**Business Case Analysis**

**Digital Queue System for Clinics**

**Pain Points of Current Clinic Flow**

**a. Long Wait Times:**

* Patients often spend excessive time in waiting rooms, leading to dissatisfaction and stress.
* No real-time updates on queue status.

**b. Inefficient Patient Management:**

* Manual queue tracking using paper or verbal communication creates confusion.
* Front desk staff overwhelmed by routine status inquiries.

**c. Infection Risk & Overcrowding:**

* Physical queues contribute to crowded waiting areas, increasing the risk of airborne infections.

**d. Poor Communication:**

* Patients don’t receive timely updates on delays, appointment progress, or estimated wait time.

**Key Features of the Digital Queue App**

**1. Virtual Check-In & Queue Tracking:**

* Patients can check in remotely via a mobile app or kiosk and monitor their position in the queue in real-time.

**2. Real-Time Notifications:**

* Push notifications or SMS alerts for upcoming turns, delays, or rescheduling.

**3. Multi-Clinic Dashboard for Staff:**

* Admin interface to manage patient flow, prioritize emergencies, and track KPIs like average wait time.

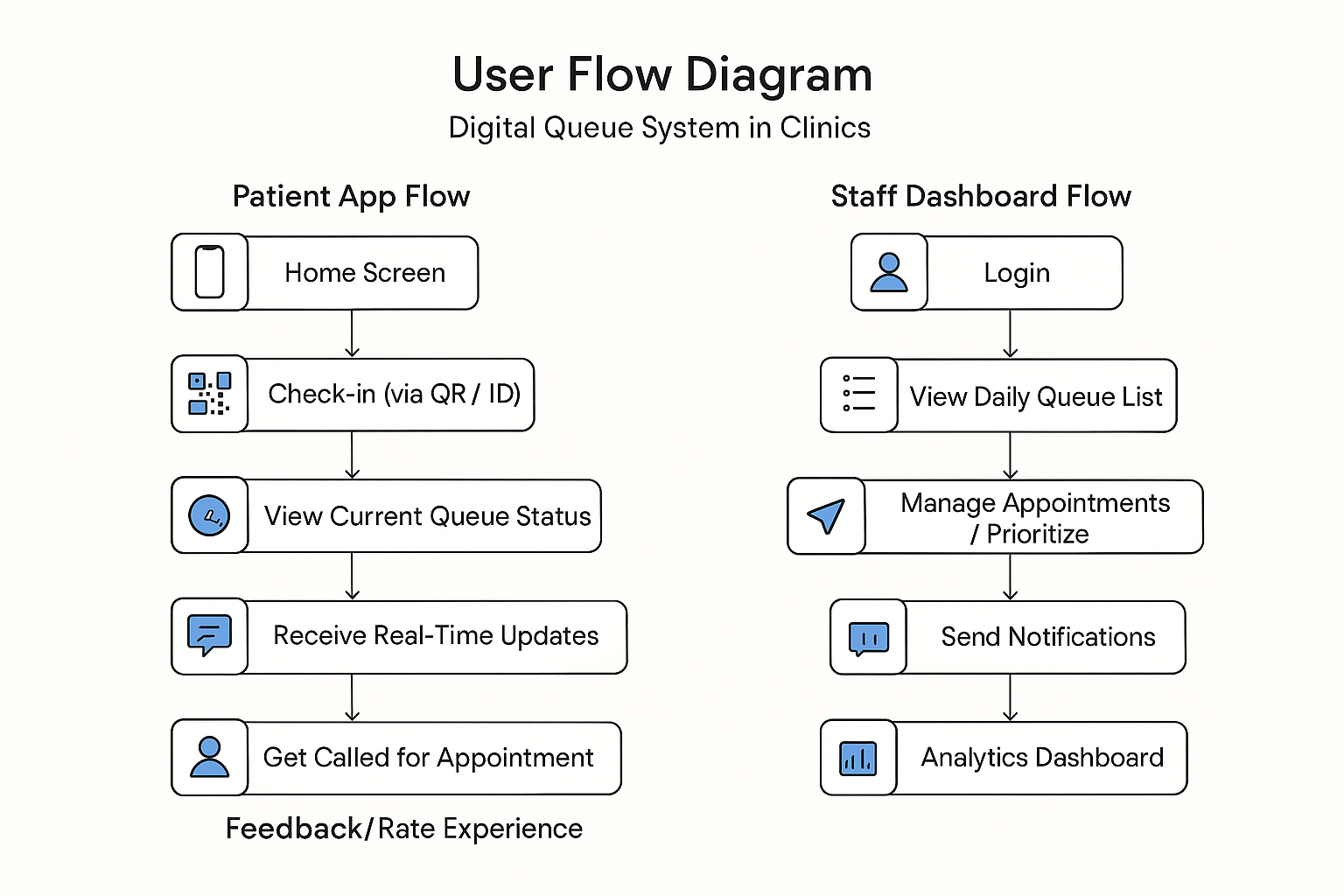
**Cost-Benefit Summary**

| **Factor** | **Cost (Initial & Ongoing)** | **Benefits** |
| --- | --- | --- |
| App Development & Hosting | R140,000 (initial) + R5,000/month (support) | Time savings, happier patients, reduced staff burden |
| Staff Training | R10,000 once-off | Improved workflow and adaptability to tech |
| Hardware | R50,000 (10 devices) | Accessibility for walk-ins or elderly without smartphones |
| Overall ROI (Year 1) | Approx. R180,000 | Potential savings of R300,000+ via efficiency, retention |

**User flow diagram for digital queue system**

**A diagram of a computer program

AI-generated content may be incorrect.**

****