

## 1. Title of the Entry

**BizNest**

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## 2. Team Information

- **Team Name:** GitPush
  - **Member Names & Roles:**
    - **Roman R. Osorio** – CEO (Chief Executive Officer)
    - **Mardz C. Lidasan** – CMO (Chief Marketing Officer)
    - **Centmarde J. Campado** – CTO (Chief Technology Officer)
  - **Affiliation:** Caraga State University TBI Incubatees
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## 3. Division

**Student Division** (endorsed by TBI)

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## 4. Challenge Theme Chosen

**E-Governance**

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## 5. Project Description

**BizNest** is an AI-powered platform designed to modernize Local Government Unit (LGU) operations and empower local entrepreneurship. It serves as a unified, intelligent system that simplifies and streamlines critical processes within cities and municipalities.

The platform integrates:

- **Smart zoning insights** to identify ideal business zones through the **AI-Powered Business Location Recommendations** feature and a **Smart Interactive Map** that visually presents zoning, economic hotspots, and available areas.
- **Real-time supplier matching** to connect entrepreneurs with local suppliers using the **Smart Supplier Directory with AI Matching**, making it easier to build business networks and supply chains.

- **Predictive analytics** to support strategic decision-making, achieved through the **Predictive Potential Analytics** module, which forecasts growth trends, economic potential, and business sustainability.

To enhance user interaction, **BizNest** also includes a **Virtual Assistant / AI Chatbot** that responds instantly to inquiries about permits, zoning, and business processes—minimizing the need for physical visits to LGU offices. Additionally, the **Business Status Dashboard** offers LGUs a real-time overview of registered, pending, or non-renewed businesses, improving transparency and compliance monitoring.

BizNest addresses common challenges such as outdated paper-based systems, fragmented data, and inefficient workflows. By integrating intelligent tools and automation, the platform transforms LGUs into **proactive, data-driven, and investment-ready ecosystems**, paving the way for smarter and more inclusive local economic development.

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## 6. AI Component

**What kind of AI is used (ML model, CV, NLP, etc.):**

- **LLaMA 3.1 8B-Instant (LLM):** Powers the AI chatbot for real-time, context-aware responses about business permits, zoning, and entrepreneurship.
- **Natural Language Processing (NLP):** Enables the chatbot to understand and respond to user queries effectively.
- **Machine Learning (ML):** Supports predictive analytics by analyzing economic data, land use, and business trends.
- **Supervised Learning Models:** Used to recommend optimal business locations based on historical patterns and real-time data.

**Purpose and Expected Impact:**

The AI components are designed to reduce manual work in LGUs, improve decision-making, and guide entrepreneurs with smart, data-backed insights. For LGUs, this means faster and more accurate zoning and permit approvals, reduced administrative burden, and better visibility of underutilized or high-growth areas. The AI empowers local governments to become more efficient, transparent, and business-friendly—helping attract investments, increase revenue through improved tax collection, and support inclusive economic development. On the entrepreneur side, the system enables smarter site selection and quicker access to relevant information, increasing their chances of business success.

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## 7. Prototype Description

**Description of TRL 3 Prototype or Demo:**

The current prototype is at TRL 3, representing an early-stage proof-of-concept. It demonstrates the core functionalities of the platform, including the interactive business location recommendation interface, AI-powered chatbot for zoning and permit inquiries,

and dynamic dashboards for LGU use. Users can simulate asking questions, receive AI responses, view suggested business zones, and explore sample supplier data. Though not yet connected to live government data, the prototype effectively showcases how AI can streamline processes and support decision-making for both LGUs and entrepreneurs.

#### **Tools, Platforms, or Frameworks Used:**

- **React.js** – For building the dynamic and responsive user interface.
  - **Shadcn** – To provide clean, reusable UI components for a professional layout.
  - **Tailwind CSS** – For styling and responsive design.
  - **Supabase** – Used as the backend-as-a-service for managing user data, authentication, and real-time features.
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### **8. Value Proposition**

#### **Problem it solves:**

Butuan City faces challenges in helping entrepreneurs identify suitable business locations and build reliable supplier networks. LGUs struggle to provide effective support due to fragmented data, reliance on outdated printed maps, and time-consuming, in-person consultations. These inefficiencies hinder investment planning, slow down permit processes, and reduce overall revenue potential.

#### **Who benefits and how:**

Local Government Units (LGUs) benefit through:

- **Boosted Investment and Branding:** Positions the LGU as progressive and investor-ready, attracting more local and foreign business activity.
- **Increased Revenue Collection:** Tracks non-renewals and improves tax compliance to recover lost income.
- **Smarter Urban Planning:** AI identifies promising zones for growth, guiding better zoning and infrastructure decisions.
- **Streamlined Services:** Automates permit support and reduces manual workload, improving service delivery.
- **Greater Public Trust:** Provides faster, transparent, and tech-enabled support to entrepreneurs.

Entrepreneurs benefit by receiving AI-driven recommendations for the best locations to start their businesses, faster access to permit guidance, and better access to local supplier data—leading to more confident, informed decisions and higher chances of success

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### **9. Scalability & Feasibility**

**After the hackathon, we plan to expand the prototype into a fully functional platform by:**

- Securing funding for full product development
- Conducting city pilot testing (starting with Butuan City) to assess real-world performance and usability
- Integrating with LGU systems for seamless access to zoning, permits, and business data
- Refining features through user testing with LGU staff and entrepreneurs.
- Preparing to scale to other cities after a successful pilot

**Infrastructure or Partnerships Needed**

- **Department of Science and Technology (DOST)** – for funding support and technical guidance
- **Department of Information and Communications Technology (DICT)** – for digital infrastructure and cybersecurity standards.
- **LGU Butuan (whole)** – as key adopter, funding partner, and policy enabler
- **City Planning and Development Office** – for zoning data and urban planning integration
- **Business Permits and Licensing Office (BPLO)** – for syncing registration and permit systems
- **LGU IT Office** – for system integration with existing LGU platforms.
- **Legal and compliance support** – to meet data privacy laws and government standards.

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