



System administrator research.

Goal : To create a platform that enables shop owners to register, manage, and promote their businesses while ensuring accessibility, security, and scalability.

1. What are the core goals of the system?

- **Fairness:** Ensure equitable access to registration for both local shop owners and informal traders.
- **Transparency:** Provide real-time registration status, compliance history, and customer feedback visibility.
- **Compliance:** Make it easy for shop owners to meet food safety and business licensing standards with reminders and alerts.

Improvement that our genesis system will do:

- CIPC focuses on formal companies, with little relevance or support for informal businesses.
- Our system is specifically designed for spaza shops and informal traders with built-in compliance monitoring and real-time visibility.

2. How does the system empower local entrepreneurs and consumers?

- Entrepreneurs get a simple mobile-first platform to register, verify, and manage their spaza shops.
- Consumers can verify registered shops, leave reviews, and report food safety issues anonymously.
- Local vendors get visibility and digital inclusion, reducing foreign dominance and increasing trust.

Improvement that our genesis system will do:

- CIPC offers no tools for consumer engagement or shop visibility.

- Our platform creates a feedback loop between consumers and shop owners, building community trust and empowerment.

3. What legal and compliance requirements must the system follow

- Compliance with South African Business Registration Laws (CIPC, SARS).
- Adherence to Food Safety Regulations (as per the Department of Health).
- POPIA-compliant data collection and storage, ensuring user privacy.

Improvement that our genesis system will do:

- CIPC doesn't cater to food safety in informal setups.
- Our system integrates compliance alerts, verification steps, and simplified workflows built into the platform

4. What specific problems does it solve compared to the current unregulated system?

- Unfair foreign dominance: Offers local-first registration and easier onboarding for SA citizens.
- Lack of compliance: Introduces alerts, violation logs, and food safety tips.
- No transparency: Public directory of verified shops with consumer feedback.
- Counterfeit goods risk: Shops flagged by customers can be inspected or suspended.

Improvement that our genesis system will do:

- The current CIPC doesn't regulate ownership fairness, nor allow consumer reporting.
- Our system addresses the root issues like foreign dominance, food safety, and community trust.

5. Can we mimic the existing databases into our usability, or will it be from the beginning and why?

- Start from scratch but with optional API integration or mock services for CIPC and Home Affairs in future phases.
- This ensures the system is fully customized for informal businesses, rather than forced into a formal mold.

Improvement that our genesis system will do:

- CIPC's database is closed and rigid.
- Our approach builds flexibility, allowing us to integrate external verification in future without compromising design.

6. How can the system be made accessible to both urban and rural shop owners?

- Mobile-friendly UI with offline support.
- Use of USSD, SMS, and multi-language support (Zulu, Xhosa, Sesotho, English).

- Minimal text, more icons, and voice guidance in later phases.

Improvement that our genesis system will do:

- CIPC assumes broadband access and digital literacy.
- Our platform is designed for low-bandwidth areas, and non-tech-savvy users.

7. What are user personas and how will it help having a journey blueprint to guide intuitive & user-centric design?

User personas help us understand needs and design better UX. Examples:

- **Lerato** (Rural Shop Owner): Low literacy, feature phone.
- **Sipho** (Government Inspector): Needs dashboards, alerts.
- **Nosipho** (Customer): Wants shop list, rating system.

Blueprints allow:

- Step-by-step user flows
- Pre-filled forms and tooltips
- Context-based help

Improvement that our genesis system will do:

- CIPC offers a flat experience with no user persona consideration.
- Our system will tailor the experience per user type, improving usability.

8. Who are the main users of the system, and what are their needs?

- Shop Owners: Easy registration, permit renewal, violation alerts.
- Government Admins: Shop approval tools, inspection reports, data analytics.
- Consumers: View shop info, rate service, report food safety violations.

Improvement that our genesis system will do:

- CIPC does not cater to consumers or real-time government monitoring.
- Our system connects all three users in one ecosystem, closing the feedback loop.

9. What kind of support will be available for shop owners who need help using the system?

- Chatbot support (later phases) in local languages.
- FAQs, how-to videos, and voice note guides.
- Field agents or community assistants in pilot rollouts.

Improvement that our genesis system will do

- CIPC offers limited, mostly email-based support.

- Ours will be contextual, multilingual, and mobile-focused.

10. Summary of how users will register their shops on the platform (Step-by-step process)?

1. Sign up with phone number or ID
2. Fill in basic shop info (name, address)
3. Upload ID & permit (or use biometric verification)
4. Pin shop location on map
5. Submit for approval
6. Get SMS/email confirmation

Improvement that our genesis system will do

- CIPC has a lengthy form and documentation process.
- Our system uses mobile-first steps, image uploads, and biometric integration.

11. What are the core system functionalities, and how should they be structured?

- User Registration
- Document Uploads & Verification
- Compliance Monitoring (permit expiry, food safety status)
- Feedback/Report Module
- Role-based Dashboards (shop owner, admin, consumer)

Improvement that our genesis system will do

- CIPC has one-size-fits-all services.
- We offer dedicated tools for each role, designed specifically for the spaza ecosystem.

12. How will the navigation be structured to ensure an intuitive user journey?

- Top/Side Navigation Bar
- Role-based menus
- Visual indicators (progress bars, checklist ticks)
- Simple forms with help icons

Improvement that our genesis system will do

- CIPC's system is cluttered for mobile use.
- Ours is designed mobile-first, with progress tracking and visual simplicity.

13. How can the system ensure accessibility and usability for diverse users?

- Responsive Design
- Language Selector
- Icon-based navigation
- Offline Access

- Clear error messages and guided onboarding

Improvement that our genesis system will do

- CIPC doesn't support informal traders with accessibility needs.
- We ensure equal usability regardless of language, education, or tech skill.

14. What is the best technology stack for the system based on accessibility and scalability?

- **Frontend:** React / React Native
- **Backend:** Node.js + PostgreSQL or Firebase
- **Storage:** AWS / Firebase Storage
- **Security:** JWT, 2FA, Biometric, POPIA-compliant encryption
- **Cloud:** AWS or Azure for scaling and load balancing

Improvement that our genesis system will do

- CIPC is built on older stacks, not mobile-optimized.
- Our stack supports modern mobile UX, offline sync, and large-scale growth.

15. How will the UI/UX be designed for ease of use?

- Minimalist layout
- Clear icons
- Large buttons
- High-contrast colors
- Multilingual support
- Real-time feedback during form entry

Improvement that our genesis system will do

- Since CIPC doesn't adapt UI based on user device or preference.
- We provide a custom, localized, and intuitive design.

16. What type of authentication and security measures will be used for verification?

- OTP verification via SMS
- Document upload (ID, permits)
- Optional biometric authentication
- End-to-end encryption
- Secure cloud storage
- POPIA-compliant data handling

Improvement that our genesis system will do

- CIPC doesn't support mobile verification or biometrics.
- Ours provides multi-layered authentication and local law compliance.

17. What are the expected system limitations, and how can they be addressed?

Limitation	Solution
Internet access issues	Offline-first model with data sync
Device compatibility	Lightweight, responsive design
Language barriers	Built-in translation/localization
Data overload	Modular microservices for scaling

Improvement that our genesis system will do

- CIPC doesn't work offline or consider rural needs.
- Our solution mitigates connectivity and literacy gaps.

