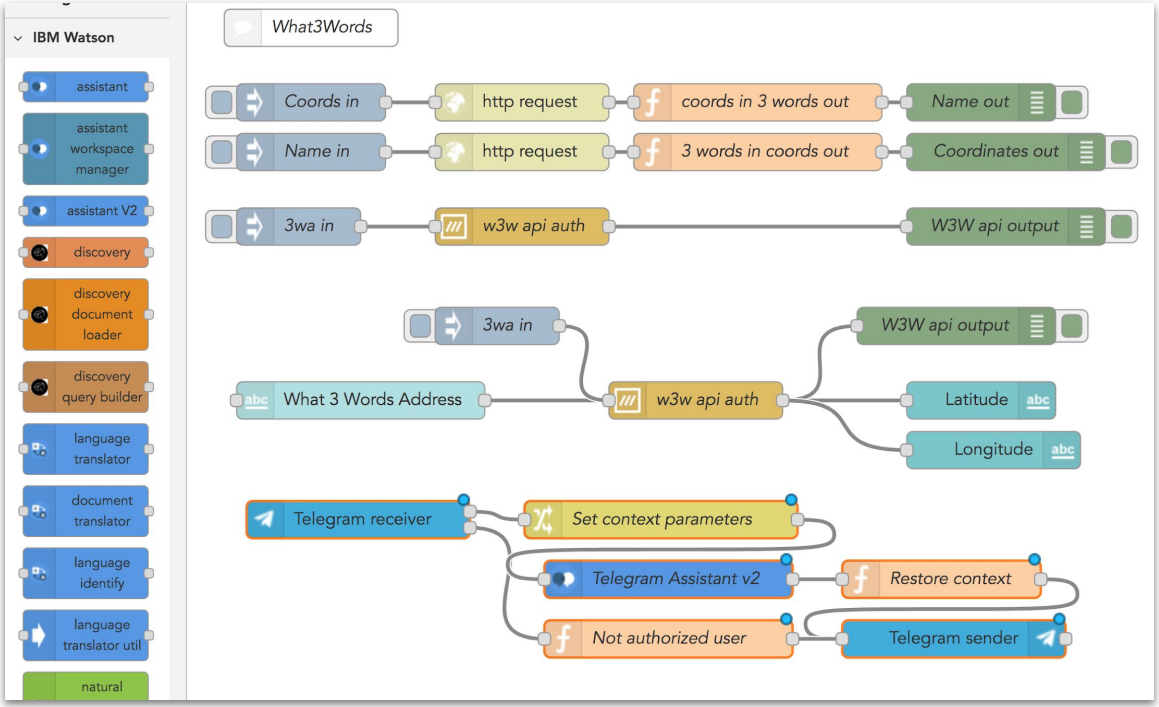
ThinkFlow in action

ThinkFlow is a low-code platform for visual flow based programming and data transformation.

It is particularly suitable for IOT, ML, AI and Data API access applications.

It is built on a highly scalable, secure cluster architecture which allows instantaneous deployment and secure hosting in the cloud or on-premise

Note: The image on the right looks like a flow chart… but it is, in fact, the application code



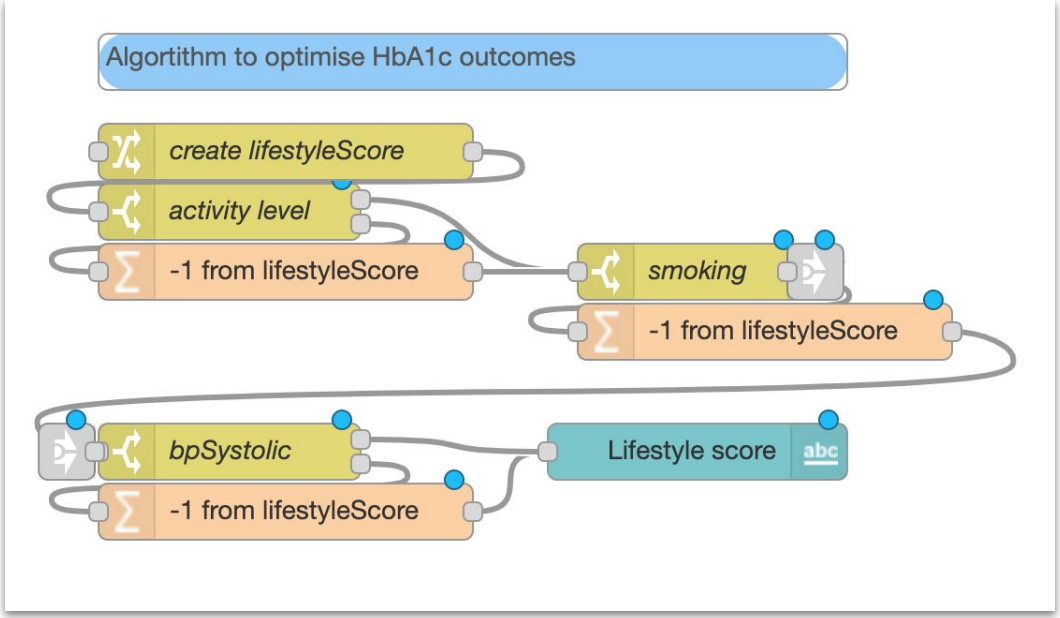
Example application: This is the complete backend code required to provide a set of Geolocation coordinates to a message sent to a Chatbot Assistant.

Time to build working prototype: less than two hours, including research.

ThinkFlow as an explainer

Non-programmers can easily build logic and algorithms which can be used by Build Developers as a working example of user requirements

This provides a way for non-technical subject matter experts to *directly* contribute to the Value Analysis phase of the product development cycle



Simple algorithm to create lifestyle score for healthtech application

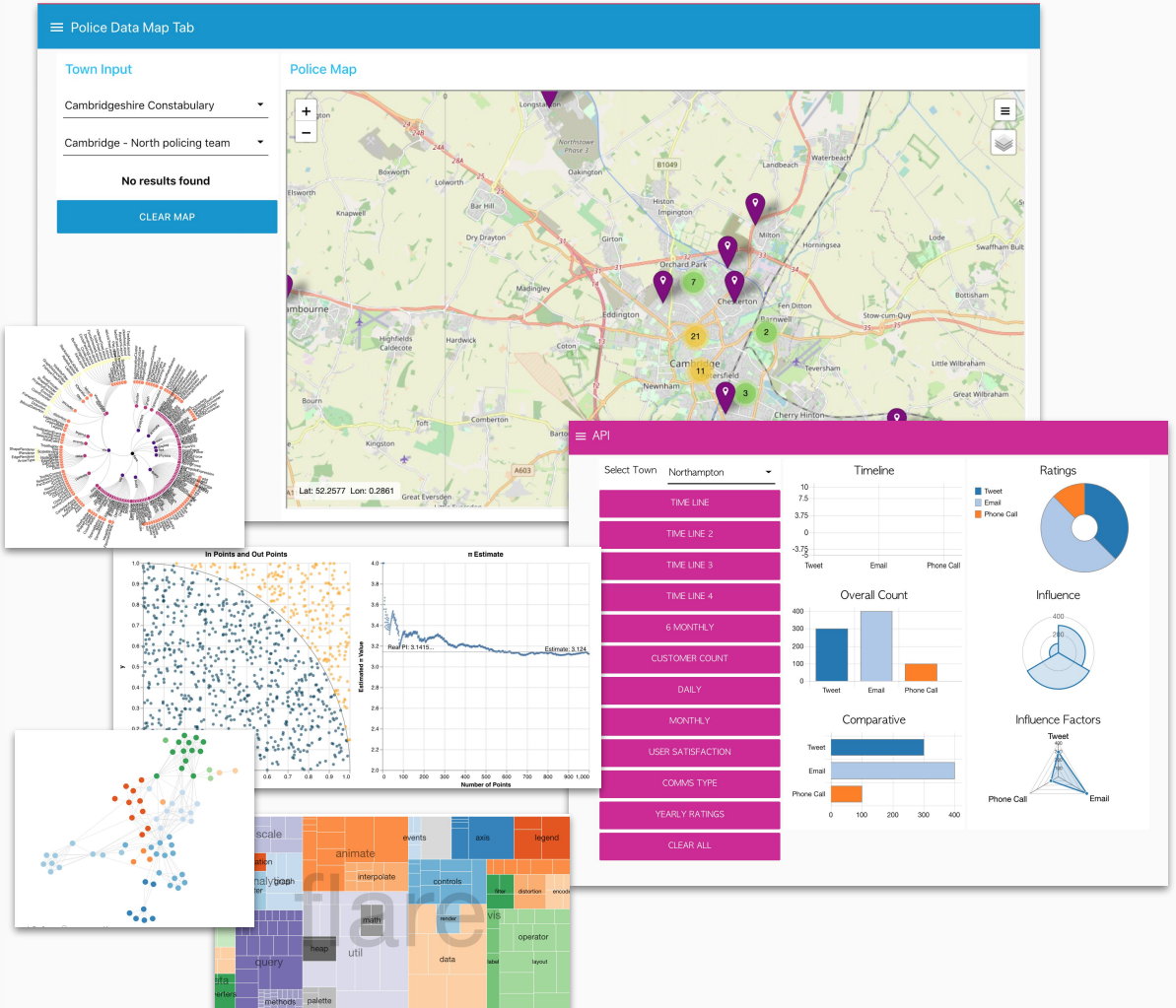
Rapid Interface Build

Usable interfaces can be created within minutes to rapidly test functionality - at very low cost

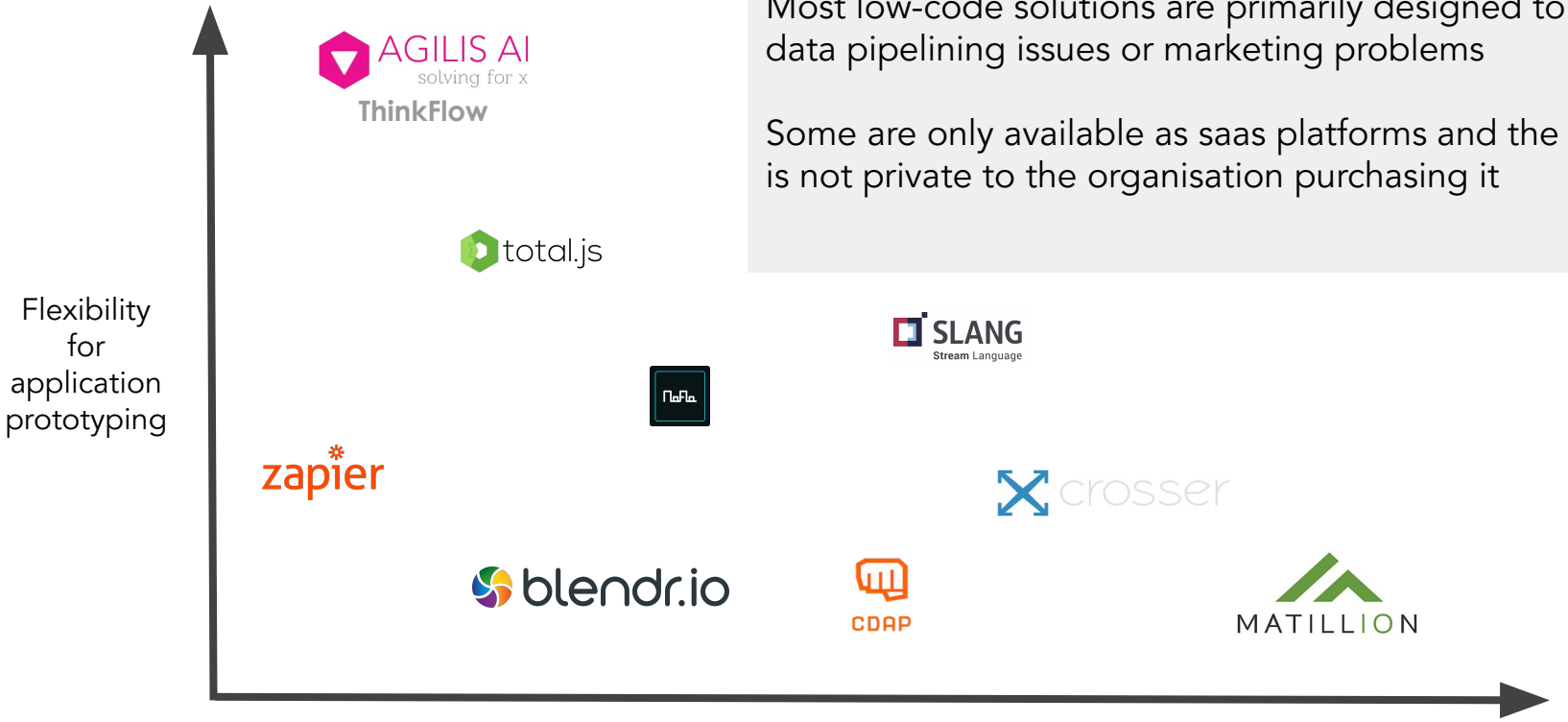
The backend low code toolset brings data into the interface via APIs, CSV, Databases, Spreadsheets, JSON or text files

A wide range of user interface components, dashboard and visualisation tools then allow an exceptionally fast working prototype to be built - a matter of hours, or even minutes

Live mapping interface for API data



The Low Code Landscape



Most low-code solutions are primarily designed to solve data pipelining issues or marketing problems

Some are only available as saas platforms and the data is not private to the organisation purchasing it

Summary

ThinkFlow allows organisations to very quickly build low cost, low code prototypes with meaningful data

Outcomes:

- Reduced risk
- Users get what they need and want
- Faster speed to market
- Lower development cost

Applications:

- Artificial Intelligence systems
- Natural Language Processing
- Machine Learning
- Internet of Things
- Smart Cities
- Data pipelining

Industry Areas

Industrial IOT, Supply Chain, Logistics, Industry 4.0, Connected Devices, Transport and Driving Applications, Plant Maintenance, Agritech, Public Safety, Energy and Decarbonisation, Marketing, Research, Data Science, Backend of Applications, Forecasting, Weather, Mapping, Data Visualisation and Dashboarding, Software Integration, Sensor Fusion and Data Pipelining, etc...

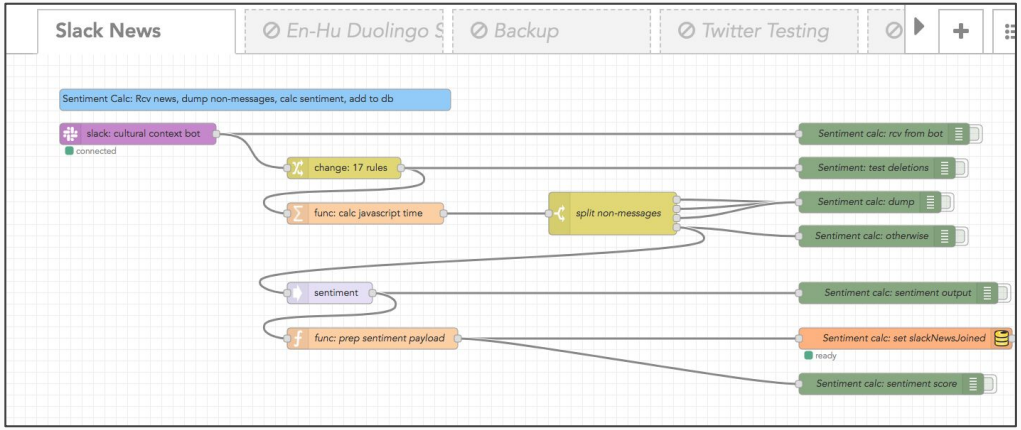
Further Examples

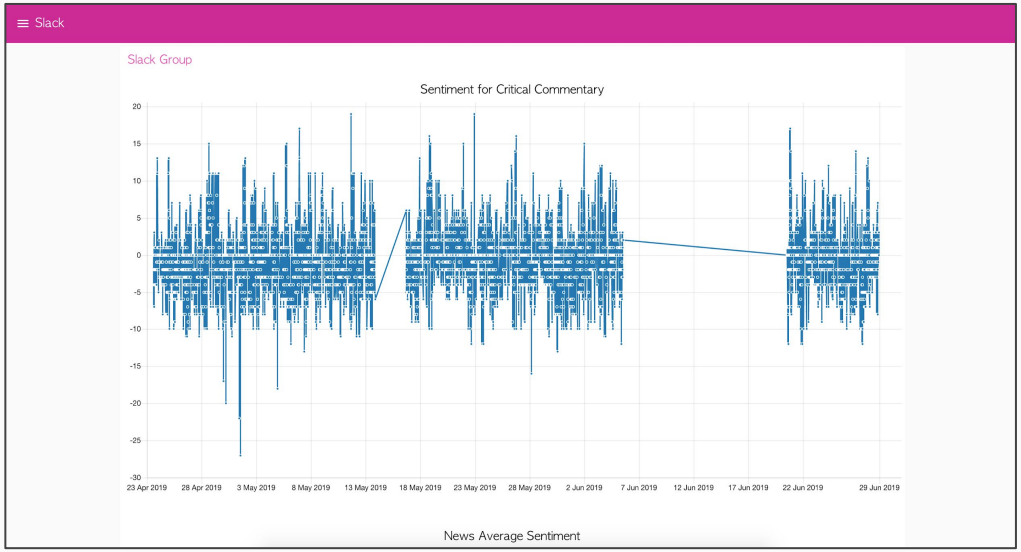
News Sentiment Analysis

- Collects data from a Slack channel news feed
- Analyses if words used are Positive, Negative or Neutral
- Stores the result in a Real Time database
- Data is formatted and exported to a dashboard interface
- Shows sentiment across time

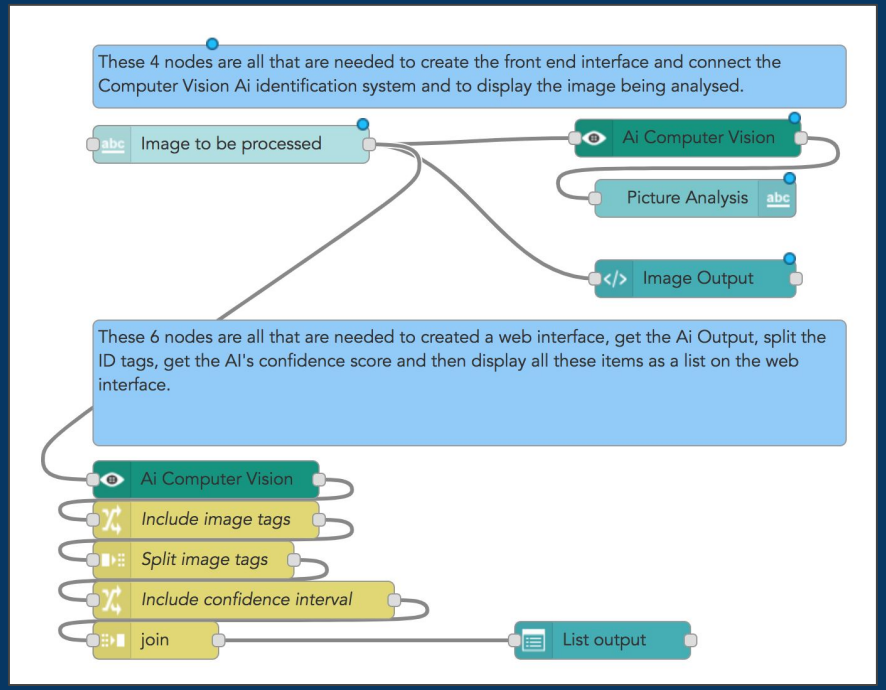
Other applications

- Sentiment analysis of corporate communications
- Storage of company information streams
- Business Intelligence Dashboarding



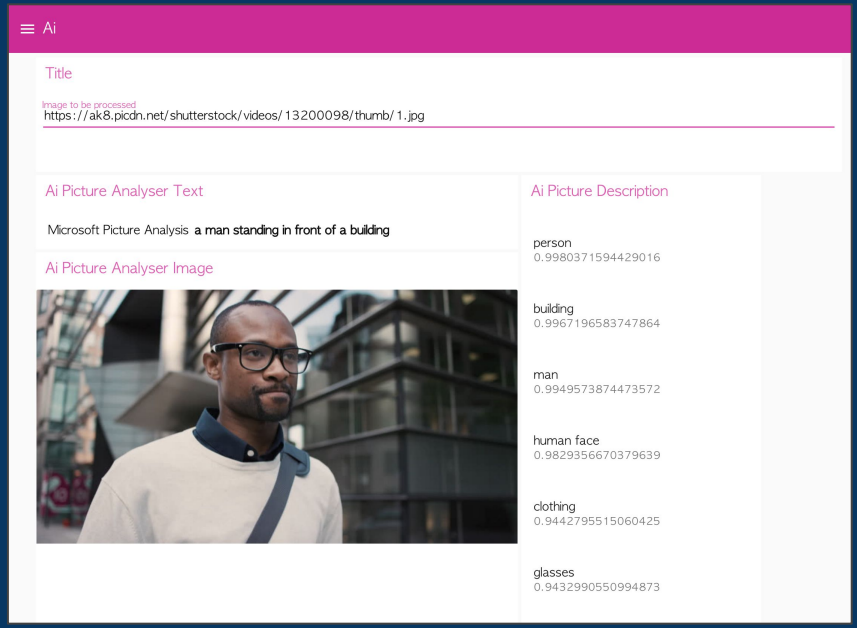


Vision Machine Learning Analysis



10 programme blocks to:

- Creates a web interface dashboard
- Connects to Vision ML system
- Analyses the image
- Adds Machine Learning confidence rankings



Other applications

- Use with Google ML and AI, IBM Watson, Microsoft Cognitive Services
- Use as Ai as a backend microservice

API Data transformation and Geo-Mapping