

MedZ

Stay Prepared, Stay Healthy

By - Akanksha (DT2023001), Ketki Bhatia (DT2023007), and Niharika Suri (DT2023015)

Group-7

Opportunity Identification



Opportunity Identification



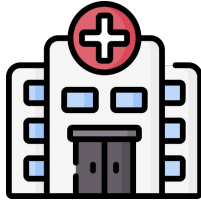
Complex Insurance
Management



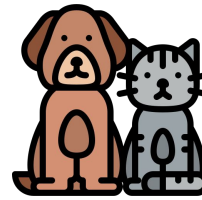
Absence of Emergency
Health Information



Disorganized Health
Records



Inefficient Integration
with Hospital Systems



Lack of Pet Health
Management

MedZ - Preliminary Research



Preliminary Research

Primary Research

Interview (via Selective Sampling)



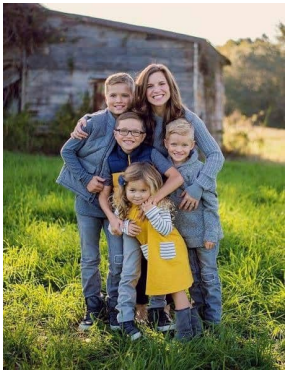
Secondary Research

A comprehensive analysis of PHR and EMR apps to understand competitive features and market trends, and reviewed Medical AI advancements to assess current adoption in healthcare.



Primary Research - Results





LYNETTE (THE BUSY HOMEMAKER)

Lynette Scavo is a dedicated housewife and mother of four energetic kids, all under the age of 10. Married to Tom, who works long hours, Lynette manages a bustling household while juggling her children's school schedules, activities, and health needs. She struggles to keep track of each child's medical records, vaccinations, and prescriptions, often feeling overwhelmed by the chaos of paperwork and appointments.

CURRENT CARE SYSTEM

- Lynette keeps track of her children's health needs using physical files and sticky notes, which leads to missed appointments and difficulty finding medical records in emergencies.
- Managing vaccinations and prescriptions for four kids adds to her stress.
- Although Tom offers to help, he isn't familiar with their medical histories in detail.



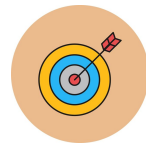
FRUSTRATIONS

- Misplaced medical records during critical times.
- Forgetting important health updates or follow-ups.
- Overwhelmed by managing four kids' health needs.



GOALS

- Organize all family health records in one place.
- Set automatic reminders for appointments and vaccinations.
- Simplify health tracking for a large family.
- Quickly access records during emergencies.



"With four kids, I can't afford to lose track of appointments or records it's chaos without a system."



SPENCER (THE DISTANT CAREGIVER)

Spencer Reid is a management consultant who has moved to a busy metropolitan city for his demanding job. With frequent travel and long hours, he faces challenges in managing his mother Diana's healthcare, as she lives alone in their hometown. Balancing his career and caregiving responsibilities often leaves him feeling overwhelmed by the distance and constant worry about her well-being.

CURRENT CARE SYSTEM

- Spencer monitors Diana's vital signs remotely but struggles to stay updated.
- He schedules her doctor appointments, but coordinating follow-ups is challenging.
- Her medical records are disorganized, making quick access difficult.
- Although he uses medication reminders, he worries about missed doses when away for work.
- In emergencies, managing her care from a distance is tough.



FRUSTRATIONS

- Limited record access
- Missed follow-ups
- Disorganized records
- Work-caregiver imbalance



GOALS

- Centralized health records
- Streamlined scheduling
- Improved care coordination
- Medication and health monitoring
- Clear emergency plans



"Living in a different city makes it hard to manage my mom's health I need a solution that keeps me connected and informed."



PENELOPE (THE PRIVACY CONSCIOUS INDIVIDUAL)

Penelope Garcia is a cybersecurity specialist working in a fast-paced tech environment where she constantly monitors and mitigates cyber threats. She is highly aware of the privacy and security risks associated with personal data, particularly sensitive health information. While her career focuses on protecting data, she experiences similar concerns in her personal life, especially regarding her own health records. Penelope is meticulous about the security of her health data and insists on using only the most secure tools to store, track, and share her medical information.

CURRENT DATA MANAGEMENT

- Penelope maintains a digital health record but is selective with her app choices.
- She only updates her medical records through trusted platforms featuring strong encryption and privacy.
- Finding secure apps for sharing information with healthcare providers is challenging
- She regularly checks for updates and vulnerabilities in her chosen apps.



FRUSTRATIONS

- Fear of data breaches
- Lack of transparency in apps
- Tedious/Self manual record updates
- Privacy risks with third-party apps



GOALS

- Securely manage health records
- Control access to personal data
- Easily update records automatically
- Prevent unauthorized data access



"I won't compromise on my privacy if I'm trusting an app with my health data, it better be secure and transparent about how it's handled."



LUCY (THE DOG MOM)

Lucy Chen is a new lawyer at a prestigious law firm, facing overwhelming demands as a first year associate. She works long hours and has an unpredictable schedule, making it hard to balance work and personal life. Dedicated to her dog, Kujo, she wants to provide the best care possible but struggles with vet visits and medication amid her hectic routine. Lucy feels overwhelmed by the demands of her job and her lack of organization, which impacts her ability to care for her pet.

CURRENT PET CARE

- Lucy walks Kujo daily but is unsure if it's enough exercise.
- She feeds Kujo and gives joint medication but struggles to track them.
- Vet visits are scheduled, but managing follow ups is challenging.
- Grooming is often missed due to her hectic schedule.
- Lucy enjoys evening bonding time with Kujo.



FRUSTRATIONS

- Missed Appointments
- Disorganized Pet Records
- Emergencies
- Health Tracking
- Lack of Timely Notifications



GOALS

- Smart notifications and reminders.
- Schedule vet appointments easily.
- Emergency assistance feature.



"I want to focus on my career and quality time with Kujo, without worrying about his health management."



TIM (THE INSURANCE CONSULTANT)

Tim Bradford is a senior insurance investigator at a leading health insurance company with over 10 years of experience. He oversees claim verification and fraud detection but often faces challenges with incomplete medical records and outdated processes. Although he strives to provide seamless service to clients, his role can be stressful and time consuming, especially in a fast paced, compliance driven environment.

CURRENT SYSTEM

- Tim reviews medical records and claim submissions, often verifying discrepancies manually.
- He uses specialized software to track claims but finds it inefficient with incomplete records.
- Communication with healthcare providers and clients is fragmented, causing delays.
- Tim keeps detailed logs but struggles with disorganized client files.
- He manages a high volume of claims, making it hard to prioritize urgent cases.



FRUSTRATIONS

- Delays due to incomplete records.
- Time-consuming manual verification.
- Poor communication with clients/providers.
- Overwhelmed by large claim volume.

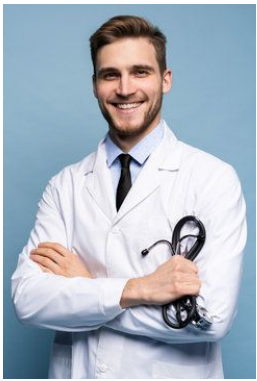


GOALS

- Ensure complete, accurate medical records.
- Streamline claim verification with technology.
- Improve communication with clients/providers.
- Reduce fraud risks.



"Incomplete records are the biggest hurdle in fast tracking claims clients often don't even realize what's missing."



Dr. OWEN (THE TRAUMA SURGEON)

Dr. Owen Hunt is an accomplished Trauma Surgeon known for his meticulous attention to detail, technological adaptability, and collaborative approach to patient care, dedicated to providing efficient and error-free patient care. Despite his expertise, he encounters significant challenges due to a lack of integration within hospital systems and the absence of emergency health information. These gaps often lead to delays in diagnosis and treatments, making it more difficult to deliver timely care in critical situations.

CURRENT SYSTEM

- Owen often encounters incomplete or delayed patient records during emergencies.
- Fragmented hospital systems create bottlenecks in patient diagnosis and treatment.
- Without a centralized health information system, reliance on verbal communication leads to outdated methods.
- Managing multiple cases simultaneously adds to the chaos when records inconsistent unavailable.



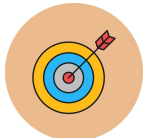
FRUSTRATIONS

- Delayed patient care due to silos.
- Lack of centralized medical data.
- Time wasted on manual processes.



GOALS

- Ensure seamless hospital system integration.
- Access emergency health data instantly.
- Eliminate manual data-entry errors.



"When systems are fragmented, I'm forced to waste precious moments. Integrated systems let me focus on saving lives, not searching for records."

Secondary Research - Results



Market Research - User Perception

**International Journal Of Community Medicine
And Public Health**

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HOME / ARCHIVES / VOL. 8 NO. 1 (2021): JANUARY 2021 / Original Research Articles

A study on perception of clinicians regarding use of electronic medical record for patients attending outpatient departments in a tertiary care teaching hospital in northern India

Samarpita Dutta
Dy. Medical Superintendent, Agartala Government Medical College,
Agartala, Tripura (West), India

Nirupam Madaam
Department of Hospital Administration, All India Institute of Medical
Sciences (AIIMS), New Delhi, India

Parmeshwar Kumar
Department of Hospital Administration, All India Institute of Medical
Sciences (AIIMS), New Delhi, India

PDF

PUBLISHED

2020-12-25

HOW TO CITE

- 81.4% of clinicians supported adopting EMR modules in outpatient departments.
- EMRs were perceived to improve quality of care.
- A significant benefit noted was the ease of following up on patients seen by different clinicians ($p < 0.05$).

Market Research - User Perception



International Journal of
Advanced Medical and
Health Research

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 Outline
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ORIGINAL ARTICLE

Perception of electronic medical records (EMRs) by nursing staff in a teaching hospital in India

Pera, Naveen Kumar; Kaur, Amrit¹; Rao, Raveendra²

[Author Information](#) ⓘ

International Journal of Advanced Medical and Health Research 1(2);p 75-80, Jul-Dec 2014. | DOI: 10.4103/2349-4220.148008

- 75% of nursing staff were comfortable using EMRs.
- EMRs were valued for displaying critical patient information (diagnoses, medications, allergies).
- Perceived benefits included improved decision-making and patient care due to immediate access to medical history.

Market Research - User Perception



The screenshot shows the header of the Indian Journal of Medical Research website. The header is blue with the journal's logo and name on the left. Below the header is a navigation bar with links: Home, About Us, Editorial Board, Issues, Ethical Guidelines, Instructions, and Media & News. Below the navigation bar is a row of social media icons (WhatsApp, Facebook, X, LinkedIn, Messenger, Print, Pinterest, Email) and a row of icons for translation, a search bar, and buttons for 'Buy Reprints' and 'PDF'. Below the icons is the article information: 'Practice Original Article', '160(1);51-60', and 'doi:10.25259/ijmr_664_23'.

INDIAN JOURNAL OF MEDICAL RESEARCH
Official Journal of the Indian Council of Medical Research

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Translate this page into:
English

Practice
Original Article
160(1);51-60
doi:10.25259/ijmr_664_23

- 78% of participants adopted digital health IDs.
- Barriers to uptake included lack of awareness, low digital literacy, and unclear utility.

Perception towards electronic health records & uptake of digital health IDs among the urban residents in northern India: A mixed methods study

Aravind P. Gandhi^{1,2}, Kathirvel Soundappan¹,

¹Department of Community Medicine and School of Public Health, Postgraduate Institute of Medical Education and Research, Chandigarh, India

²Department of Community Medicine, All India Institute of Medical Sciences, Nagpur, India

Market Research - User Perception



Harvard
Business
Review

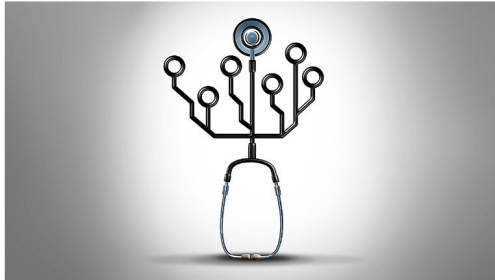
Technology And Analytics | AI Can Outperform Doctors. So Why Don't Patients Trust It?

Technology And Analytics

AI Can Outperform Doctors. So Why Don't Patients Trust It?

by Chiara Longoni and Carey K. Morewedge

October 30, 2019



- Highlight AI's ability to provide personalized care using patient-specific data.
- Use clear language like "based on your unique profile" to build trust.
 - Ensure physician involvement in final decisions to boost acceptance.
 - Educate patients on how AI integrates lifestyle, history, and genetics into recommendations.

Market Research - External Factor Analysis

P : Government initiatives like Ayushman Bharat focus on affordable healthcare; data privacy regulations evolving.

E : Rising middle-class income and healthcare spending; demand for cost-effective health management solutions.

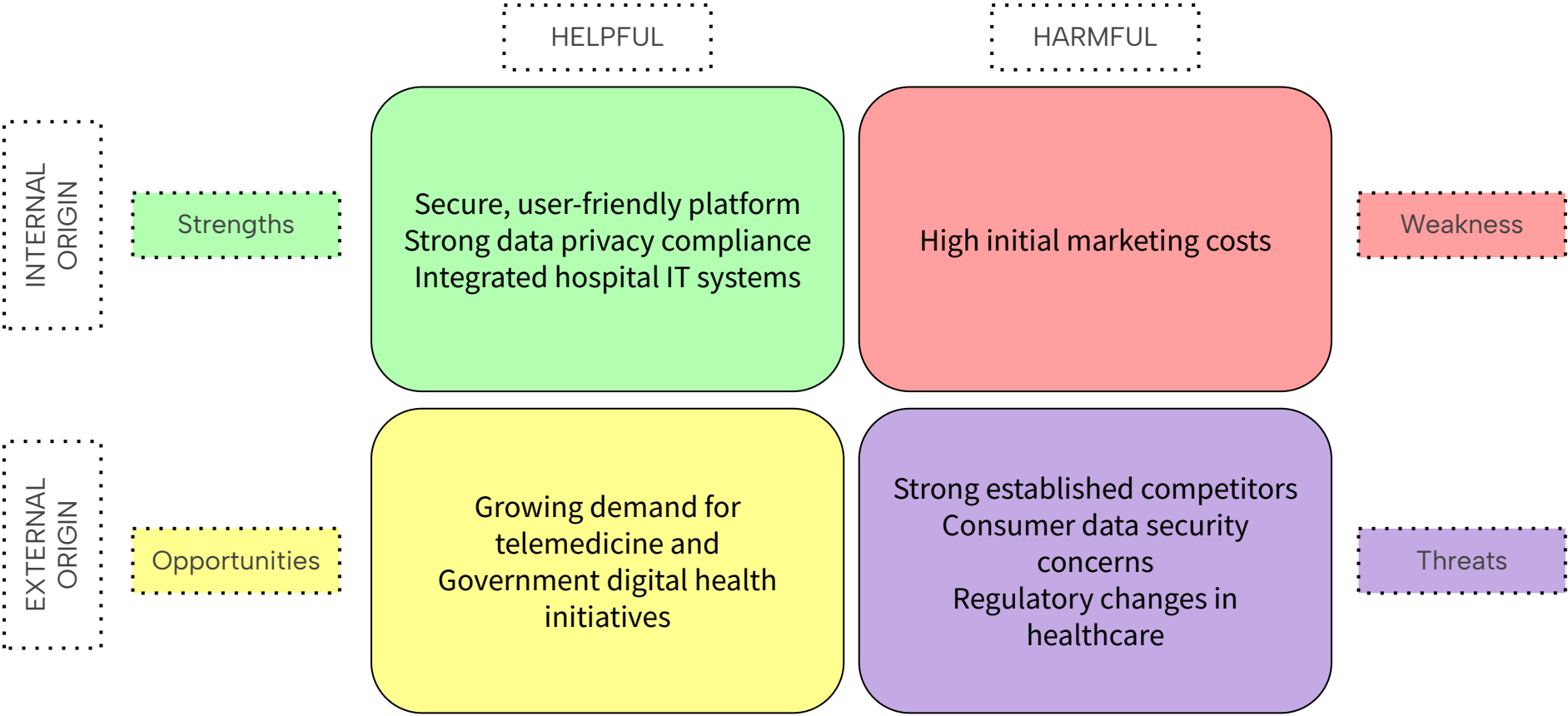
S : Growing health consciousness; increasing adoption of health-tech solutions, especially among urban families.

T : Surge in mobile healthcare apps; fragmented hospital IT systems need integration solutions.

E : Push for reducing paper records; increasing adoption of sustainable, digital healthcare solutions.

L : Strict compliance with Personal Data Protection Bill (PDPB) and healthcare data regulations.

Market Research - Internal Factor Analysis



Market Research - Competitive Analysis



Market Research - Competitive Analysis



Comprehensive Overview

<https://docs.google.com/spreadsheets/d/16xXwscAqFC9qbjlaDh42FCPMLDp5XRJxkklx1-q-l0U/edit?usp=sharing>

MedZ- Product Explanation



What exactly is MedZ?

MedZ is an innovative digital healthcare platform designed to simplify health management for individuals, families, and healthcare providers. With advanced technology, including AI-driven insights and real-time data synchronization, MedZ connects patients, doctors, labs, and pharmacies while ensuring data security compliant with Indian healthcare standards like FHIR and NHA.



MedZ : Mission and Vision

MISSION

To revolutionize healthcare accessibility and management by offering an intelligent, integrated platform that empowers users to take control of their health through personalized insights, seamless connectivity, and secure data handling.

VISION

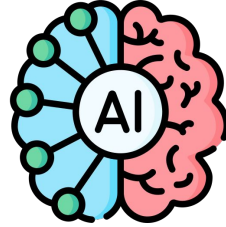
To be the most trusted digital healthcare solution in India, transforming the way individuals, families, and providers interact with health services by creating a safe, unified, innovative, and user-friendly ecosystem.



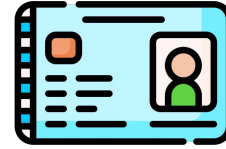
Why use MedZ?



Comprehensive Health
Management



AI-Driven Health Insights



Emergency Card Services



Seamless Doctor-Patient
Ecosystem



Integrated Insurance
Management



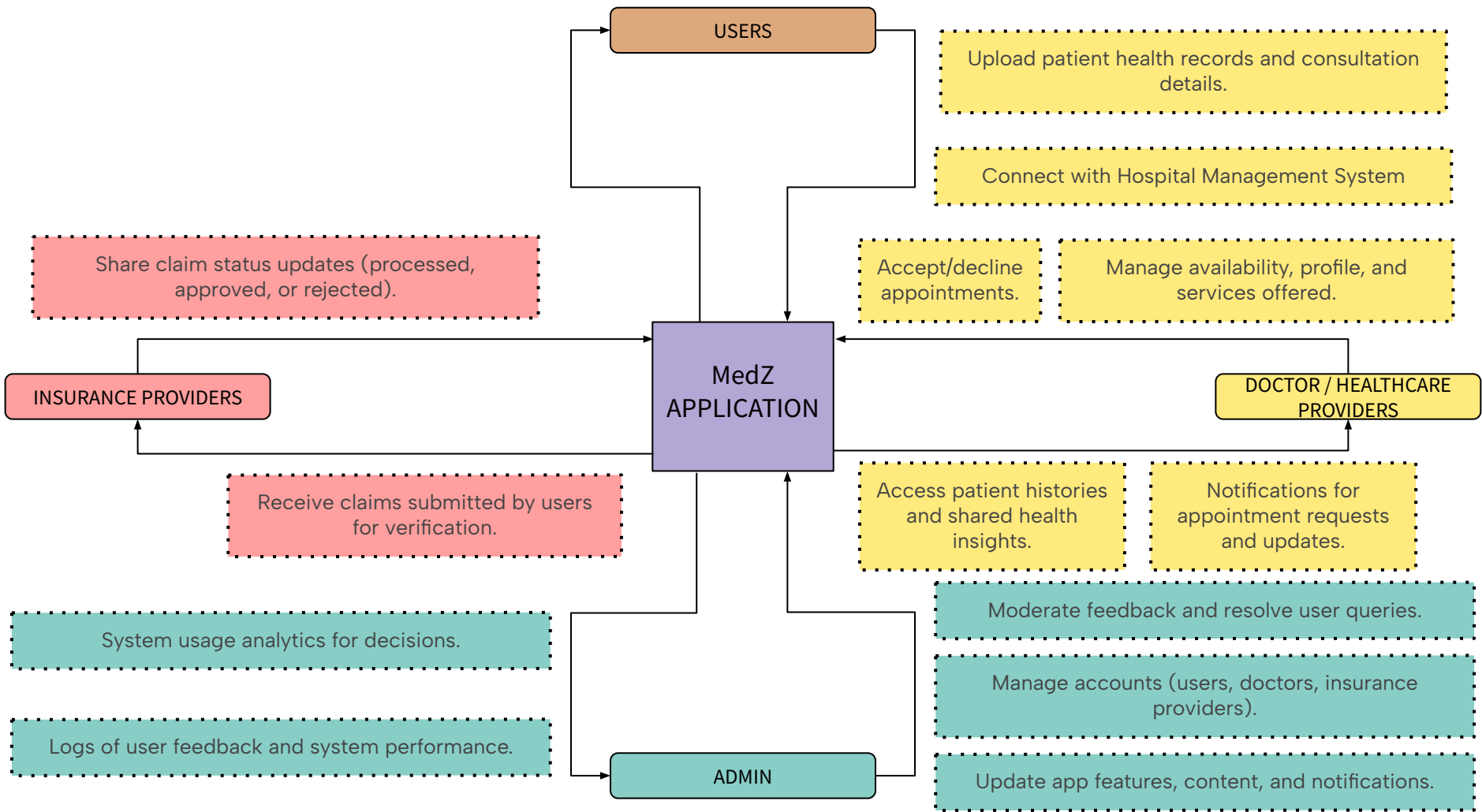
Data Privacy and Security

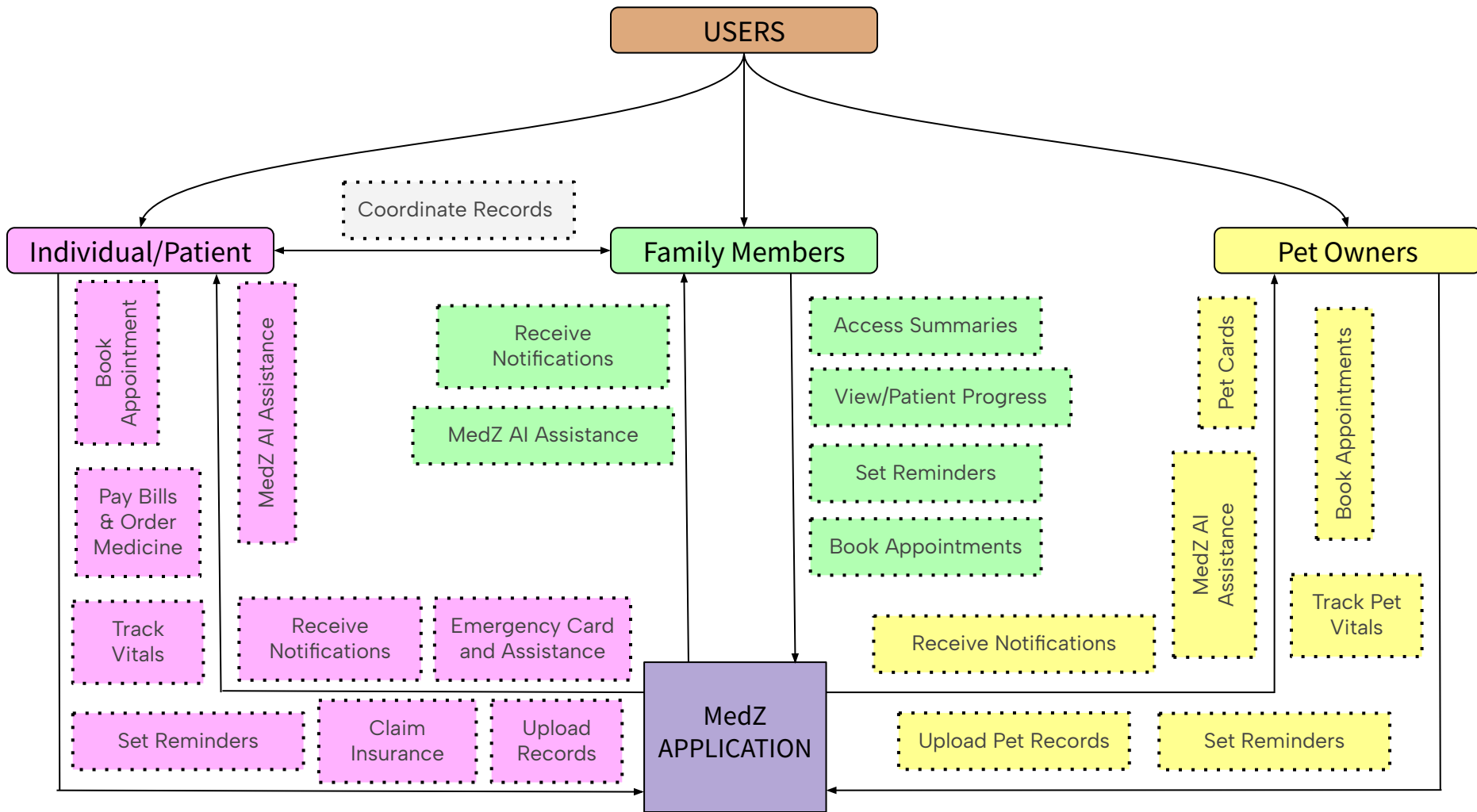
Our Target Customers

- **Patients** seeking efficient health management solutions through a user-friendly app
- **Families** managing healthcare for loved ones, including children or elderly parents
- **Pet owners** needing integrated health records and care for their pets
- **Doctors and clinics** streamlining patient data, appointments, and improving their reach
- **Insurance users** managing policies with real-time updates and efficient tools

MedZ- Context Diagram







MedZ - Business Overview

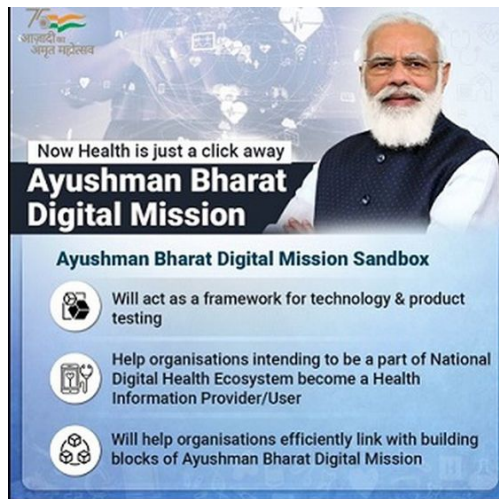
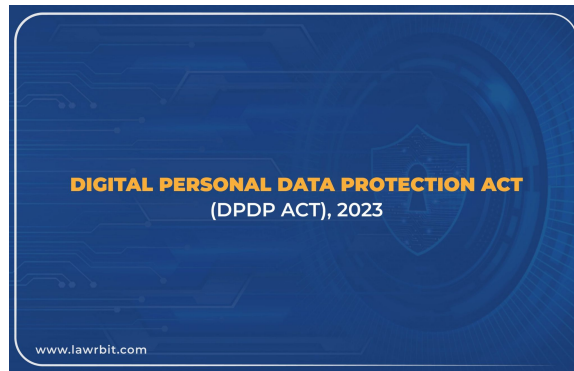


Sourcing : Data

Data Integration: Partner with ABDM-compliant hospitals, diagnostic labs, and telemedicine platforms for seamless patient data integration

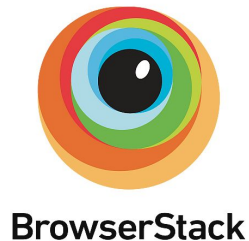
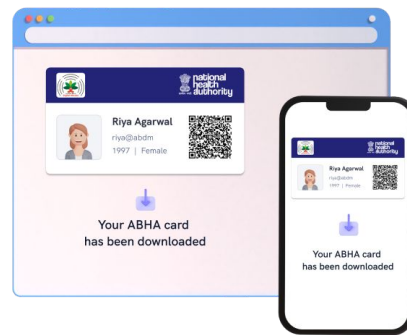
Data Privacy: Adherence to DPDPA 2023, following ABDM guidelines for secure, interoperable storage using FHIR standards, and implementing role-based access control for data access.

Data Localization: Secure storage on India-based servers



Sourcing : Software Requirements

- **AWS** Mumbai Region for reliable, scalable cloud services
- **Spring Boot** for secure, scalable backend development
- **React Native** for cross-platform mobile app development
- **ABDM HIE** integration for interoperability
- **BrowserStack** for cross-platform testing



Sourcing : Engineers, Management, and Others

Healthcare IT
Professionals

Software Developers

Data Privacy Specialists

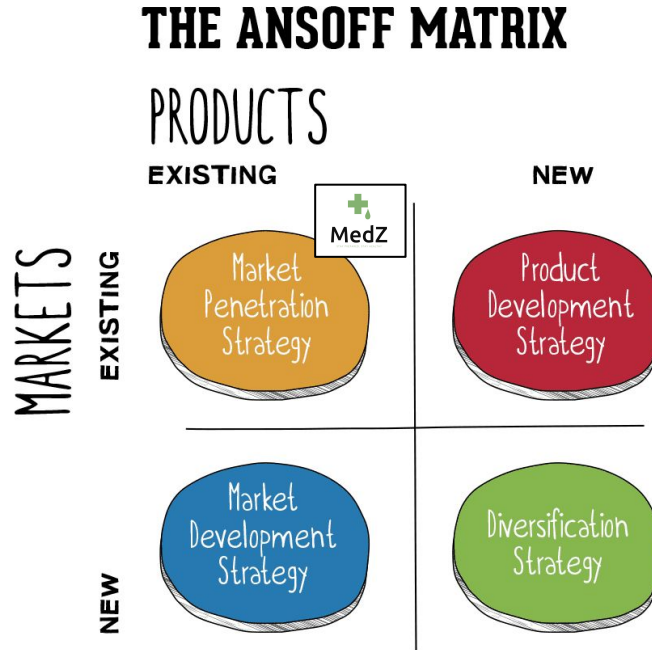
Data Analysts

UX/UI Designers

Cybersecurity
Professionals

Local Partnerships
Team

Service Strategy



Service Strategy : Market Penetration Strategy

- A pre-demo to introduce the app
- Tailored Features for Diverse Medical Fields (psychologists, veterinarians)
- Expand Network of Healthcare Providers (hospitals, clinics, specialists)
- Focus on Seamless UX (intuitive, mobile-first, voice-activated)
- Accessible Design (high-contrast, screen reader compatibility, multilingual, opendyslexic)
- Customer Support (24/7, multi-channel assistance)
- AI-Driven Healthcare Insights (predictive health, preventive care)
- Strengthen Insurance Collaborations (real-time claims management)

Pricing Strategy



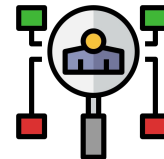
Pricing Strategy: Penetration

Boosts initial sales by attracting customers quickly with competitive pricing



Increases market awareness, raising MedZ's visibility across a wide range of healthcare professionals

Generates a buzz, creating excitement and higher demand in the healthcare market



Pricing Strategy



Free of Cost for Customers
(Patients)



Subscription Model for
Healthcare Providers

Promotional Strategy



Promotional Strategy



Personal Selling

Direct Marketing

Sales Promotion

Promotional Strategy



Internet Marketing

Advertisement

Risk Management - Business



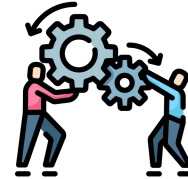
Regulatory Compliance Risk



Competitive Risk



Scalability and Financial Risk



Operational Risk

Risk Management - Customers



Privacy and Data Security Risk



Data Integrity Risk

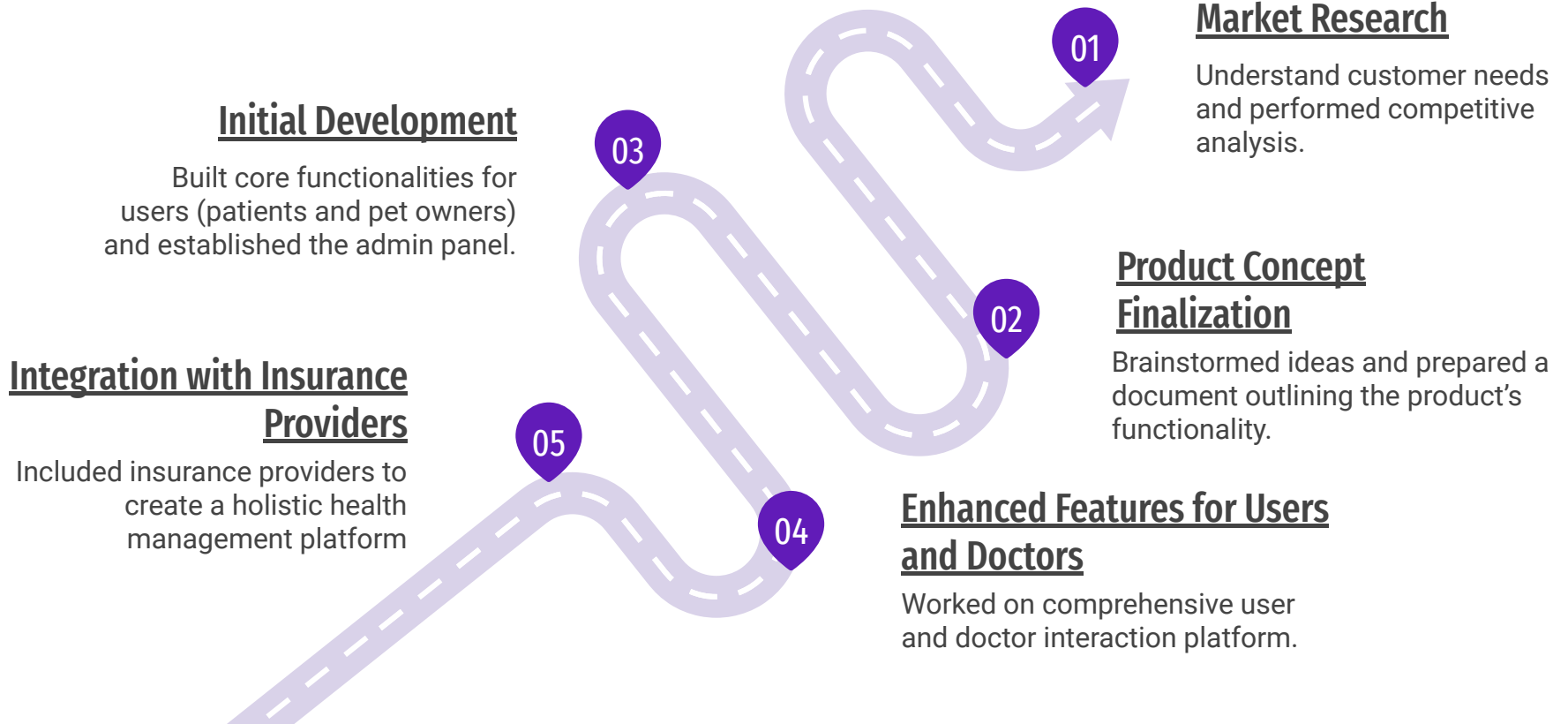


Reputation and Trust Risk

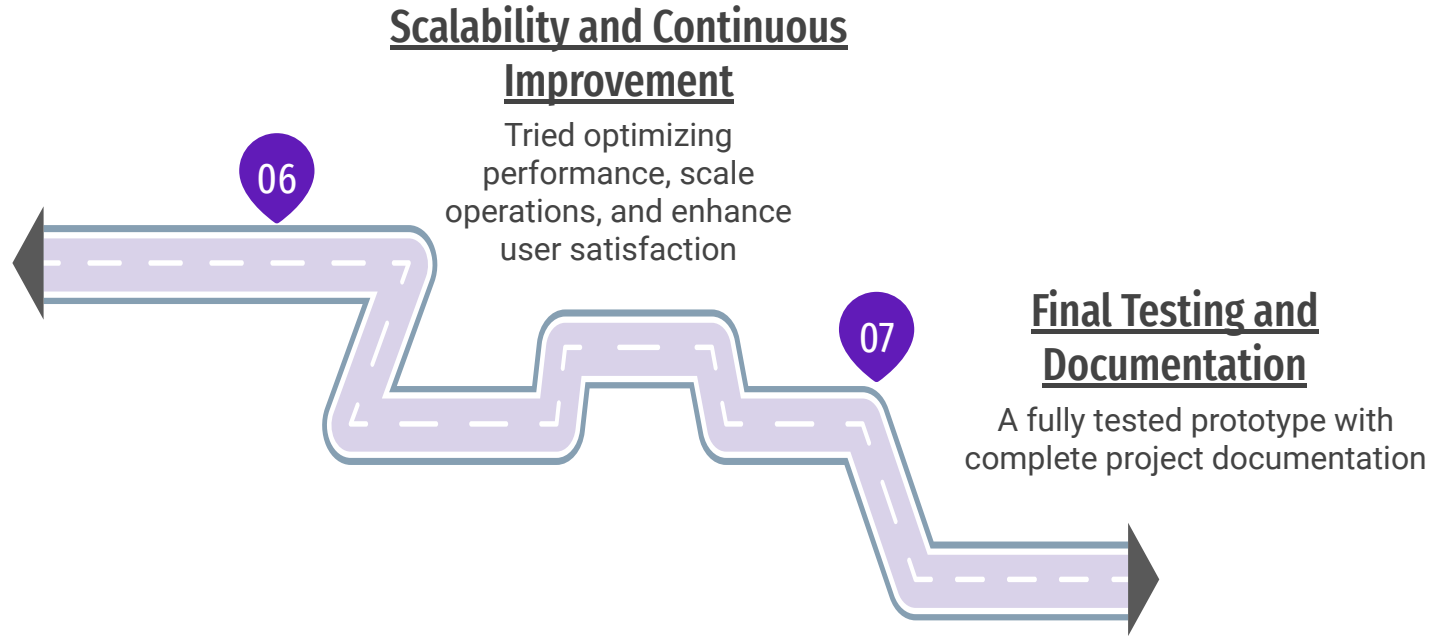
MedZ - Roadmapping



Roadmap Infographics



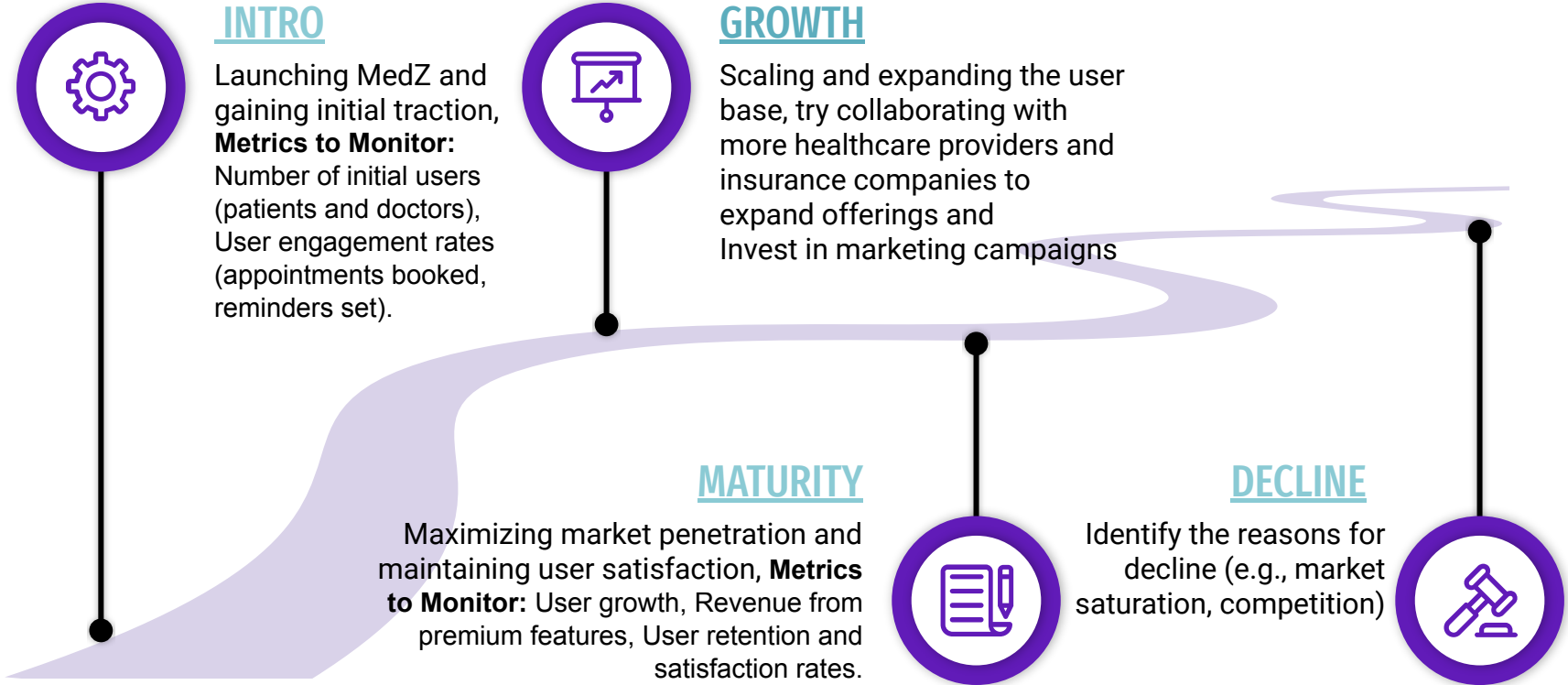
Roadmap Infographics



MedZ - Product Life Cycle



MedZ - Product Life Cycle



MedZ- Revenue and Funding

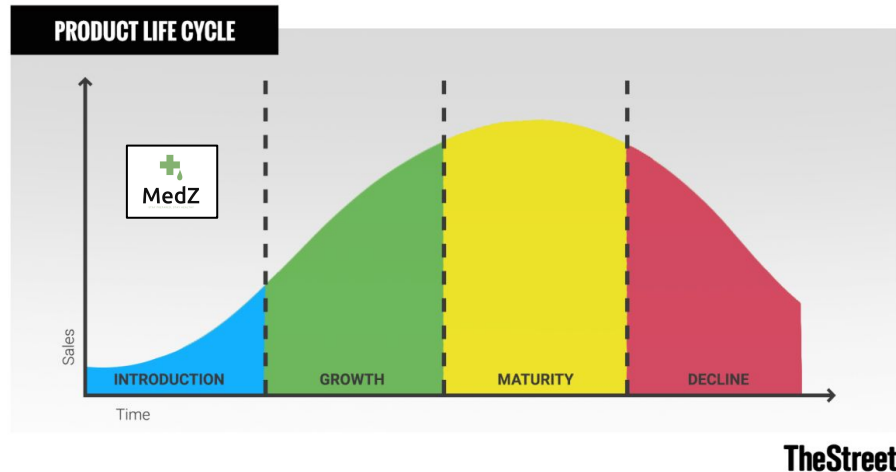


Funding - Introduction Stage

Focus: Develop MVP, attract early users, and monitor key metrics.

Revenue: Limited revenue from initial user base.

Costs: Product Development, Marketing & User Acquisition, Operational Costs.

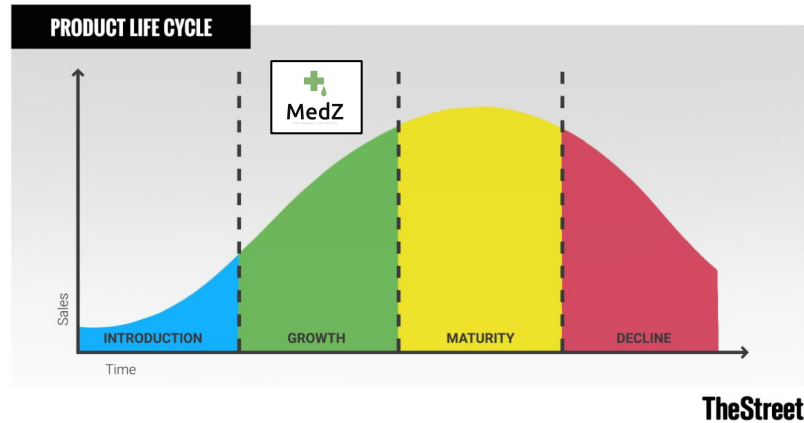


Funding - Growth Stage

Focus: Expand market reach, increase app visibility, and enhance user experience.

Revenue: Increase ad revenue and early-stage monetization

Costs: Product Enhancements (health tracking, MedZ AI integration, advanced analytics), Marketing & Partnerships, Operational Scaling.

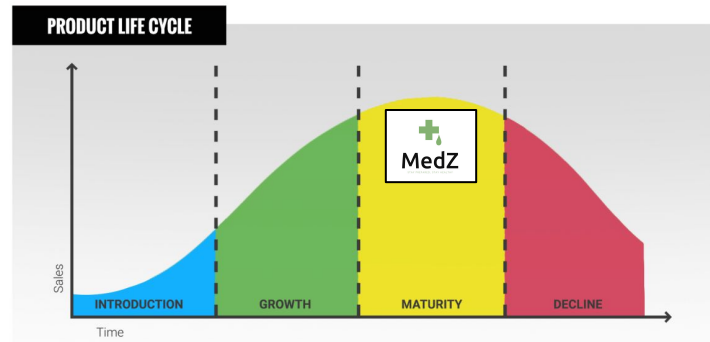


Funding - Maturity Stage

Focus: Retain users, maximize revenue through premium features and MedZ AI, and maintain high user satisfaction.

Revenue: Monetize MedZ AI with premium subscription features, and increased user engagement.

Costs: Maintenance & Upgrades, Marketing for Retention, Operational Efficiency.



MedZ- Wireframe



Link to Prototypes

<https://www.figma.com/design/aDI7kUYH7Z4XtZsKHFMoaG/Untitled?node-id=0-1&t=xJW7K6S49p86iS27-1>

References

1. <https://www.ijcmph.com/index.php/ijcmph/article/view/7209>
2. <https://hbr.org/2019/10/ai-can-outperform-doctors-so-why-dont-patients-trust-it>
3. https://journals.lww.com/iamr/fulltext/2014/01020/perception_of_electronic_medical_records_emrs_by.10.aspx
4. <https://ijmr.org.in/perception-towards-electronic-health-records-uptake-of-digital-health-ids-among-the-urban-residents-in-northern-india-a-mixed-methods-study/>
5. <https://www.analyticsvidhya.com/blog/2024/05/med-gemini/>
6. <https://www.eka.care/services/top-10-emrs-in-india>

Thank You

