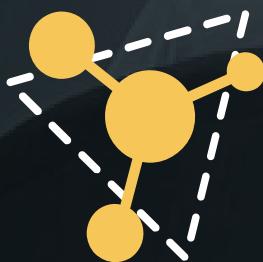


# Datum Brain's Company Overview

*We provide software development,  
design services, & business consultancy  
to enterprises operating locally & globally.*

*Doing IT right is what we do!*



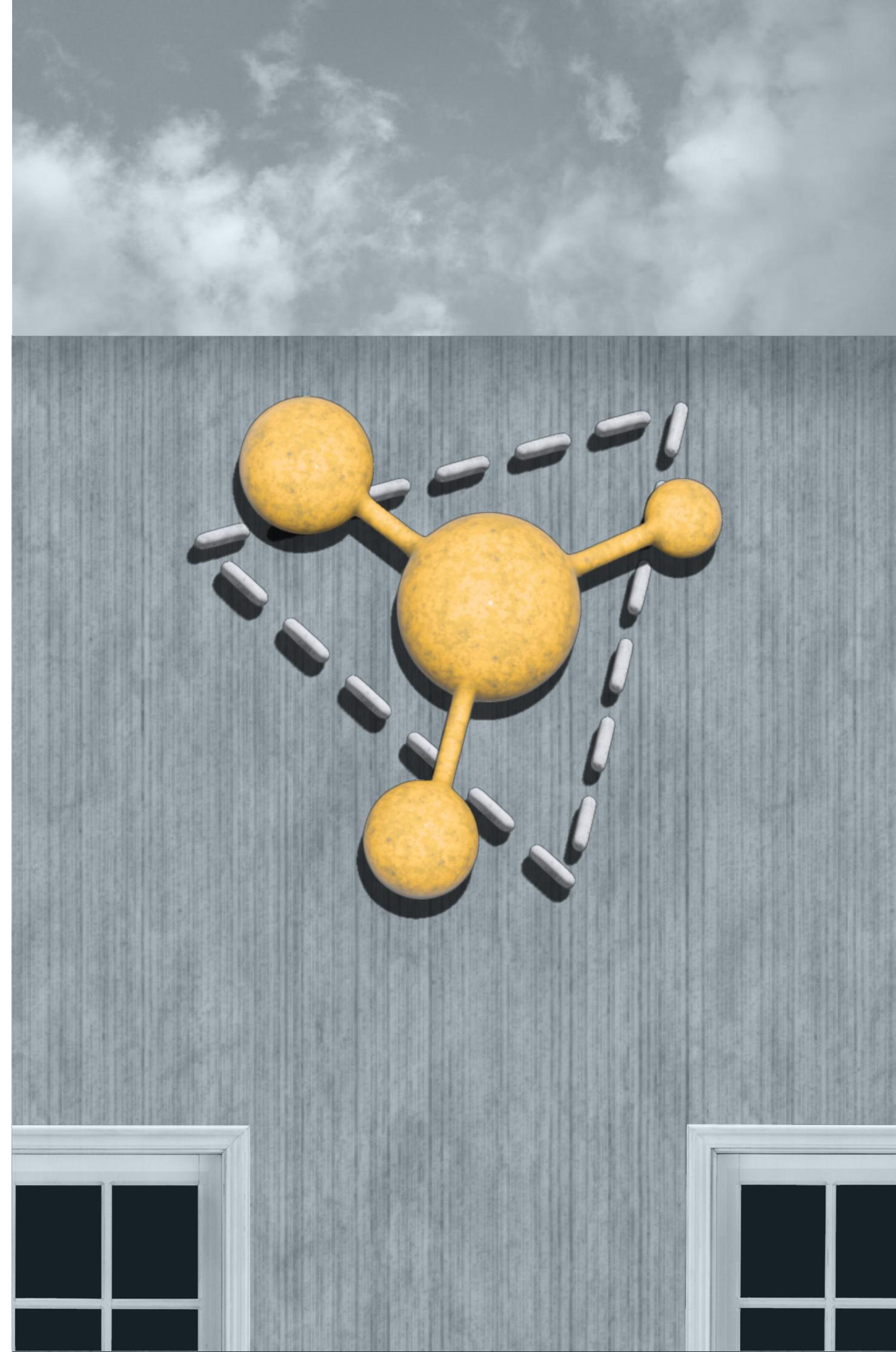
#lifeatDB



# About Datum Brain

*Datum Brain was founded in July 2016 and is now a global IT service provider.*

*Over the past years, we have developed a professional team of software devs, data scientists, and designers who excel in their domain.*





# Our Approach

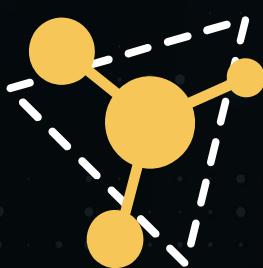
A large, semi-transparent graphic element in the background consists of several overlapping organic shapes: a dark grey blob on the left, a white blob behind it, and a bright yellow checkmark shape at the bottom. All these shapes are set against a light grey background with a subtle, faint network of geometric lines.

*The core focal point of our approach is fueling the growth of your business by giving our best.*

*We aspire to see your company's success by delivering top-notch products and services.*

# Datum Brain's Portfolio

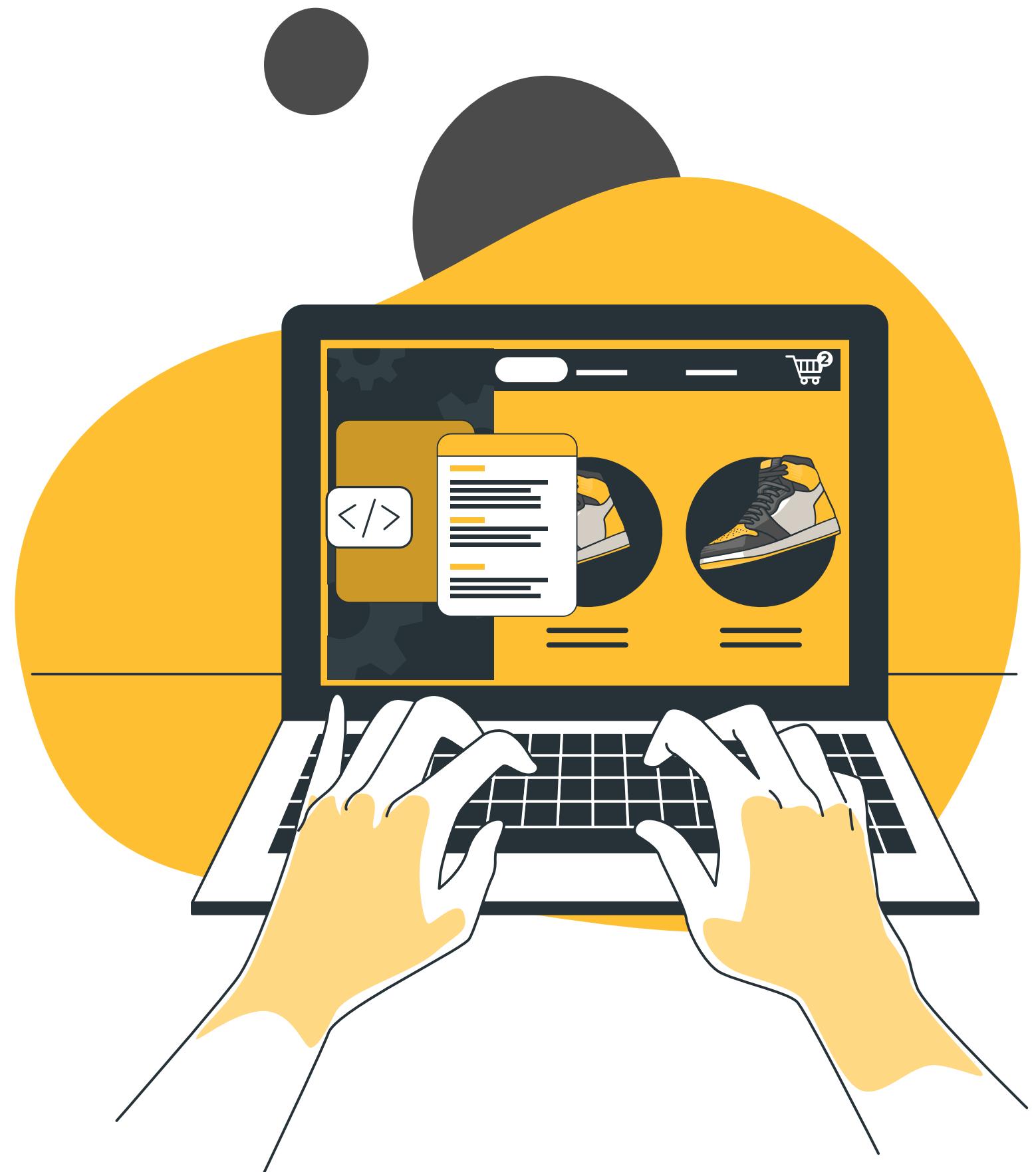
*Let's see how it has helped  
its clients achieve their vision  
of digitalization!*



# Nike's Big Data

Not all problems are big data problems. Developers writing big data ETLs should really understand the nature of data first and use Spark the right way.

## Tech Stack

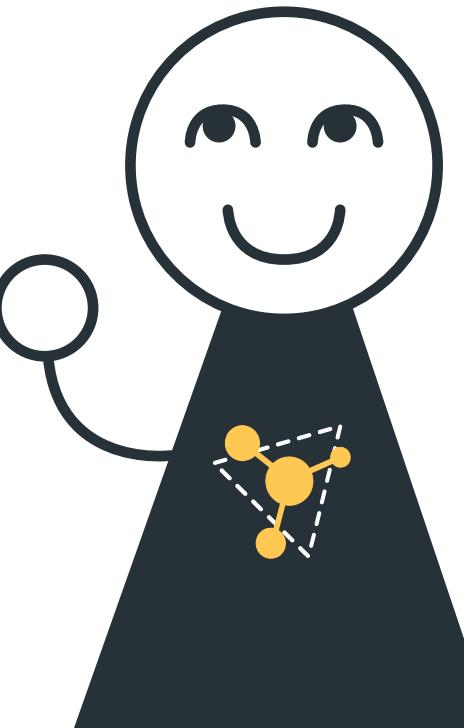


“We should implement a Big Data solution”

says every other tech company

But do you actually need it? Only a few ponder

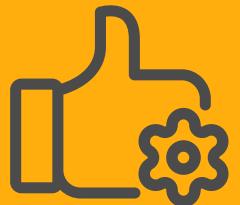
Hi from the latter ones!



# We worked on...



We worked on creating a recommendation engine for our client that grabbed the behavioral approach of the user in order to show and engage the user to use their platform to increase sales.



**Recommendation Engine**

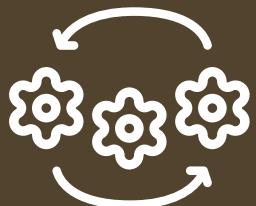


**Surpassing goals**

During innovation phase we encountered some techniques that were used wrongly in order to ingest 'Big Data'.

The problem took 22 hours to run over the cluster of 15 nodes in Azure. We steered our efforts towards minimizing the processing time. End result? 22 hours dropped to mere 6 minutes.

**Optimized Processors**



**Cost Effectiveness**

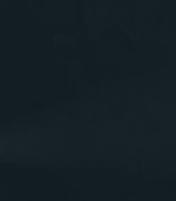


Another notable thing is, it wasn't actually a client's requirement, we had to do this by managing within our communicated time frame along with the tasks assigned by the client, and we did it!

Longer processing times cost thousands of dollars to the client and which was obviously not suitable and wasn't a good practice for sure!

**Datum Brain – The Cost Savers, to the rescue!**

We used hashmaps and simple conventional dynamic programming algorithms in order to save cloud service bills.



**It was learned that not every kind of  
data needs a solution for scalability,  
just thinking of an optimal code  
can save the day.**

# Scalable Web Crawler

Web query engine that has the capacity to query up to 330404 dynamic pages per hour on 300 cores when scaled up.

## Tech Stack



The client hired us to

Develop a customized web crawler that queried data out of several web pages with different data types



**Every website had different data representation methods however,**

A cartoon illustration of a web browser window. The window has a black header bar with three dots. The main content area is white. On the left, there is a yellow button with the letters "We". To its right, another yellow button contains the text "managed to develop a Web Crawler". Below these buttons, there is a bulleted list of three items, each preceded by a yellow checkmark icon:

- ✓ works regardless of different data types
- ✓ efficient in extracting
- ✓ readily available for usage

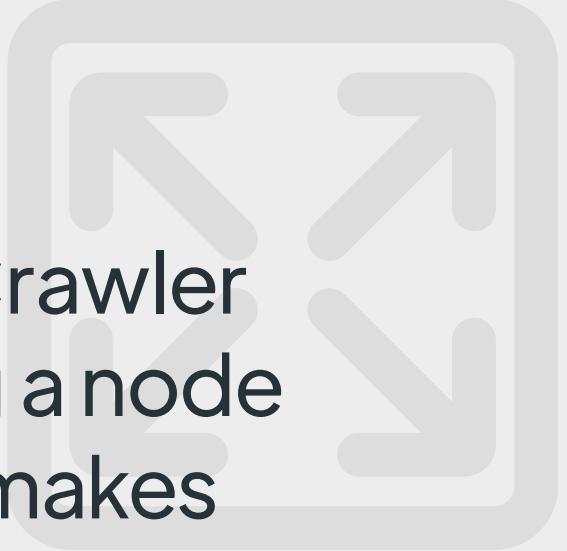
On the right side of the browser window, there is a cartoon character with a large head, smiling, wearing a dark suit jacket over a white shirt. A small yellow network icon is visible near their feet.

# We worked on...



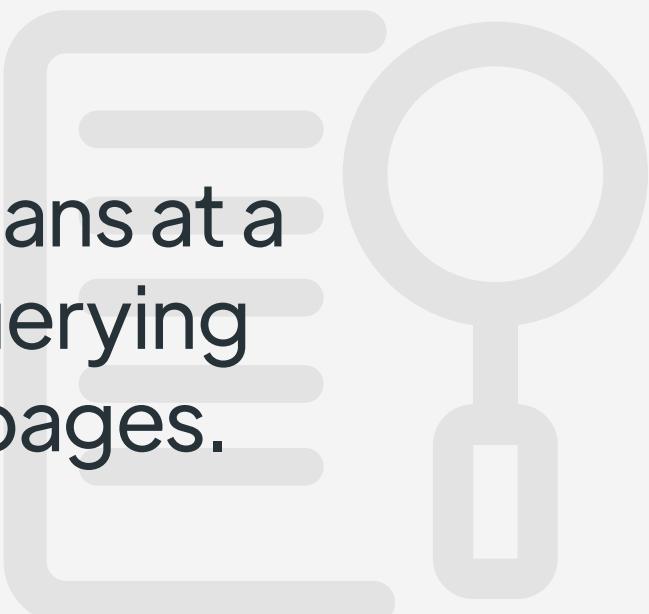
## Scability

It is a Scalable Web Crawler that scales up adding a node horizontally and this makes it stand out from other web crawlers.



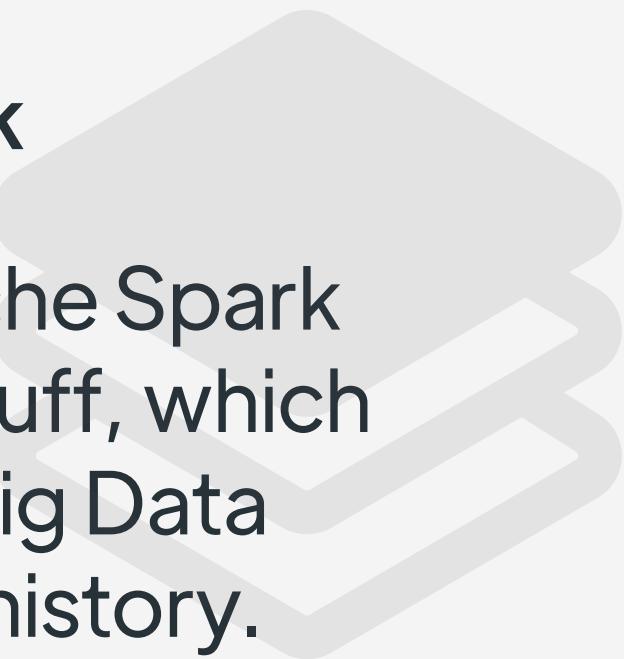
## Dynamic Pages

The web crawler scans at a speed record of querying 330404 dynamic pages.



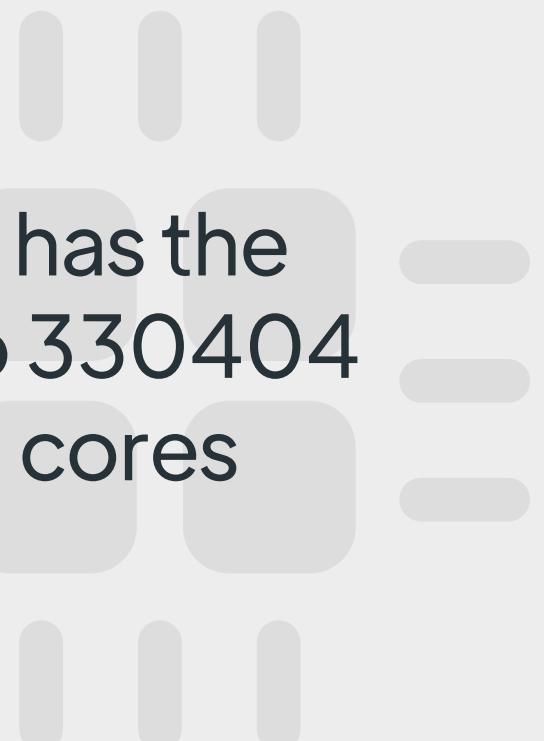
## Coherent Tech-stack

It runs on top of Apache Spark leveraging SpookyStuff, which is one of the fastest Big Data collection engines in history.



## Multi-Cores

Web query engine that has the capacity to query up to 330404 pages per hour on 300 cores when scaled up.



Volume

13,065,908

65 Day Avg Vol

19,773,037

4 Day Avg Vol

56,323,62,00



1D

5D

1M

3M

YTD

1Y

3Y



datumBRAIN



We understand your data better  
than anyone!

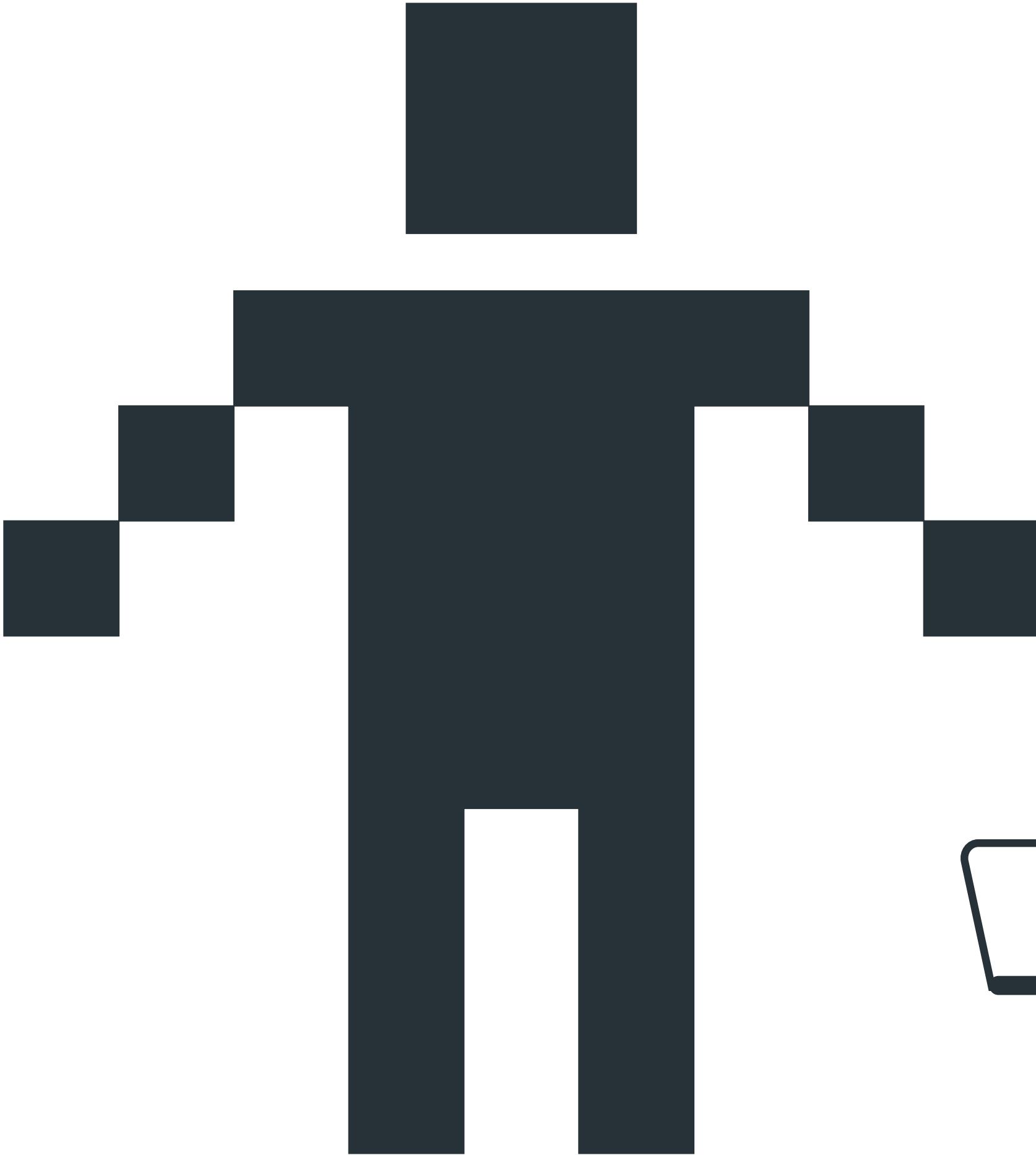


# Web Driver, A Human-like crawler

Anti-bot crawler that acts as a human with the ability to solve all kinds of riddles like captcha or custom questions. Rotates IP, if blocked by a site. Slows down if the website feels the crawl is too frequent.

## Tech Stack





We developed an intelligent Anti-Bot Crawler inspired by human behavior. This Human-Like Web Crawler is able to solve all sorts of tricky riddles and even custom questions.





# One of its unique feature is...



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That it rotates the IP when a website blocks it due to security constraints.

We programmed this Anti-Bot crawler in a way that it opts for a passive approach when the website detects that the crawling process is recurring.





We are technology go-getters with  
a dynamic approach and confident  
mindset.



CONFIDENTIAL



# Video Session Recording System

Online exams proctoring solutions

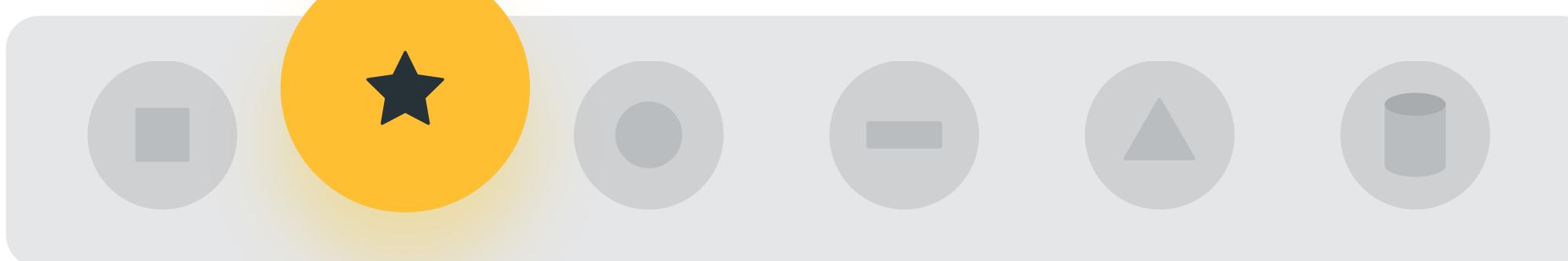
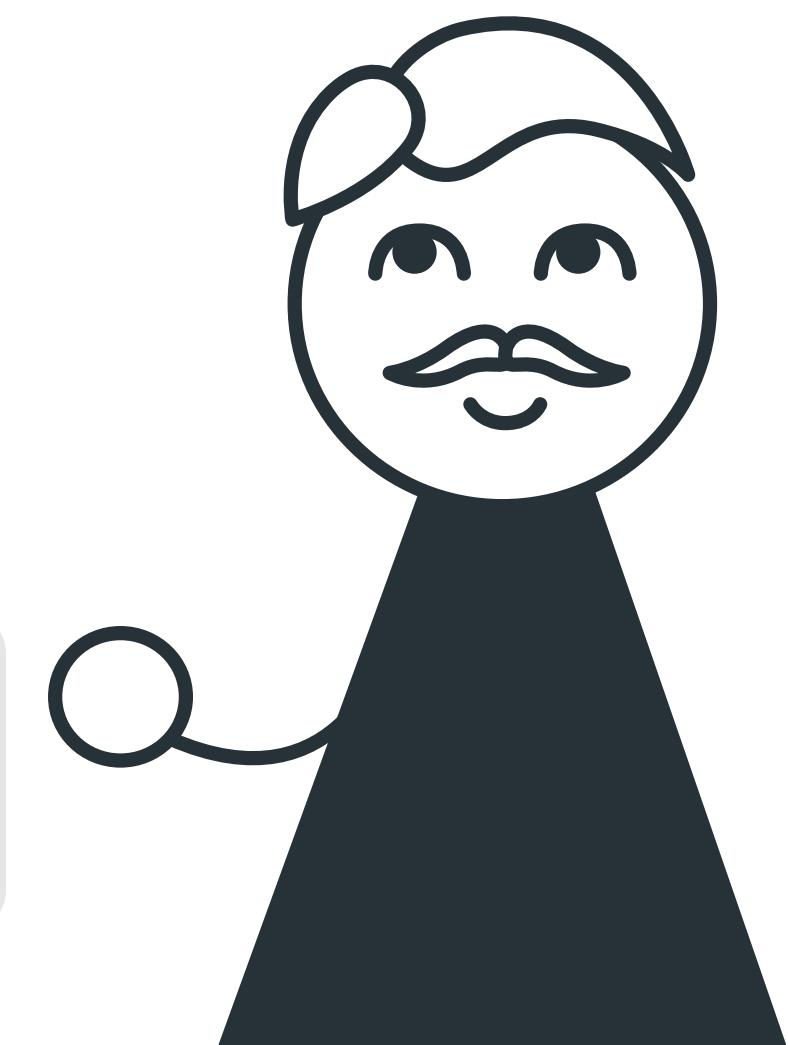
## Tech Stack





## Surveillance at hand

A system was developed for our client to record the activities undertaken during test sessions for close monitoring and assessment.



# We worked on...



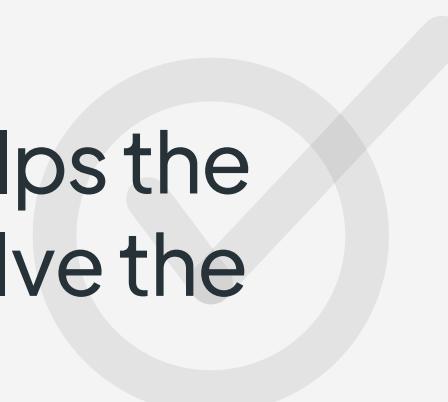
## Inspection/Proctoring

This service facilitates the proctor to inspect every statistical aspect of the test sessions being held.



## Issues resolution

This keen invigilation helps the technical teams to resolve the issue quickly.



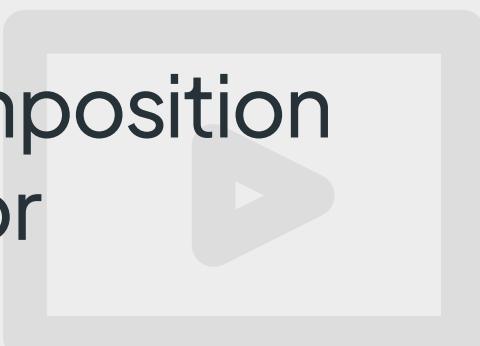
## Lag identification

The system helped proctors to identify lagging and prepared a log to keep a check on it.



## Final composition

Eventually, the final composition can be accessed later for auditing purposes.





We successfully delivered an optimal solution that has modernized the client's platform.

# Reservations & Scheduling as a Service

Resilient exams proctoring & scheduling system provided as a service which enables organizations to solve their pre-exam use cases (scheduling/rescheduling etc)

## Tech Stack

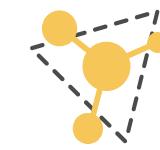




Datum Brain collaborated with PSI as their software development team to develop a remote scrutinized system.



# We developed with a...



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## Broader Vision

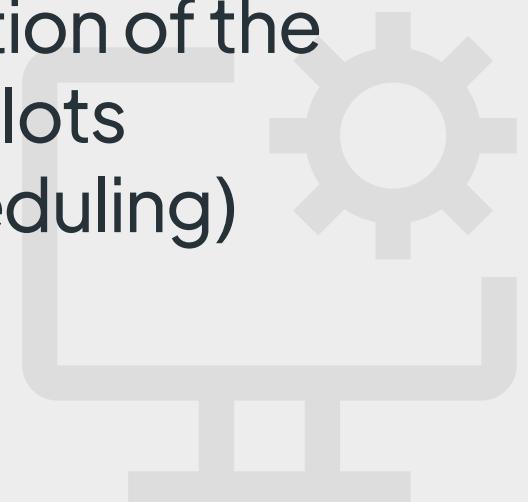
The reservations and scheduling systems were built with broader vision so they can be well utilized globally by businesses for their relevant use cases.



## Administrative approach

PSI uses this system for administrative purposes to manage its exam proctoring process. The core features of this system includes:

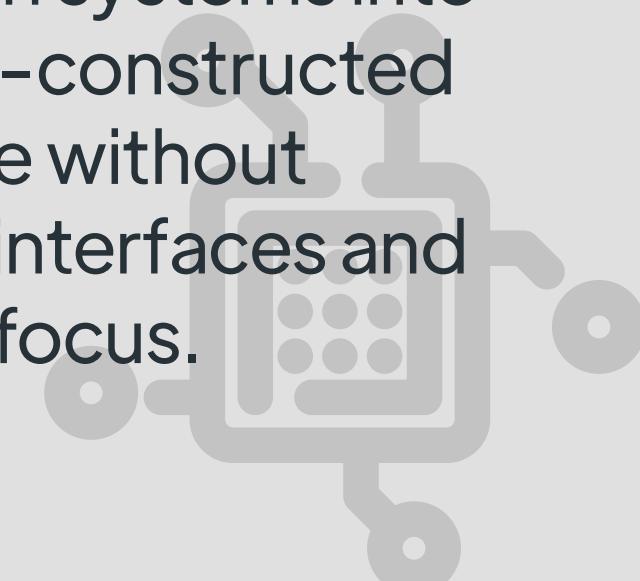
- Finding available locations
- Selection of the slots (Scheduling)
- Modification of the booked slots (Re-scheduling)



## Ground up method

We also conducted the development of APIs to expose the core functionality of the system to be programmatically accessible by clients.

This was done purposely so clients can integrate their own systems into this well-constructed software without varying interfaces and shifting focus.





Datum Brain's support enabled the client to launch their projects ahead of time.

# Polymer DLP – Enterprise App

No-Code Data Loss Prevention (DLP). Identify, catalog and limit access (based on policies defined by you) to what you classify as personally identifiable information (PIIs) for SaaS apps.

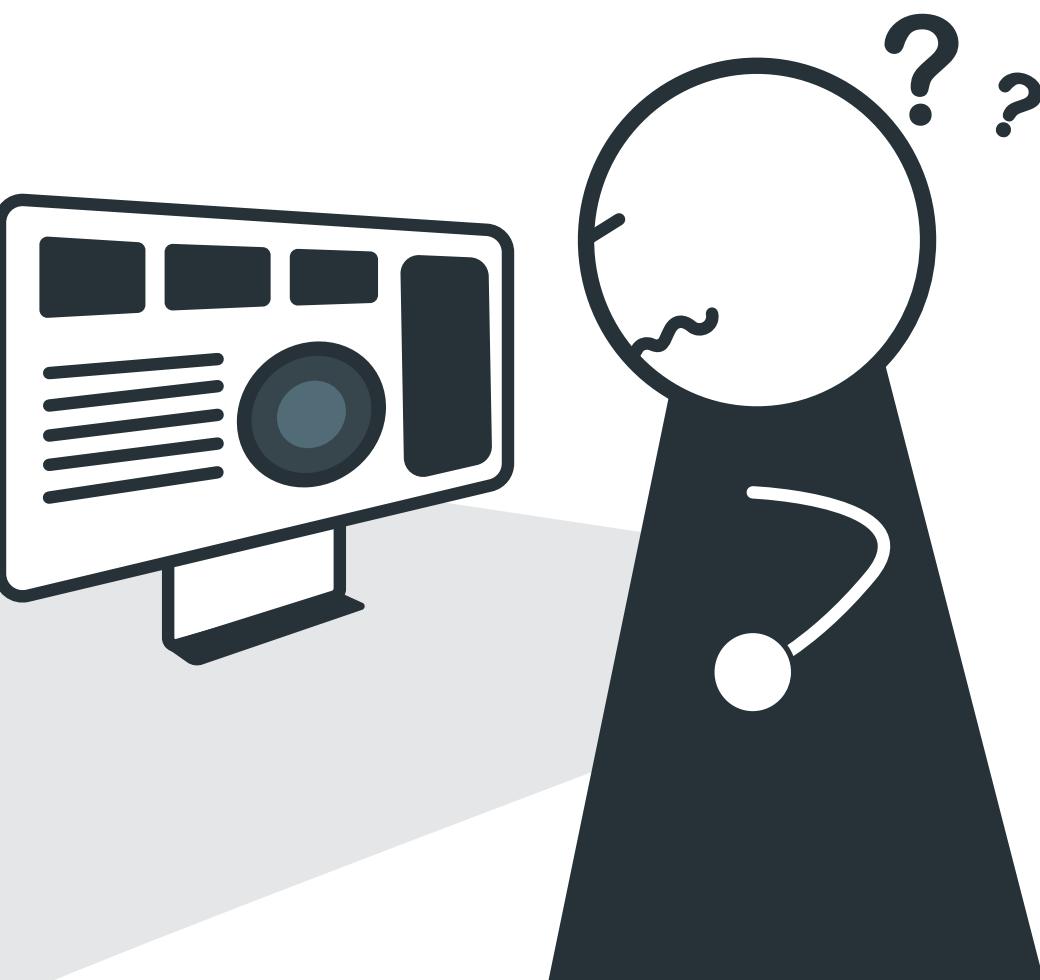
## Tech Stack



With huge data floating over the wire, compliance becomes the top priority for organizations around the globe.

Data security is a delicate matter to deal with when businesses need to share data within or outside the firm.

A manual approach for reviewing data before sharing it with other entities is indeed agonizing.

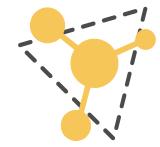


We tackled the problem for our client by developing this application to handle this data chaos. The developed system was based on No-Code Data Loss Prevention that identifies, catalogs and limits access to sensitive data which is classified as personally identifiable information (PIIs) for SaaS apps.





# We helped polymer clients...



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simplify the tedious process by allowing them to:

## Define criticality

To easily define what they classify as critical data.



## Manage reactions

To define the reaction when something critical is found (warn/redact) in shared sources (text, Docx, CSV, pdf, images, etc) across SaaS apps (Slack, Github, Google Drive, Zendesk, etc)

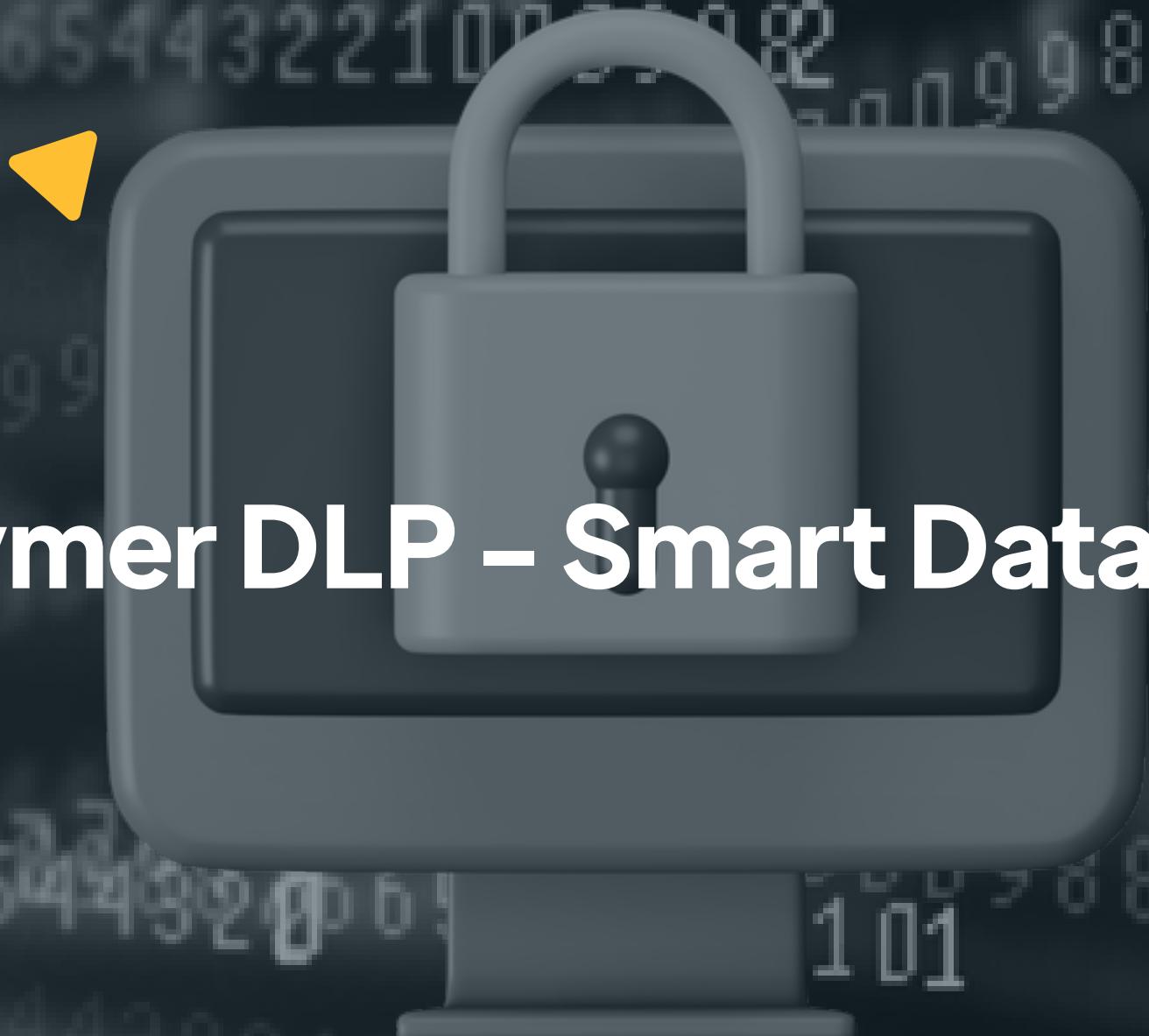


## Make analysis

To analyze and understand the sharing of sensitive data among the organization.



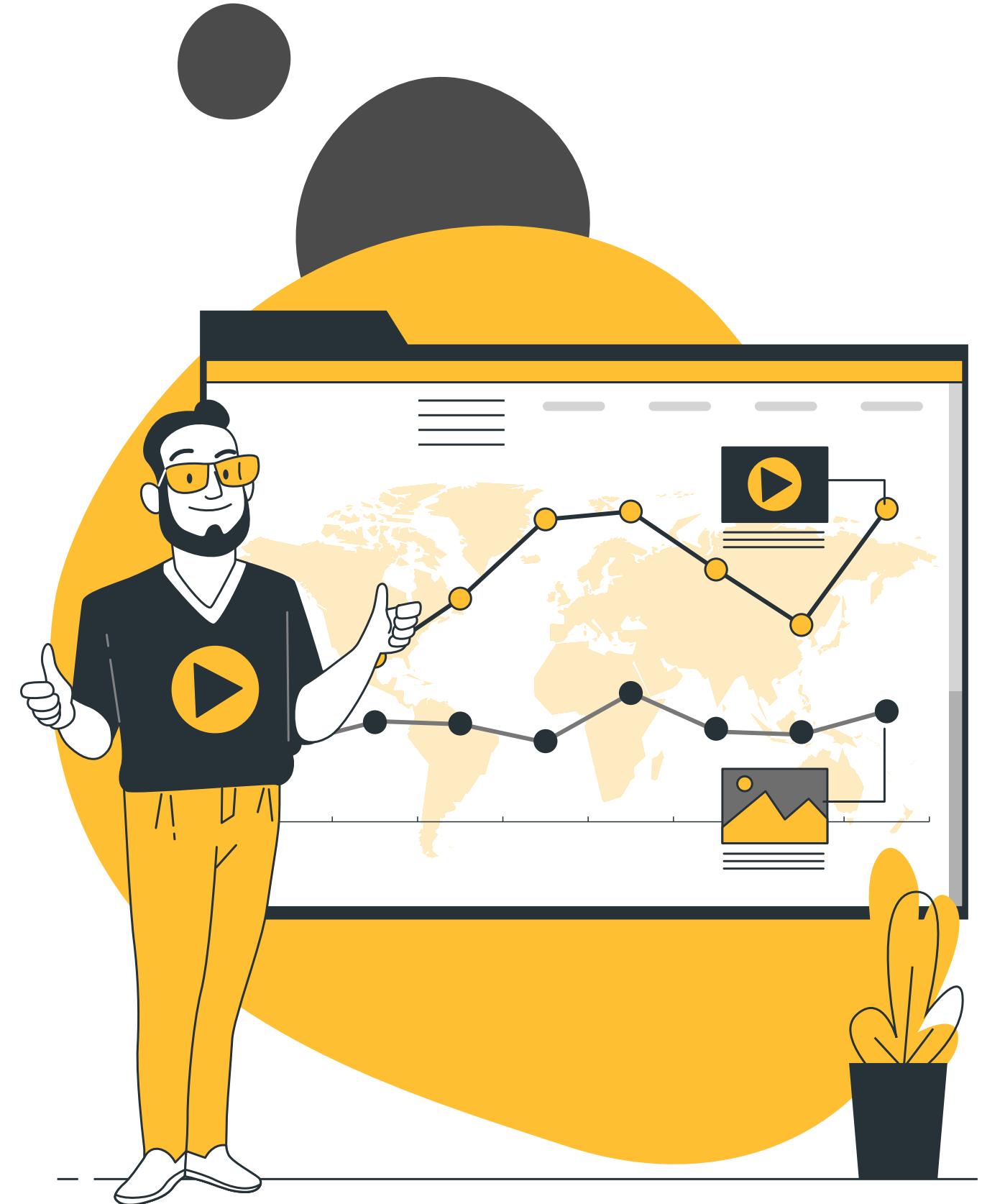
# Polymer DLP - Smart Data Savior

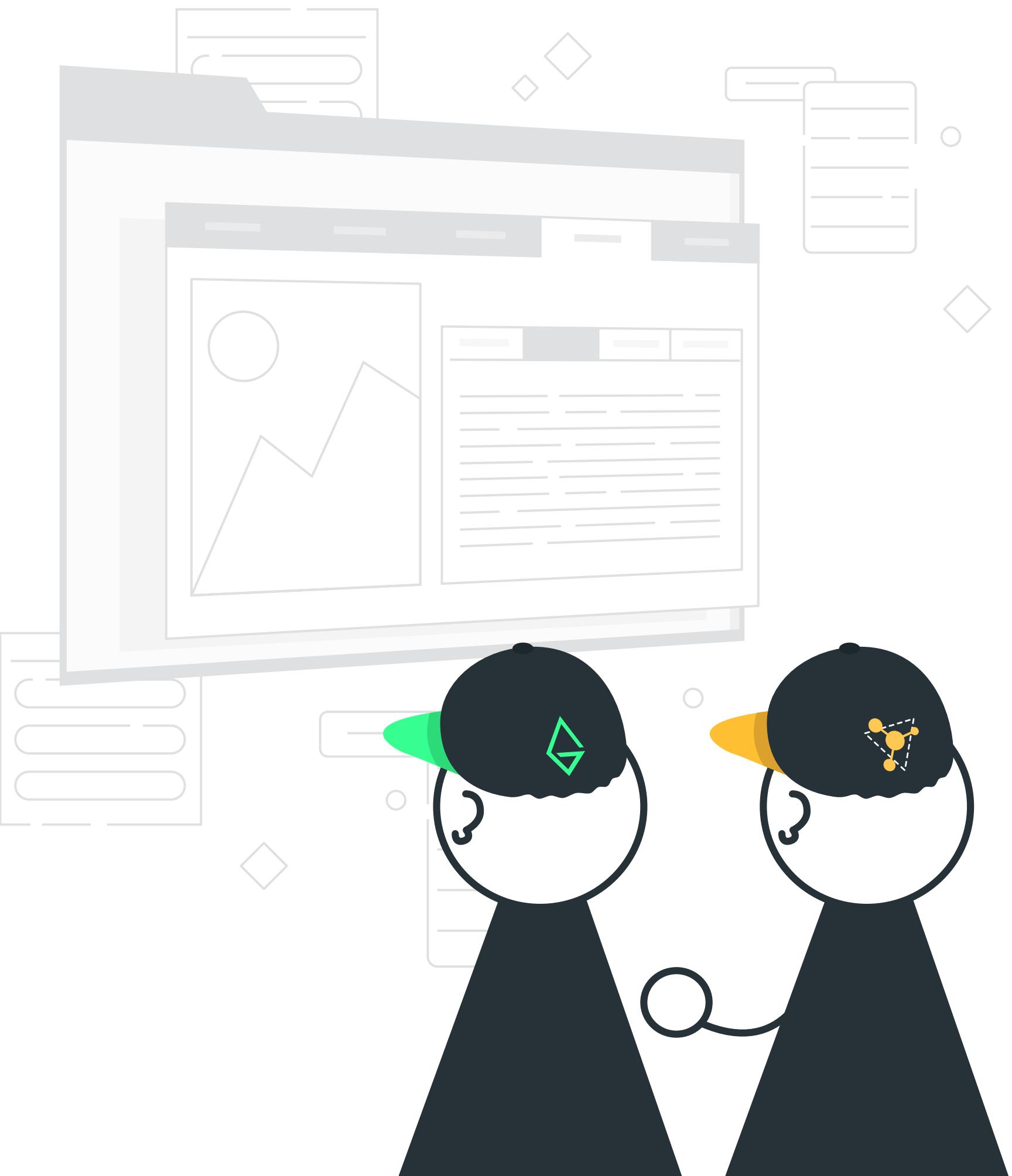


# Ardent Growth - Grouper App

We help B2B SaaS companies  
drive more pipeline and reduce  
CAC using our Topic Priority Matrix  
and Demand Generation  
Framework

## Tech Stack





With Ardent Growth, a B2B focused content marketing firm which takes pride in taking complete responsibility for the client's revenue streams.

Datum Brain, as a technical partner, built a system where making content strategies for revenue generation became a breeze and it wasn't guesswork anymore.

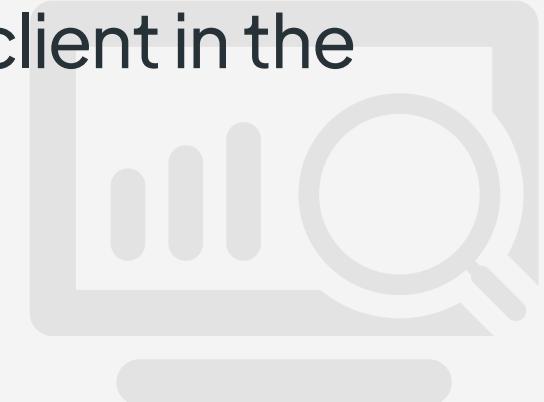
# We built a system that...



## Favors TAM gap analysis

Total Addressable Market gap analysis to identify content gaps instead of competitor analysis. The reason for not choosing competitor analysis was that no difference would exist and we'll be on the same surface as them.

So, we chose TAM Gap Analysis to stay at the top and provide a real candidateship for our client in the market.



## Identifies content cannibalization

We then also devised and implemented an algorithm that smartly identifies content cannibalization and prevents it by providing data-driven direction.

In this manner, our client's content ranks higher resulting in increased, consistent, and reliable revenue streams.



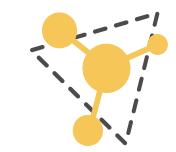


A system that ensures reliable & high revenue streams by directing data-backed content strategies

REAL ESTATE

LOCKERS

PACKAGE DELIVERY



datumBRAIN

# Parcelist

Automated deliveries at your convenience



## Tech Stack



We designed and integrated a whole system for our client 'Parcelist' to aid their delivery services by developing a cloud-based web application along with an interactive website.



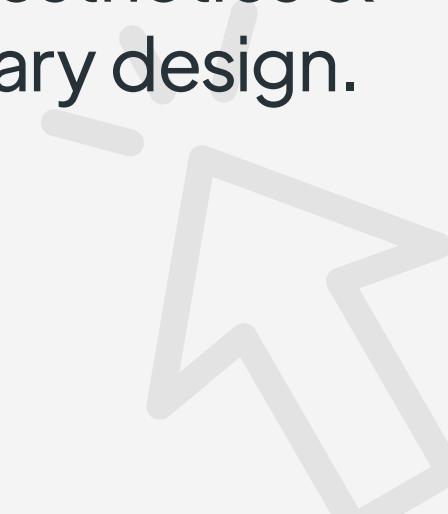
# We built a system that was...



## Behaviour focused

The whole idea of safe & convenient package delivery was practically implemented by us which facilitated the end-user.

The app is enriched with unconventional features, aesthetics & extraordinary design.



## Cloud based

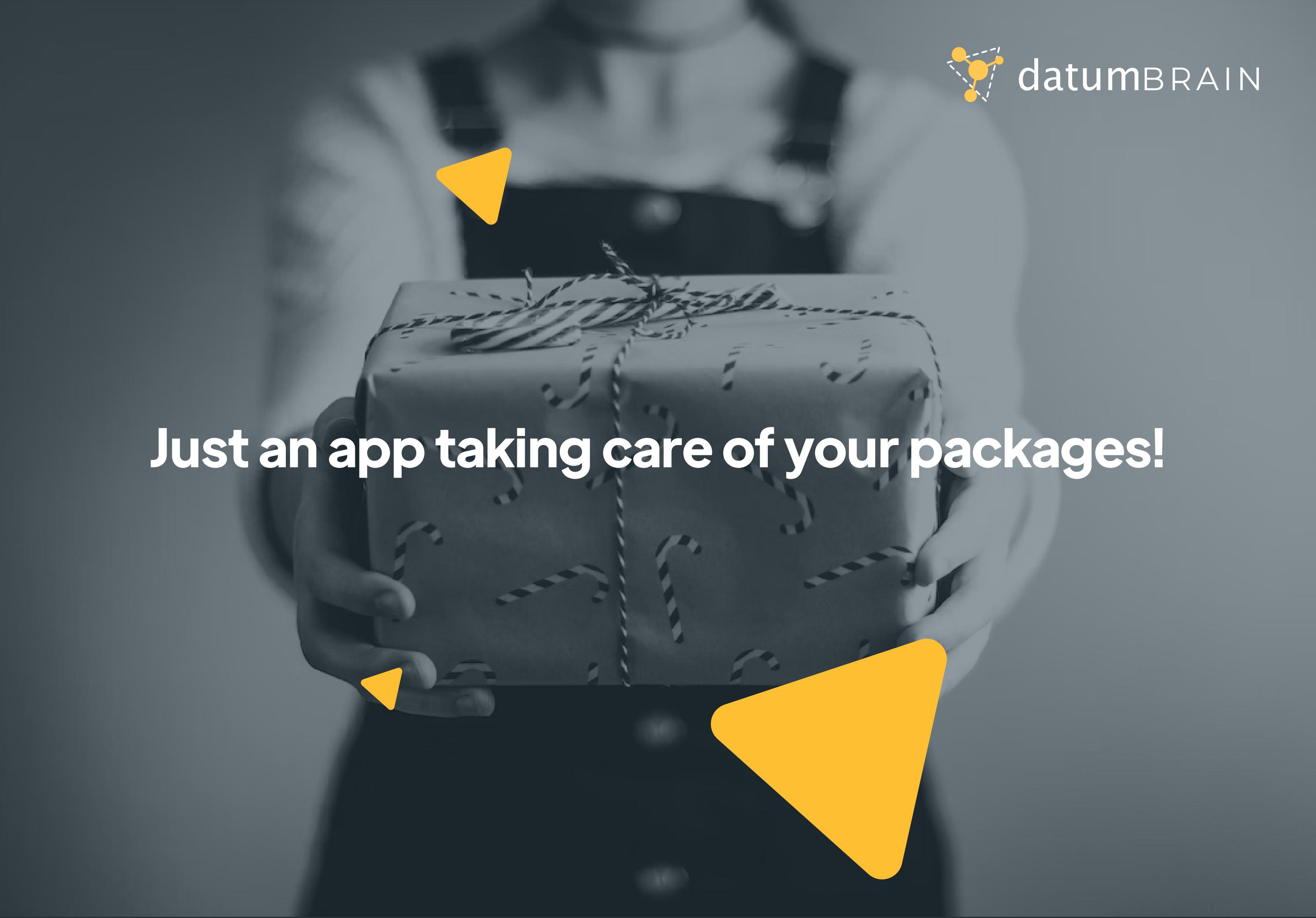
Team 'Parcelist' also wanted us to establish a cloud-based web app along with their website. We ensured that all the development steps undergo critical checks so the end product is enriched with quality features and our client receives maximum benefit.



## Smart and Robust

A fully automated system for smart deliveries was developed and delivered to our client.



A grayscale photograph of a person's hands holding a rectangular gift box wrapped in dark paper with white stripes and tied with a ribbon. The hands are positioned as if presenting the gift.

**Just an app taking care of your packages!**



BIG DATA

ETL

DATA ANALYSIS

ML



# Mecku

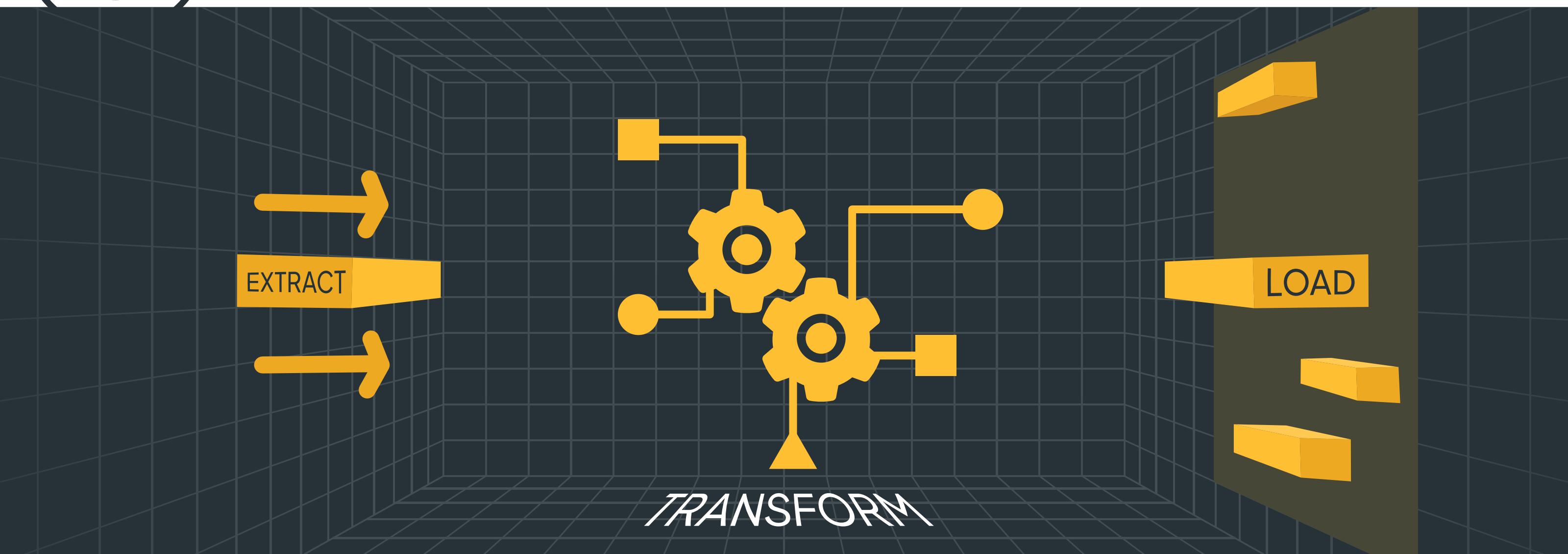
Easy ETL, Connect



Tech Stack



The project included major assignment of carrying out ETLs while dealing with multiple sources of data. ETL is often considered to be a daunting task but we have simplified the overall process by developing an efficient ETL tool, Mecku.

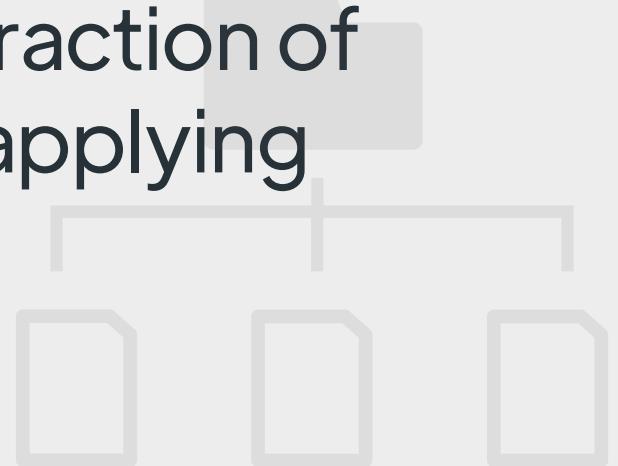


# We worked on...



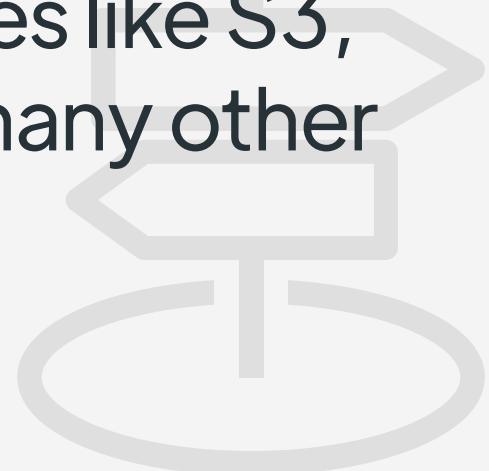
## Multi-source extraction

This potent ETL tool is capable of carrying out the extraction of data from sources, applying transformations.



## Multiple data destinations

Data sources and data destinations can be of different natures like S3, Postgres, MySQL, and many other kinds.



## Incredible interface experience

We also made sure to develop an incredible user experience that included dragging and dropping nodes for user ease.



## Visualization

This just not defined sources, transformation, and destinations but also helped to explain ETL flow through a connection.





# Layman friendly ETLs!



YOU ARE NOT A LAB RAT!

Datum Brain  
 Startups  
Already!



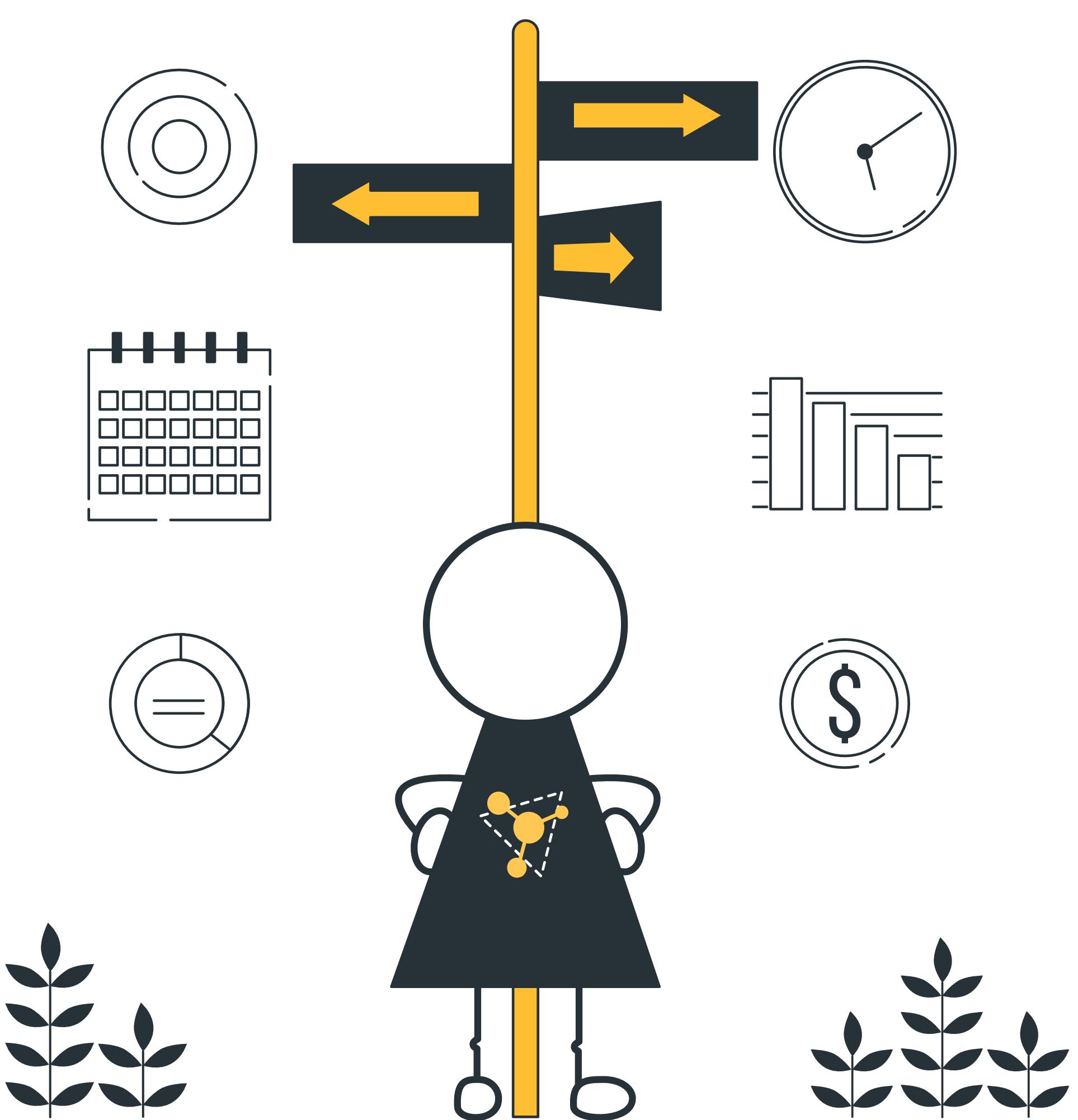


Fortunately, we're not doing it for the first time.

*You can't go wrong with us!*

GRAB THE OPPORTUNITY to work with a professional team who believes in "lets ship it" mantra which is a perfect startup approach.

We have worked with startups of variant sizes as development partners from ideation, Proof of concepts, getting funded & going live to the stage where solutions are finally used by enterprises.





X



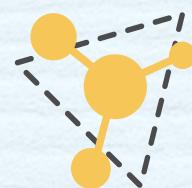
One of the recent notable mention we have is  
**Polymer** which has acquired a **\$6M funding recently.**

<https://www.crunchbase.com/organization/polymer-9779>



As development partners we are actively involved in web development, native apps development, API development and integration, database creation and management, deployments as needed

**We are excited for your success!**



**datumBRAIN**



# Thank you for the time!

Visit us at

- 🌐 [datumbrain.com](https://datumbrain.com)
- 🌐 [dbr.ai](https://dbr.ai)

