What are Best Tools for Digital Transformation in Today World Helping People from Health and Banking Sectors

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Abstract— In recent days we looks into the best digital transformation strategies for modernizing the banking and healthcare sectors in the rapidly evolving technological environment of today. It examines key technologies for the banking sector, including big data analytics, mobile banking applications, robotic process automation (RPA), and electronic health records (EHR) and artificial intelligence in healthcare diagnostics. The analysis examines how these solutions solve issues unique to the industry, boost productivity, and enhance customer satisfaction. By examining how both industries are approaching digital transformation, this report sheds light on emerging trends and best practices from across industries.[17] The results highlight the need for further innovation and cybersecurity in order to fully exploit the potential of digital transformation in improving public health outcomes.

Key words: Digital transformation , Health Care, Cybersecurity, Technology.

1. Foreword of best tools in today life :

In the rapidly evolving twenty-first century, digital transformation has emerged as a key driver of advancement in numerous industries. The two most significant industries in today's society that are most affected by this technology revolution are banking and healthcare. These industries are vital to both economic stability and human well-being, yet new digital tools and technologies are causing a big change in them. [11].

Digital transformation, often understood to mean integrating digital technology into every facet of a company or organization, has a profound impact on how operations are conducted and value is provided to clients or patients. The efficacy of healthcare delivery systems, diagnostic precision, and patient care are all expected to increase with this modification.

Digital technologies are revolutionizing banking services by offering unmatched convenience, security, and customization to customers, all while decreasing internal processes for financial institutions.

Global occurrences like the COVID-19 pandemic have made the need for digital solutions and remote services even more critical, underscoring the importance of digital transformation in these industries. In order to ensure treatment continuity, healthcare providers swiftly adopted telemedicine systems, and banks expanded their digital capabilities to meet the rising demand for contactless and online banking.

Up to 2019, India's digital transformation experienced notable progress in a number of areas. The following are a few top instruments and technological advancements that were essential.:

Aadhaar :The largest biometric identity system in the world, Aadhaar, made it possible for over a billion people to engage in the digital economy as shown sample model in Fig 1: Unique Identification Authority of India (UIDAI)

Fig 1: Unique Identification Authority of India (UIDAI)

DigiLocker: A safe online platform for exchanging and storing digital files as shown in below Fig. 1:Access of Diglocker.
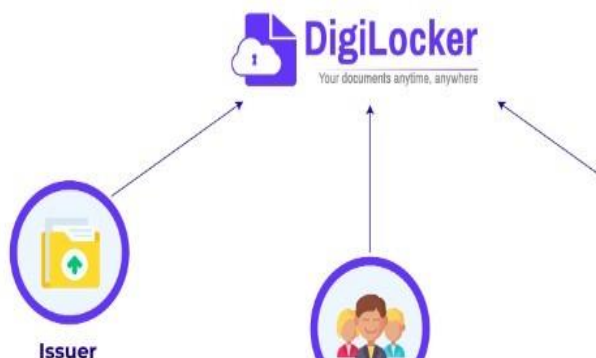

Fig. 2:Access of Diglocker

.**The Unified Payments Interface (UPI)**:In which enables instantaneous money transfers between bank accounts via mobile devices, completely changed the digital payments industry as shown in Fig 3:UPI.

Fig 3:UPI

The Goods and Services Tax: It was made easier to apply via the GST Network (GSTN), which also made tax compliance and procedures more efficient
BHIM App: A UPI-based mobile payment app that encourages cashless transactions.
Government e-Marketplace (GeM): An online marketplace that improves efficiency and transparency for public procurement[4]
These tools together contributed to India's rapid digital transformation, making services more accessible and efficient for millions of people.

II   Overview of Digital Transformation in Healthcare and Banking:
Digital adoption in both healthcare and banking sectors saw significant developments up to 2019, though the pace and nature of adoption varied between the two.
1.1 Current state of digital adoption in both sectorsHealthcare
Digital adoption in the healthcare industry happened more slowly than in other industries. Among the crucial areas of digital transformation were:

☐   The EMRs, in United States had roughly 35% adoption of EMRs, while Europe lagged behind at about 3%1. Adoption rates of EMRs varied greatly

.It has reached 90% in non-federal acute care institutions.

☐ In Telemedicin the starting usage to increase, it was still relatively new. Healthcare providers' aversion to change, reimbursement practices, and regulatory concerns were among the obstacles. It may be increases to 65-75% of hospitals in the United States fully or substantially utilizing telehealth systems by 2022.

☐ In Digital health tools are limitedly incorporated into routine care, they were being developed for diagnosis, treatment, and management. Significant obstacles included organizational and cultural barriers. The wearable health device industry is expected to reach $40 billion by 2025.

Banking:

The banking industry saw a quicker digital transformation:

Online and Mobile Banking: The majority of banking transactions has shifted to the internet by 2019.With the ease of handling accounts while on the road, mobile ba nking apps have grown in popularity[1].

Fintech innovations include digital wallets, robo-advi sors, peer-to peer lending and digital wallets. These ser
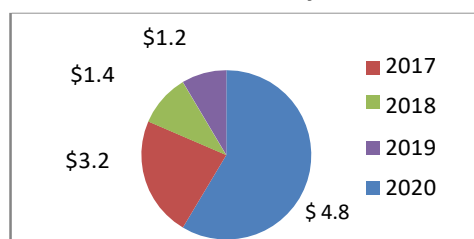-vices were made possible by the emergence of fintechCompanies.[8]

Fig 4: Global Mobile Payments

Blockchain and Cryptocurrencies: As alternative financial tools, cryptocurrencies and blockchain technologyhave drawn the attention of banks.

☐ Mobile banking has grown to 72% of customers in wealthy countries.

☐ 46% of banks are in the process of digitalizing their operations.

☐ AI and machine learning adoption in banking is 32%, with an additional 33% planning deployment.

☐ 66% of banks are exploring blockchain technologyfor a variety of applications.

1.2 Common difficulties in digital transformation forhealthcare:

☐ Data privacy and security problems.

☐ Interoperability issues between different systems.

☐ Resistance to change among healthcare professionals

☐ High early implementation costs

☐ Regulatory compliance (such as HIPAA in theUnited States)

Banking:

☐ Legacy system integration.

☐ Cybersecurity Threats

☐ Changing consumer expectations

☐ Regulatory compliance (such as GDPR and PSD2)

☐ Competition from fintech startups

Shared challenges:

☐ Skills gap in the workforce

☐ Ensuring a seamless user experience

☐ Maintaining Trust While Innovating

☐ Scalability of New Technologies

In general, the banking industry outperformed the healt hcare industry in terms of digital technology adoption and in tegration, even though both were undergoing digital transfor mation as shown in the above Fig 4:Global MobilePayments.

III Key Digital Transformation Tools in Healthcare:

A number of key technologies have been at the forefront of the digital revolution that has significantly transformed the healthcare sector. Platforms for telemedicine have grown in importance, especially in the wake of the COVID-19 pandemic. By providing remote patient monitoring, diagnosis, and treatment, these technologies remove geographical barriers to healthcare access. By providing video consultations, encrypted communications, and digital prescriptions, telemedicine has significantly reduced costs and improved patient comfort while also expanding access to healthcare in remote areas. The uptake of telemedicine has been astounding; according to companies like Teladoc Health, total visits increased by 156% in Q1 2020 compared to the same period in 2019.[2] Electronic Health Record (EHR) systems have been the cornerstone of contemporary healthcare information management, alongside telemedicine. These comprehensive digital patient documents contain lab results, medicines, progress comments, and demographic information. Better clinical decision support, reduced medical errors, and increased patient care coordination have all been brought about by the implementation of EHR systems.

Another revolution in healthcare is artificial intelligence (AI), particularly in the area of diagnostics. Artificial intelligence (AI) systems have demonstrated remarkable talents in analyzing complex medical data, often outperforming human experts in tasks like medical imaging cancer detection.

Another area of digital transformation in healthcare is the Internet of Medical Things (IoMT). This network of interconnected medical devices and software gathers and exchanges health information to enable ongoing patient monitoring and early detection of health issues. With wearable technology like smart watches, remote patient monitoring systems, and smart pharmaceuticals, IoMT is revolutionizing how we track and manage health. [10][12]

Lastly, blockchain technology is emerging as a useful instrument for secure healthcare data exchange. Blockchain offers a decentralized, impenetrable method of distributing and storing medical data, which might potentially solve some of the most pressing issues with healthcare information management. Applications span from enhancing the transparency and traceability of pharmaceutical supply chains to the safe interchange of patient records between providers. Blockchain has the potential to empower patients by giving them control over their medical data, as demonstrated by initiatives like MIt is MedRec. To guarantee widespread use, nevertheless, challenges including scalability, legal compliance, and excessive energy consumption must be addressed.

IV The Crucial Tools for Digital Transformation in Banking:

3.1 Applications for Mobile Banking. Applications for mobile banking have completely changed how customers interact with their banks. With the help of these apps, users may perform a number of tasks directly from their tablets or smart phones, including bill payment, balance transfers, and balance checks. Due to its flexibility, mobile banking significantly reduces the need for traditional bank visits by enabling customers to manage their funds from anywhere at any time. [13][14]

The following characteristics are frequently found in mobile banking apps:

Account Management: Users are able to see statements, transaction histories, and account balances. Mobile check deposits, bill payments, and fund transfers are examples of standard transaction capabilities. **Push Notifications for Users:** Users receive

notifications regarding promotions and activity on their accounts.

3.2 AI-Powered Chatbots for Customer Support

With the use of chatbots, artificial intelligence (AI) has become a crucial part of banking customer service. These AI-powered solutions provide round-the-clock assistance, handling transactions, responding to customer inquiries, and providing tailored recommendations based on user activity. Among the main benefits of AI chatbots are: **Better customer experience**: Quick answers to questions from customers boost satisfaction and reduce wait times. **Cost Efficiency:** Human agents can concentrate on more complex problems by automating common queries, which maximizes the use of available resources. **Data-Driven Insights:** AI systems assess customer interactions to identify patterns and enhance service provision over time.

3.3 Back-office operations with robotic process automation(RPA):

By automating repetitive tasks like data entry, compliance checks, and transaction processing, RPA enhances back- office operations. With the use of this technology, banks may reduce their operational costs while reducing the possibility of human error, which improves process accuracy and efficiency.

Among RPA's benefits in banking are:

Enhanced Efficiency: Automation speeds up processes that needed a lot of manual labor in the past. **Cost Reduction:** Banks can cut operational expenses significantly by reducing the need for human labor. **Scalability:** Without requiring a matching increase in resources, RPA systems can be readily expanded to manage growing transaction volumes.

Conclusions:

The integration of these digital transformation tools is critical for both sectors to fulfill changing customer needs and overcome the hurdles offered by a competitive environment. As enterprises continue to embrace new technologies, they will not only increase operational efficiencies but also the overall customer experience, paving the way for a more inventive and responsive future in healthcare and finance.

The continued commitment to digital transformation will be critical in tackling each sector's specific difficulties and realizing the full potential of technology to improve service delivery and patient care.

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