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INSURTECH AND FINANCIAL INCLUSION: AN EXPLORATION OF INCLUSIVE INSURANCE ACCESS IN INDIA

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ABSTRACT:

Despite the critical role of insurance in promoting financial security, India continues to face significant challenges in extending insurance coverage to its low-income, rural, and informal populations. The adoption of inclusive insurance has been historically impeded by structural barriers, including affordability, limited awareness, geographic inaccessibility, and a lack of trust. In recent years, InsurTech, which can be described as the use of technology to revolutionize the delivery of insurance, has proven to be a game changer that can potentially fill these gaps. InsurTech firms are revolutionizing the distribution and consumption of insurance in India by utilizing digital tools such as mobile platforms, artificial intelligence, vernacular interfaces, and usage-based pricing. This study investigates the role of InsurTech in promoting financial inclusion within the Indian insurance sector. It systematically identifies and categorizes key technological innovations, evaluates their contribution to enhancing inclusive insurance access, and analyzes the enabling factors and barriers that shape these outcomes. This study advances the discourse on inclusive digital insurance and provides policymakers, industry practitioners, and researchers with actionable insights to use InsurTech as a catalyst for equitable financial inclusion by employing a conceptual approach.

Keywords: *Insurtech, Financial inclusion, Inclusive insurance, Digital insurance innovation, Phygital solutions*

1. INTRODUCTION:

Insurance is very crucial in enhancing financial stability and resilience since it protects individuals and households against uncertainties in life. In general terms, insurance refers to a tool that financially covers unexpected occurrences through the transfer of possible risks to providers in form of periodic payments, or premiums. It works under the principle of risk-pooling, and it helps guard against unpredictable and uncontrollable uncertainties (Wang and Rosenman, 2007). Insurance plays a dual role of acting as a social and financial security which allows individuals to preserve their welfare, support their dependents and cover their assets during a crisis (Ewold, 1991). In essence, it helps a person to lead a more stable and easier life because it cushions against the financial impact of unexpected events (Biradar & Joshi, 2024). In addition to its role in

individual financial security, insurance also serves as a foundational element of broader financial inclusion efforts. Financial inclusion is described as a situation where there is a guarantee of provision of the necessary financial services to all at low prices, with high emphasis on the underserved, and it has been at the forefront of sustainable and inclusive economic growth (Demirguc-Kunt et al., 2018). In this context, Insurance mitigates not only the personal risk but also helps exclude the inequalities in income and strengthen national development goals. Being one of the pillars of financial inclusion, insurance allows low-income and underserved groups of the population to control risks, prevent debt traps, and engage in long-term economic activity with a higher degree of confidence (Didenko & Sidelnyk, 2021). Nevertheless, insurance is still one of the underdeveloped areas of the financial inclusion in most of the developing economies, including India. The Indian insurance industry battles a lot of structural issues which are characterized by low penetration levels, products awareness and the presence of a wide rural urban divide. A significant number of people do not fall within the mainstream insurance system because of affordability, lack of confidence, complexity of the process, and poor distribution channels (Jain & Singh, 2024). These barriers are severe especially in the rural and semi-urban settings, where access to formal financial services often remains restricted despite the presence of targeted governmental initiatives.

In recent years, the emergence of Insurance Technology (InsurTech) has opened new possibilities for bridging these inclusion gaps. InsurTech, a term derived from the integration of "insurance" and "technology," denotes the use of emerging digital innovations to enhance, modernize, and optimize processes within the insurance industry, thereby fostering greater efficiency and accessibility. Technologies such as mobile platforms, artificial intelligence (AI), big data analytics, and blockchain have become core enablers of InsurTech business success (Daily Social, 2021). These innovations support savings and improvements across key areas traditionally constrained under conventional insurance models, including underwriting, risk assessment, and claims processing (Cortis et al., 2019). The Indian InsurTech sector has shown remarkable growth, housing over 300 active startups as of 2022 (Inc24, 2022). These startups are redefining insurance delivery by enabling consumers to purchase policies seamlessly through mobile apps and websites. As India advances toward its Viksit Bharat 2047 vision, a robust and inclusive financial sector is essential for placing the insurance sector, and particularly InsurTechs, at the forefront of this transformation. InsurTechs are perfectly positioned to generate inclusive insurance growth by increasing access, developing awareness, and improving affordability.

Recognizing this potential, the Indian government has also initiated various programs like BIMA Sugam, IRDAI Hackathon and Regulatory Sandbox to build a friendly digital environment (IRDAI, 2023). They also allow creating the niche products that will suit the unique requirements of underserved segments and, thus, increase outreach and enhance inclusiveness. Despite these opportunities, the adoption of InsurTech also faces critical limitations, including digital illiteracy, regulatory ambiguity, data privacy concerns, and unequal access to enabling infrastructure (Perticone & Graz, 2024).

Against this backdrop, the present study seeks to explore the role of InsurTech in advancing financial inclusion within the Indian insurance sector. Although previous studies have mainly concentrated on the

technological innovation and business efficiency of the InsurTech (Cosma & Rimo, 2024; Koprivica, 2018 Sosa & Montes, 2022), limited attention has been paid to its inclusivity outcomes, particularly in emerging economies like India. This study seeks to fill this gap by developing a structured conceptual understanding of how technological innovations can facilitate inclusive insurance access, while also examining the key enablers and barriers influencing this process. Therefore, the main objectives of the research are (a) To identify and categorize key technological innovations driving the InsurTech sector in India. (b) To examine how InsurTech platforms contribute to enhancing financial inclusion in insurance. (c) To analyze the enablers and barriers influencing inclusive outcomes within the InsurTech landscape.

1.1. ORIGIN AND DEVELOPMENT OF INSURTECH:

The rise of InsurTech can be traced back to the early 2010s, evolving as a specialized offshoot of the broader FinTech revolution that had already begun reshaping the banking and financial services landscape. One of the pioneering efforts in this space was led by the Berlin-based startup Friendsurance, which in 2010 introduced the concept of peer-to-peer (P2P) insurance. This model enabled small groups of insured people to take on risk collectively as part of a super-pool that promised benefits including cashback incentives as part of a claim-free period, which was a new idea to conservative risk pooling structures. This invention also led to a rapid emergence of the InsurTech sector, where the initial innovators, such as CoverHound, offered digital price-comparison systems and Trov offered on-demand insurance coverages of personal property (Sarkar, 2021). These new ventures paved the way to an increasing trend of the digital revolution in the insurance industry.

During the last ten years, the InsurTech sector started its strong and steady development due to the swift progress of technology and the evolving demands of consumers. The InsurTech industry in the world was estimated to have reached about USD 10.3 billion as of 2024. According to the projections made by the IMARC Group, the market is notably expanding, and the market will reach the value of USD 152.9 billion by 2033, which accounts for the high compound annual growth rate (CAGR) of 31.51% in 2025-2033. North America is still dominating the world scene, contributing over 38.7 percent market share in 2024. This growth trajectory is fueled by multiple converging trends: the widespread integration of digital technologies across the insurance value chain, evolving consumer demands for streamlined and user-friendly digital services, increased deployment of Internet of Things (IoT) devices for risk monitoring, and the strategic use of artificial intelligence (AI) to detect and prevent fraud. Collectively, all these elements are not just transforming how operations are aperformed, but also how insurance will be delivered across the world in the future (IMARC, 2025).

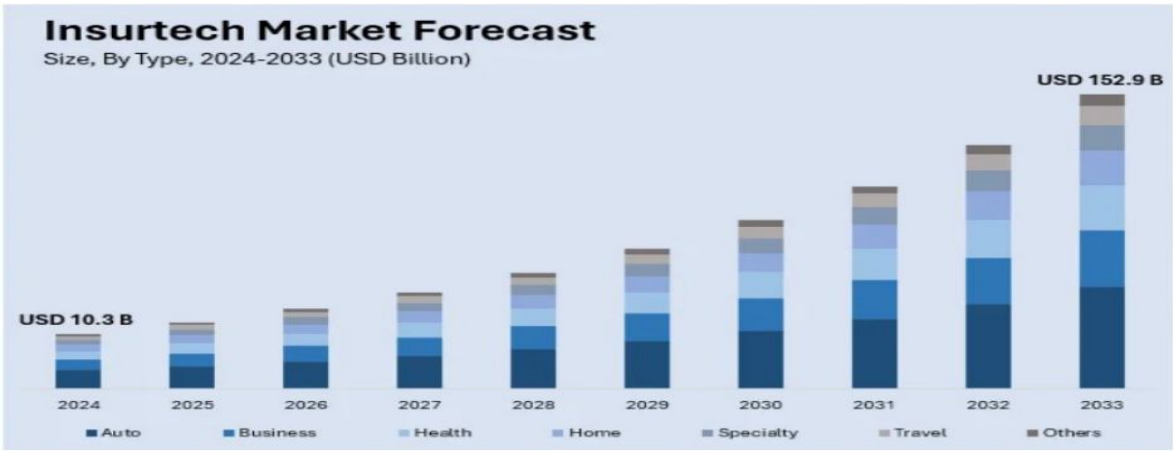

Figure 1: InsurTech Market Forecast Source: IMARC

1.2. INSURTECH IN INDIA:

The insurance industry is both huge in terms of the size of asset and profits on one hand and the manpower it employs on the other hand which is in millions. Insurance is still at the center of financial ecosystems as it is ranked as the 15th largest industries in the world (Varghese & Haresh, 2018). However, in India, InsurTech is still in its developmental stages, slowly picking up the pace in the general microscope of financial technologies. Despite its early-stage development, technology is expected to be the cornerstone of India's insurance future. According to IMARC Group estimates, the Indian InsurTech market reached a valuation of USD 0.90 billion in 2024 and is projected to grow significantly, reaching USD 11.90 billion by 2033 at a robust compound annual growth rate (CAGR) of 29.10% during the 2025–2033 period. This accelerated growth is being propelled by a confluence of factors, including widespread digital adoption, a gradual increase in insurance penetration, supportive regulatory initiatives, and the integration of artificial intelligence in underwriting processes. Further, increased need of customized and adaptable insurance products as well as the spreading mobile and internet access gives new opportunities. Collaborative efforts of traditional insurance companies and technology-driven startups are also creating a stimulating, innovative future outlook of the business.

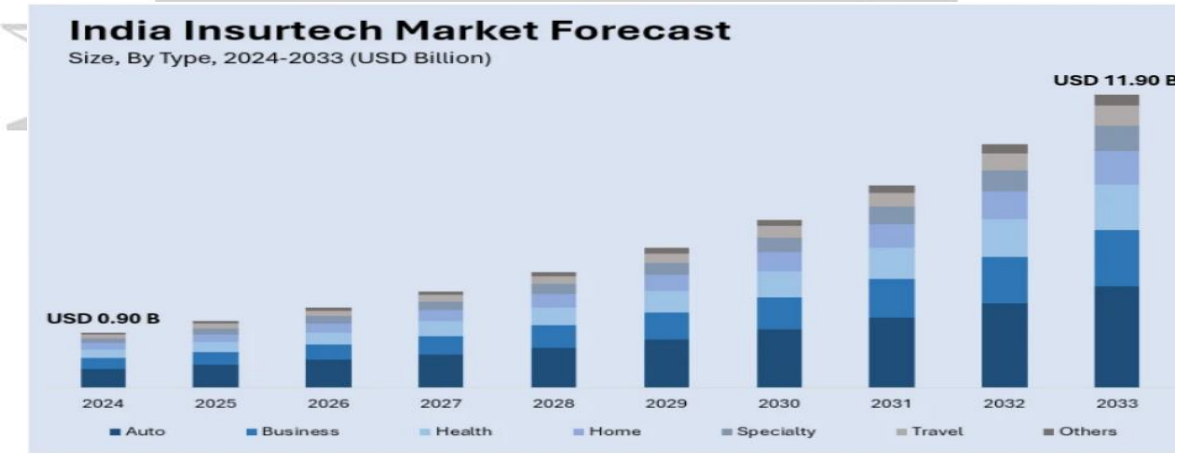

Figure 2: India InsurTech Market Forecast Source: IMARC

2. TECHNOLOGICAL INNOVATIONS IN INSURTECH:

InsurTech in India has experienced a boom in digital innovation in the desire to revolutionize the architecture of insurance product, distribution and service. These technological interventions are particularly promising for bridging long-standing gaps in inclusion by simplifying user experiences, lowering operational costs, and expanding reach. The following are the major technological innovations in Indian InsurTech particularity in context of improving access to insurance by low-income and underserved groups.

2.1 Digital Onboarding and e-KYC:

Digitization of onboarding process is arguably one of the most important advances in the sphere of inclusive InsurTech. Insurance has traditionally entailed cumbersome paper processes, in-person visits to check identity and sign agreements, creating barriers for rural and low-income users. Digital Know Your Customer (e-KYC) systems, enabled through Aadhaar integration, have drastically reduced the time and cost of onboarding while improving compliance (Signzy, 2021; Sarkar, 2021). Mobile-first onboarding solutions now allow users to purchase insurance policies remotely with minimal documentation, making insurance more accessible to those in geographically dispersed or infrastructure-poor regions (Sanction Scanner, 2024). Recent Innovations like the instant issuance of policy by Digit insurance and the digital onboarding system by RenewBuy enable customers to join and sometimes take less than ten minutes by simply using a smartphone. The options are making use of mobile-first design, biometric authentication, and cloud-based storage to enable smooth enrollment so that insurance becomes easier to access in countries with low infrastructure.

2.2 Microinsurance and Sachet-Based Products:

InsurTech companies are launching microinsurance and sachet-based products with lower cost, short term insurance products tailored to specific and everyday risk. These products are especially effective for informal workers and economically vulnerable populations who find traditional policies either unaffordable or irrelevant (Bali, 2020; Senthe, 2012). For instance, Toffee Insurance offers bite-sized health and accident plans (e.g., dengue cover, daily hospital cash) with premiums as low as ₹25 per month (Bali, 2020, Sarkar, 2021). GramCover offers agricultural-related products, including parametric crop insurance and livestock protections, to rural customers who are often excluded from formal coverage (Jain, 2022). They sell these products digitally and usually through UPI payment which allows it to be affordable and convenient.

2.3 Mobile Platforms and Vernacular Interfaces:

The growing penetration of smartphones has enabled the adoption of mobile-first insurance business models, which provide customers with the ability to explore and purchase insurance cover as well as claim on their policies completely digitally (Nhalpo, 2024). A significant aspect of these platforms is their adaptation to the linguistic and cultural diversity of India through vernacular language support, voice-based navigation, and icon-based UI. Companies such as Acko and Digit General Insurance have incorporated app-based and WhatsApp-based interfaces that allow users to purchase and manage policies in regional languages. Additionally, InsuranceDekho which has recently managed to raise a sum of $150 million in 2023, is well

engaged in the process of expanding its multilingual platform to increase digital adoption in Tier II and Tier III cities (Jaiswar 2023).

2.4 AI-Powered Chatbots and Customer Support:

AI-driven chatbots and virtual assistants are transforming customer engagement by providing 24/7 support, especially in areas lacking physical infrastructure. These bots guide users through policy selection, terms, renewal procedures, and claims submission in a simplified, conversational format (Bevz, 2025). HDFC ERGO's DIA chatbot and Turtlemint's multilingual virtual assistant are examples of how AI is being used to bridge the awareness gap (Desikan & Devi, 2021). With natural language processing (NLP) in Indian languages, these tools also help overcome digital and formal literacy barriers, making insurance more approachable for first-time users.

2.5 Usage-Based and Contextual Insurance Models:

Usage-Based insurance and contextual insurance models are also being used by InsurTech platforms to provide flexible and need-based coverage. In usage-based models, premiums are adjusted based on customer behavior such as telematics-based driving scores in motor insurance or fitness tracker data in health plans (Winlaw et al., 2019). Contextual models, on the other hand, integrate insurance with existing digital ecosystems. For example, Zopper Insurance, in partnership with digital retailers and payment apps, offers embedded insurance at the point of sale for electronics and mobile devices (Sharma, 2024). Similarly, Ride-hailing platforms like Ola and Uber have also provided Trip-based accident insurance to their partners through insurance providers such as Acko (Winlaw et al., 2019). These models normalize insurance as a day-to-day utility which implicitly broadens insurance coverage among those who may not actively seek insurance.

2.6 Instant and Paperless Claims Processing:

A major determinant of consumer trust is the efficiency of the claims process. To minimize the time and friction in claiming money, InsurTech companies have launched paperless claim tools such as video-based inspection, digital documentation and UPI instant payouts to make the process less time consuming (Wiktorson, 2024; Sarkar, 2021). Digit Insurance claims to process motor insurance claims within 24 hours using AI-powered assessment tools, while Acko's health insurance vertical allows users to initiate cashless claims via mobile apps (Kalyani & Pathak, 2020, Sarkar, 2021). Such innovations are especially important to those policyholders who have low-income and could not afford to wait long times or to have uncertain decisions of the claims made.

2.7 Agent-Assisted Digital Platforms (Phygital Solutions):

Despite of the rising digital insurance, the digital illiteracy and trust gap are significant barriers in rural India. To address this, number of InsurTechs are implementing phygital frameworks such as the use of a hybrid system using local human beings alongside digital platforms (Bevz, 2025). These agents assist users in understanding products, purchasing policies, and submitting claims through tablet-based applications and assisted apps. GramCover uses rural insurance entrepreneurs to build last-mile trust, while CSC-SPV (Common

Service Centres), under a government initiative, facilitates insurance enrollment and services in remote villages using digital kiosks (Jain, 2022). Such models help in closing the digital divide by pooling technology with the elements of local community trust.

3. INSURTECH'S CONTRIBUTION TO FINANCIAL INCLUSION IN INSURANCE:

The emergence of InsurTech represents a paradigm shift in how insurance is conceptualized, accessed, and experienced, particularly by underserved populations. Rather than being a mere facilitator of operational efficiency, InsurTech holds transformative potential in reconfiguring insurance as a socially embedded, digitally enabled tool for inclusion. This section explores how technology-driven innovations in India's InsurTech ecosystem are reorienting insurance provision toward greater inclusivity, with a focus on low- and middle-income segments.

3.1 Reframing Insurance from Product to Service Experience:

Insurance in India has been viewed as a fixed monetary product, full of complicated documentation with little transparency and reactive support. This is disrupted by InsurTech where the consumer experience is shifting to continuous engagement using user-friendly digital interfaces. Mobile-first platforms offer dynamic policy management, proactive notifications, and seamless customer support, transforming insurance into a service that is accessible, responsive, and personalized (Daily social, 2021; Tellez, 2020). This transformation is particularly crucial for financially excluded populations, who often perceive insurance as opaque or intimidating. Platforms such as Acko and Digit Insurance is illustrative of this change, bringing clarity to all aspects of the user experience, including the issuance of the policy to the settlement of a claim (Kalyani &Pathak, 2020).

3.2 Enabling Reach Through Digital Infrastructure and Ecosystem Integration:

Insurance penetration in the daily digital context (like ride-hailing apps, e-commerce sites, and payment gateways) has opened new grounds to insurance disruption even further than previously established insurance domains. Embedded insurance models, where users are automatically offered context-relevant coverage, reduce the cognitive and procedural burden associated with buying insurance (Winlaw et al., 2019). For instance, Acko's partnerships with Amazon and Ola allow users to purchase device and travel insurance seamlessly during routine digital interactions (Kalyani & Pathak, 2020). This not only enhances visibility but also normalizes insurance as a default safety net rather than a discretionary add-on. At the same time, the ecosystem enablers such as Aadhaar-based e-KYC, UPI-based micropayments (Signzy, 2021), and government-backed digital public goods made it possible to provide small-ticket, high-frequency insurance services to distant and inaccessible locations.

3.3 Supporting Inclusion Through Adaptive Product Design:

InsurTech companies are not only rethinking the provision of insurance, but also what exactly is being insured and how it is being covered. From sachet-based health and accident products to crop-specific parametric insurance for rural farmers, the rise of contextual and modular insurance products speaks directly to the risk realities of economically vulnerable segments (Bali, 2020; Senthe, 2012). Startups like Toffee Insurance and

GramCover tailor their offerings to micro-risks such as diseases, loss of income, seasonal hazards, thus aligning financial protection with the everyday vulnerabilities of informal workers, gig economy participants, and smallholder farmers (Bali, 2020; Jain, 2022). These targeted products give access points into the insurance market to the groups of people that are historically locked out of the system due to generic and fixed policy templates.

3.4 Rebuilding Trust Through Transparency and Speed:

Trust is a continuing hindrance to insurance uptake among the first-time and low-income users; with a large number of them suspicious of claims being paid out. InsurTech addresses this challenge by embedding transparency, speed, and traceability into the claim's lifecycle. Real-time updates, paperless documentation, and instant payouts via digital platforms reduce uncertainty and build confidence (Wiktorson, 2024). Platforms like Digit have demonstrated that simplified, AI-enabled claims processing can drastically reduce delays, while HDFC ERGO's DIA chatbot guides users step-by-step through claim procedures (Desikan & Devi, 2021). Such transparency is vital in ensuring not only satisfaction but also repeated engagement with insurance products.

3.5 Hybrid Approaches for Last-Mile Inclusion:

Digital infrastructure is growing very fast but digital literacy and remote behavioral readiness is uneven across India. Recognizing this, some InsurTech models have adopted hybrid or "phygital" approaches, blending digital tools with human intermediation. Insurance agents with tablet-based applications like Gram Cover (Bali, 2020; Jain, 2022), the Common Services Centres (CSCs), who are typically community-based, help educate users, establish rapport, and guarantee that the digitally reluctant audiences adopt the technology (Bevz, 2025; Jain 2022).This adaptive distribution strategy ensures that technology complements, rather than replaces, local knowledge and trust systems—an essential consideration for genuine inclusion.

4. ENABLERS AND BARRIERS TO INCLUSIVE INSURTECH:

While technological innovation offers promising avenues for enhancing financial inclusion in the insurance sector, its effectiveness is shaped by a set of enabling conditions and contextual barriers. This section explores the broader ecosystem factors that either facilitate or constrain the ability of InsurTech to deliver inclusive insurance outcomes in India, particularly for low-income, rural, and informal segments of the population.

4.1 Enablers of Inclusive InsurTech:

Several systemic and technological developments have created a fertile environment for InsurTech-driven inclusion. These enablers can be categorized into infrastructure, policy, socio-economic readiness, and innovation ecosystem components:

a) Digital Infrastructure and Mobile Penetration:

Digital insurance platforms are also available in far-flung locations due to the availability of affordable smartphones and the growing internet access via mobile devices (Sarkar, 2021). According to press release by Ministry of Communication (2025), rural internet access has grown markedly, supported by a rise in rural

telephone connections from 377.78 million in 2014 to over 527 million by October 2024, and urban connections reaching 661 million in the same period. The number of internet subscribers in India in 2014 reached 251 million and is estimated to rise to overwhelming numbers of almost 970 million subscribers by the mid of 2024, with a impressive 285 percent growth. Connectivity has also been enhanced with 5G being deployed rapidly with more than 462, 000 base stations in more than 779 districts by the end of 2024. Median mobile broadband speeds have also improved dramatically, from just 1.3 Mbps in 2014 to 95.67 Mbps in December 2024, making app-based and WhatsApp-enabled insurance distribution not only feasible but efficient across diverse geographies.

b) India Stack and Aadhaar-Enabled Services:

India Stack has emerged as a foundational digital infrastructure enabling seamless, inclusive insurance access. It has captured a large proportion of the market, and more than 136 crore IDs have been created in 2023, and more than 1,470 crore e-KYC transactions have been accomplished in the Aadhaar ecosystem. This has simplified identity verification and reduced onboarding barriers for low-income users.

Complementing this, DigiLocker has seen rapid uptake, with over 2025.07 lakh signups in 2024 alone, enabling secure, paperless documentation. UPI also enhances the ecosystem by providing low-cost real-time payments that cover more than 40 percent of transactions in India and almost 49 percent of world real-time payments in 2023. Together, these tools reduce administrative friction and support scalable, user-friendly insurance delivery (Ministry of Communication, 2025).

c) Regulatory Support and Innovation Sandboxes:

Insurance regulatory and development authority of India (IRDAI) has been very active in enhancing innovations in the insurance industries through favorable regulation systems. Key initiatives such as the Regulatory Sandbox, guidelines for microinsurance, and facilitation of digital-only insurers have enabled startups to experiment with inclusive insurance models in controlled environments. More recently, the government has further strengthened its commitment to InsurTech through programs like BIMA Sugam, a unified digital platform for insurance services, IRDAI Hackathons to crowdsource innovative solutions, and the formation of mission mode teams to fast-track reforms. In addition, policy measures such as providing additional EOM (Expenses of Management) allowances for InsurTech-related investments and awareness campaigns reflect the strategic emphasis on expanding digital insurance outreach.

Together, these intiatives highlight the fact that the government strives to create a strong InsurTech ecosystem through a combination of regulatory flexibility, technological investment, and customer education (IRDAI, Annual Report 2022–2023).

d) Growth of the Gig Economy and Embedded Insurance:

The rapid expansion of India's platform-based gig economy driven by companies like Ola, Zomato, Swiggy, and Amazon has introduced new opportunities for embedded insurance models. The platforms are valuable distribution vehicles because they enable insurance products to be embedded into standard activities,

with users getting coverage and underwriting participation without taking a different insurance path (Kool, 2024).

This model is particularly beneficial for informal and first-time users, such as delivery personnel, drivers, or freelance workers, who often lack traditional financial security. For example, ride-hailing, or food delivery apps can integrate personal accident or health policy into the service agreements, thus providing risk protection in an seamless and low-friction manner. By aligning insurance delivery with everyday digital interactions, embedded insurance helps bridge the gap between informal labor markets and formal financial protection mechanisms (Sultan & Panigrahi, 2024).

4.2 Barriers to Inclusive InsurTech:

Despite these positive developments, several challenges hinder the full potential of InsurTech as a tool for financial inclusion. These barriers are both structural and behavioral, often requiring long-term and multi-stakeholder interventions.

a) Digital Literacy and Tech Accessibility Gaps:

A major challenge to the expansion of inclusive InsurTech can be the poor digital literacy rates of the target consumer groups, especially in rural and low-income category users. Many individuals struggle with using mobile applications, navigating digital interfaces, or completing e-KYC procedures (Nhalpo, 2024). These challenges are compounded by unreliable internet connectivity in remote areas, making access to app-based insurance platforms inconsistent and often exclusionary.

b) Low Awareness and Insurance Aversion:

Although, digital penetration is increasing, insurance penetration in India is minimal, mainly because of the lack of awareness and persistent behavioral aversion. Many low-income consumers view insurance as complex, non-essential, or untrustworthy often influenced by misinformation or past negative experiences (Sarkar, 2021). These cognitive and psychological barriers hinder adoption, even when digital platforms are accessible. According to the MEDICI India InsurTech Report (2020), insurance penetration remained at the level of 3.4% and 3.7% between 2015-2018, being substantially lower than the 5.2 that was recorded in 2009. The effect of such a long-term low coverage level is a severe limiting factor to the long-term growth and inclusivity of the sector.

c) Language and Cultural Relevance:

Even though the InsurTech platforms have now become multi-lingual, content and user experiences are usually not well adjusted to local cultural and socio-economic situations. Standardized messaging, generic interface designs, and lack of sensitivity to regional idioms or behavioral norms can alienate users, particularly in rural and low-literate communities. This lack of alignment lowers user trust and activity, and undermining the inclusiveness of digital insurance services.

d) Data Privacy and Trust Concerns:

The growing reliance on user data in digital insurance raises significant privacy and ethical concerns.

Since the platforms gather highly private data like health information or user spendings, users demonstrate their concern about data abuse, black-box algorithms, and the inability to control them. These concerns are particularly acute among vulnerable populations, where trust is fragile and easily eroded, undermining digital adoption. A lack of transparency in how data is stored, processed, and used exacerbates this distrust (Lin & Chen, 2020). Unless supported by robust data protection systems, well-established user consent processes, the potential of inclusive InsurTech will not be met.

5. IMPLICATIONS:

The conceptual exploration of the potential of InsurTech in promoting financial inclusion in India provides worthy implications in the theoretical, management, and policymaking fields. Theoretically, the study contributes to the body of knowledge of digital financial services by conceptualizing InsurTech as not only an instrument of operational efficiency or consumer convenience, but as a strategic tool that allows inclusive insurance ecosystems. By conceptually aligning technological innovations with the core dimensions of inclusion namely, affordability, accessibility, awareness, and trust, it offers a developmental lens to understand how technology can bridge long-standing exclusionary gaps. From a managerial standpoint, the findings can be of practical use to companies interested in pursuing InsurTech Business in underserved markets. Firms are encouraged to design products that reflect contextual risk needs and affordability constraints, such as sachet-based and event-specific insurance offerings. The optimal distribution methods are those that combine the digital distribution with the agent-assisted ones in low literacy settings and the user interface should be simple, with support of vernacular language and visual navigation. Furthermore, transparent claims processes, customer feedback loops, and behavioral nudges can enhance trust and long-term engagement, particularly among first-time insurance users. On the policy front, the study underscores the critical role of regulatory and infrastructural support in enabling inclusive outcomes. Improving digital infrastructure in rural areas, maintaining experimentation in regulation by providing sandboxes by the IRDAI, and setting up protections over the transparency and data privacy offered by algorithms are important.

Moreover, public–private partnerships should emphasize insurance literacy alongside digital access, positioning insurance not merely as a financial product but as a protective social utility. Together, these theoretical insights, managerial strategies, and policy priorities collectively pave the way on how to use InsurTech as an agent of inclusive development in the insurance sector.

6. CONCLUSION & FUTURE RESEARCH DIRECTIONS:

InsurTech as an emerging industry in India can provide a revolutionary approach to overcome longstanding gaps in insurance coverage because of low cost of technology-enabled insurance, that enhance affordability, reach, awareness, and trust. This paper conceptually explored how InsurTech innovations align with financial inclusion goals, while also identifying key socio-technical enablers and constraints. Positioned as more than a technological disruptor, InsurTech emerges as a developmental tool with the potential to reshape insurance access for underserved populations. However, to unleash this potential, user-based design, regulatory

reinforcement, and ecosystemic collaboration is necessary that comes with an emphasis on accessibility and social trust. Future research should be validated by utilizing empirical evidence on the effectiveness of InsurTech capabilities, including digital onboarding, microinsurance, and AI-facilitated claims on inclusive insurance. Comparative studies across regions and demographics can shed light on adoption disparities, while longitudinal research is needed to determine whether initial digital adoption leads to sustained usage and deeper integration of insurance into household financial behaviors. Additionally, the ethical dimensions of digital insurance particularly around data privacy and algorithmic fairness needs closer examination. These directions will help ground the conceptual insights of this study and guide inclusive innovation in the evolving insurance landscape.

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