

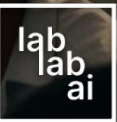
DOGE Hackathon 2024

Team Kommu



BUREAUSTREAM

Streamline Governance, Empower Citizens.



Problem

Government agencies worldwide—including Indonesia and the United States—**face significant challenges due to bureaucratic inefficiencies**, leading to delays, increased operational costs, and diminished public trust. Traditional processes involve excessive paperwork, complex procedures, and limited transparency, which hinder effective service delivery. Manual document validation further exacerbates these delays, creating bottlenecks.

Solution

BUREAUSTREAM addresses these challenges through two core features:

- **No-Code Workflow Builder:**

Enables government employees to effortlessly digitize and automate processes, reducing reliance on technical expertise.

- **AI-Powered Chat Interface with CV Integration:**

Provides citizens with an intuitive platform to access services, upload documents, and track application statuses in real-time. Using CV, the platform analyzes and validates document uploads, ensuring data accuracy.

By leveraging xAI's Grok API, BUREAUSTREAM enhances conversational AI capabilities, ensuring multi-lingual support, precise instruction- following, and robust citizen engagement.



Images: Chaotic lines on government agencies in Indonesia & US
(source: Reuters, Suara, Jabar Ekspres)

For Government Employees



- **Process Digitization**
Create and modify **workflows using the no-code builder**, transforming manual processes into automated digital operations.
- **Task Management**
Monitor citizen requests, validate flagged documents, and ensure timely completion of services.

For Citizens



- **Service Access**
Use the **AI chat interface** to apply for services such as marriage certificates, business licenses, and more.
- **Document Validation with CV**
Upload documents for automatic analysis, data extraction, and validation. CV ensures that blurry or incomplete documents are flagged for re-upload.
- **Progress Tracking**
Track application status in real-time, receiving updates and notifications through the chat interface.

Technological Framework

BUREAUSTREAM leverages advanced technologies to deliver a comprehensive solution:



Natural Language Processing (NLP)
Powers conversational AI for citizen interaction in multiple languages, ensuring inclusivity.



Computer Vision (CV)
Automates document analysis by extracting and validating critical data from uploaded images or scanned documents.



Cloud Computing
Provides scalable, secure storage and accessibility for government processes.

Powered by **xAI's Grok API**, BUREAUSTREAM benefits from superior AI-driven conversational capabilities, document handling accuracy, and error detection.

BUREAUSTREAM

Administrations

Needs Attentions

Configuration

Service Workflows

Date

12/15/2024

BUREAUSTREAM

Welcome back

Login into your account

Username

username

Password

Login

Don't have an account? [Sign up](#)

BUREAUSTREAM

Stage 1 / 3 - Collecting necessary data

New consultation

Ongoing service requests

Marriage certificate request

Archives

Marriage certificate request

NIK : 3203012503770011

KASUPATEN CIANJUR

Nama : GUOHUI CHEN

Tempat/Tgl Lahir : PILIKAN 25-03-1977

Jenis Kelamin : L

Agama : ISLAM

Status Perkawinan : MUDA

Pekerjaan : PETANI

Kewarganegaraan : INDONESIA

Berkas Herga : 12-12-2023

Thank you for providing the image of the KTP. Here is the information extracted for the Groom:

1. Groom's Full Name: Guohui Chen

2. Groom's Identification Number (KTP): 32031250377001

AI

Please provide the details for the Bride or an image of her KTP.

Type your message here...

Send Message

Date

12/15/2024

Name

Marriage certificate request

Previewing the conversation

Validate the data here to complete the process

To confirm, here are the details you've provided:

1. Groom's Full Name: Guohui Chen

2. Bride's Full Name: Mira Setiawan

3. Groom's Identification Number (KTP): 32031250377001

4. Bride's Identification Number (KTP): 3171234567890123

AI

Please confirm if these details are correct. If everything is accurate, I will proceed with the verification process.

yes they're correct

US

AI

Your data has been sent for verification

Continue Process

Video Demo:
bit.ly/bureaustream-grok-demo

DOGE Hackathon 2024

Total Addressable Market (TAM):

The TAM encompasses **all local government agencies globally** that could benefit from workflow automation and AI-driven citizen engagement solutions. Given the vast number of such agencies worldwide, this represents a substantial market opportunity.

Serviceable Addressable Market (SAM):

Indonesia:

- **Number of Cities**
Indonesia has 514 cities with 38 province, with average 30 agencies under every government levels
- **Local Government Structure**
Each city & province typically comprises around 30 agencies responsible for various public services.

United States:

- **Local Governments**
As of 2017, the U.S. had approximately 38,779 general-purpose local governments, including counties, municipalities, and townships.
- **Special Districts**
Additionally, there were about 51,296 special districts addressing specific functions.

Serviceable Obtainable Market (SOM):

Indonesia:

- **Target Market**
Focusing on a subset of Indonesian cities, particularly those with populations exceeding 100,000, could be strategic. There are over 100 such cities in Indonesia.
- **Potential Clients**
If BUREAUSTREAM targets 30% of these cities, that equates to approximately 30 cities.
- **Revenue Model**
Assuming an annual subscription fee of \$50,000 per city for the platform, the potential annual revenue would be:
 $30 \text{ cities} \times \$50,000 = \$1,500,000$

United States:

- **Target Market**
Targeting mid-sized municipalities and counties, especially those seeking digital transformation solutions, could be effective.
- **Potential Clients**
If BUREAUSTREAM captures 1% of the 38,779 general-purpose local governments, that equates to approximately 388 clients.
- **Revenue Model**
With an annual subscription fee of \$75,000 per client, the potential annual revenue would be:
 $388 \text{ clients} \times \$75,000 = \$29,100,000$

Subscription-Based Licensing

What it Covers:

This is the core revenue stream, offering government agencies access to BUREAUSTREAM's platform. The subscription fee is based on:

- The **size of the agency**: Larger agencies with more workflows, users, and documents would require higher computing and support resources.
- The **number of services** digitized: Agencies implementing multiple processes (e.g., tax filings, marriage certificates, and business licensing) pay more.
- **Usage levels**: Scaled pricing based on citizen interactions, document uploads, and data storage needs.

Pricing Model:

- **Tiered Subscriptions**: E.g., Small agencies (\$25,000/year), Medium (\$50,000/year), and Large (\$100,000/year).
- **Additional Users or Workflows**: Incremental fees for agencies needing more capacity.

Potential Upsell:

Offering discounts for multi-year subscriptions or bundled services to improve retention and encourage broader platform adoption.

Implementation and Training Fees

What it Covers:

A one-time fee to onboard agencies and ensure a smooth transition to the platform. These fees account for:

- **Workflow Customization**: Designing and configuring no-code workflows to match the agency's processes.
- **Data Migration**: Moving existing paper-based or legacy system data to BUREAUSTREAM.
- **Infrastructure Setup**: Initial integration with agency IT systems (e.g., citizen databases, APIs for existing platforms).
- **Training**: Comprehensive training sessions for agency employees on:
 - How to use the no-code builder.
 - Managing workflows and document validation via CV.
 - Analyzing reports and citizen feedback.

Pricing Model:

Fees are proportional to the agency's size and complexity of workflows, starting from **\$10,000 to \$50,000** per setup.

Add-On Services:

Advanced training packages for IT administrators or support teams. Ongoing consultancy for post-implementation optimization.

Premium Features

What it Covers:

These are optional features or modules offered at an additional cost, allowing agencies to expand or enhance the functionality of the platform:

- **Advanced Analytics**: Tools to analyze citizen interactions, workflow bottlenecks, and service performance using AI.
- **Integration Services**: APIs to connect BureauStream with existing systems like CRM, financial software, or national databases.
- **Custom Reports**: Tailored reports on service delivery KPIs (e.g., average processing times, citizen satisfaction scores).
- **Fraud Detection Module (CV-powered)**: Advanced CV features to detect forged or tampered documents.
- **Citizen Engagement Tools**: Chatbot enhancements, including multilingual support, personalized notifications, and surveys.
- **Priority Support**: Dedicated technical support teams or faster issue resolution.

Pricing Model:

- **Per Module Pricing**: \$5,000 - \$20,000 annually, depending on the module.
- **Custom Packages**: Discounts for agencies opting for multiple premium features.

Additional Revenue Potential

- **White-Labeled Solution**: Offer BUREAUSTREAM as a customizable platform that governments can brand as their own for an added fee.
- **Enterprise Agreements**: Long-term, multi-year contracts at a premium price for large-scale agencies.
- **Data Monetization (with consent)**: Anonymous aggregated data insights for policy-making, urban planning, or third-party research.

Traditional Workflow Automation Tools:

- Examples: **Nintex, Kissflow, Zapier (custom workflows)**
- Focus: Automation for businesses and general industries, with limited features tailored specifically for government agencies.
- Weaknesses: Requires technical expertise, limited integration with citizen-facing systems.

E-Government Platforms:

- Examples: **Accela, OpenGov, Granicus**
- Focus: Digital solutions for government services (e.g., budgeting, permitting, and licensing).
- Weaknesses: Often lacks a no-code builder for flexibility and Computer Vision (CV) for automated document analysis.

Standalone OCR and CV Tools:

- Examples: **Adobe Acrobat (OCR), ABBYY FineReader, Google Vision API**
- Focus: Advanced document scanning and data extraction.
- Weaknesses: Requires integration with other platforms for end-to-end workflows, no citizen interaction tools.

Unique Value Proposition of BUREAUSTREAM:

1. Comprehensive Platform

- Combines **no-code workflow automation, AI-driven citizen engagement, and Computer Vision-powered document validation** into a single, unified solution.
- Unlike standalone tools, BureauStream integrates these capabilities seamlessly to address end-to-end government service delivery.

2. Tailored for Government Agencies

Built specifically for government workflows, offering features like multilingual support, fraud detection for uploaded documents, and citizen progress tracking.

3. No-Code Flexibility

Allows non-technical employees to easily design, modify, and manage workflows without requiring external IT support.

4. Computer Vision (CV)

CV-powered automation eliminates manual document verification, saving time and reducing errors. This is a feature most e-government platforms or workflow tools lack.

5. Scalable and Adaptable

Designed to cater to agencies of all sizes, from small municipalities to large federal governments, with flexible pricing and modular features.

PHASE 1 (M1-M12)

Product Launch & Initial Adoption

Goal: Establish BUREAUSTREAM as the go-to solution for local government agencies in Indonesia.

Key Activities:

- Finalize platform development and pilot testing with select local agencies.
- Focus on critical services such as:
 - Marriage certificates
 - Business permits
 - Tax filings
- Train government employees on using the no-code workflow builder.
- Develop foundational partnerships with municipal governments.
- Market entry into Indonesia's top-tier cities with >100,000 population.

Expected Outcomes: Build case studies to demonstrate efficiency gains and showcase successful implementations to attract new clients.

PHASE 2 (M12-M24)

Scaling in Indonesia & Entering the U.S. Market

Goal: Expand BUREAUSTREAM's reach to mid-sized municipalities and agencies in both Indonesia and the U.S.

Key Activities:

- Scale operations to cover more Indonesian cities, focusing on underserved agencies.
- Launch marketing campaigns targeting mid-sized U.S. municipalities that are actively pursuing digital transformation.
- Localize features:
 - Introduce language packs for U.S. government workflows and regional requirements.
 - Add compliance modules for U.S. federal and state regulations.
- Introduce premium features:
 - Advanced analytics for decision-making.
 - Enhanced fraud detection using CV.
 - Citizen engagement tools (e.g., satisfaction surveys, personalized updates).

Expected Outcomes: Achieve 100+ active client agencies globally, establishing BUREAUSTREAM as a trusted name in e-governance.

PHASE 3 (M24-M36)

Advanced Capabilities & Global Expansion

Goal: Expand BUREAUSTREAM into new markets and deepen AI integrations to deliver innovative solutions.

Key Activities:

- Enter markets in Southeast Asia (e.g., Malaysia, Philippines) and Europe (e.g., U.K., Germany).
- Launch AI-powered insights for policy-making.
- Predictive analytics for workflow efficiency.
- Sentiment analysis for citizen feedback.
- Integrate IoT (Internet of Things) to manage physical workflows like asset tracking or infrastructure monitoring.
- Develop white-label solutions for large agencies to brand and customize BUREAUSTREAM.
- Establish partnerships with global organizations like the United Nations or World Bank to implement BUREAUSTREAM in developing nations.

Expected Outcomes: Reach 500+ clients worldwide, with revenue streams diversified across subscriptions, premium features, and global partnerships.

Enhanced AI Features

- Expand Computer Vision (CV) to detect fraud beyond document tampering, including real-time video verification for virtual services.
- Add advanced NLP capabilities for highly localized citizen interactions in multiple languages.

Broadening Use Cases

Move beyond administrative workflows to include:

- **Healthcare services:** Patient registrations, vaccination records.
- **Education workflows:** School enrollment, scholarship applications.
- **Disaster management:** Relief distribution and citizen tracking.
- **Infrastructure monitoring:** Real-time progress tracking for public works projects.

Revenue Diversification

- Launch **data analytics subscriptions** for aggregated, anonymized insights on citizen service trends.
- Offer BureauStream as a **white-label solution** for larger governments or private entities.
- Monetize integrations with private services (e.g., banks, insurance for business licensing).

Technological Leadership

- Leverage cutting-edge advancements like generative AI for automatic report generation.
- Enable integration with decentralized blockchain systems for tamper-proof record-keeping.

Impact Goals

- Reduce service processing times by 50% for local agencies.
- Increase citizen satisfaction and engagement through transparency and ease of use.
- Assist governments in achieving their digital transformation goals, contributing to the United Nations' Sustainable Development Goals (e.g., Goal 16: Peace, Justice, and Strong Institutions).

Let's transform public services with



Streamline processes, empower citizens,
and shape a smarter future.

