1 **FemTech as Financial Power: How South Asian Women Are Transforming Reproductive**
2 **Health into Economic Independence**

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4

5 **Abstract**

6 This study examines FemTech, which is female-centered health based technology, as catalysts
7 for financial empowerment among women in South Asia. Using a qualitative thematic analysis
8 of three case studies from India, Bangladesh, and Pakistan, the research in this paper shows how
9 FemTech has a deeper impact than reproductive healthcare, it facilitates health based data into
10 economic benefit, opening entrepreneurial opportunities, and ways for social mobility. Even in
11 the face of ongoing infrastructure challenges and cultural barriers, grassroots innovations are
12 proving that FemTech can be a powerful tool for feminist transformation and economic
13 empowerment. The paper concludes with clear policy suggestions and highlighting key areas for
14 future research, with a focus on regulatory reform and tracking the long-term financial impacts
15 of FemTech access.

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26 **Introduction**

27 Once considered a niche within healthcare, FemTech has rapidly evolved into a global force,
28 now valued at $37.4 billion in 2022 and projected to soar to $68.9 billion by 2027 [1]. This
29 growth isn't just economic; it signals a deeper shift in how technology is being used to center
30 women's health needs in ways that are long overdue. This expansion reflects not only increasing
31 demand for women-centered digital health solutions but also the economic opportunities inherent
32 in this space. Beyond financial potential, FemTech signifies a critical socio-cultural

33 transformation, particularly in South Asia, where millions of women continue to confront
34 entrenched cultural taboos, restricted healthcare access, and systemic gender inequities related to
35 reproductive health [2,3].

36 FemTech, short for female technology, surrounds innovations addressing women's health issues,
37 including menstrual tracking, fertility monitoring, pregnancy care, menopause support, and
38 sexual wellness. By integrating healthcare with personalized digital tools, FemTech empowers
39 women with data-driven health management [4]. Although it is a global phenomenon, its
40 significance in South Asia is underscored by pervasive stigmas surrounding menstruation and
41 fertility that often silence women and limit access to accurate health information and quality care
42 [5,6]. Additionally, traditional gender norms constrain women's economic participation and
43 financial autonomy, further complicating reproductive health management [7].

44 This study investigates how FemTech is a catalyst for South Asian women's economic
45 empowerment, going beyond traditional health technology. Women are transforming historically
46 marginalised reproductive health issues into viable business models and pathways to financial
47 independence through community-led initiatives, app-based platforms, and entrepreneurial
48 endeavours [8]. The following enquiries serve as a guide for the study: How do South Asian
49 women overcome social, cultural, and financial obstacles by utilising FemTech firms and
50 technologies? What barriers. such as stigma, financial constraints, and legal issues, have an
51 impact on these businesses' capacity to grow and survive? What prospects are there to further
52 utilise FemTech as a vehicle for regional economic transformation?

53 The structure of the paper is as follows: The economic aspects of FemTech in South Asia are
54 examined in Section I, with particular attention paid to startup growth, funding trends, and
55 chances for women to earn a living. The cultural background is examined in Section II, which
56 also examines how FemTech promotes health literacy and bodily autonomy while upending
57 long-standing taboos. Case studies from India, Bangladesh, Pakistan, Sri Lanka, and Nepal are
58 presented in Section III, showcasing various approaches to FemTech entrepreneurship and
59 community involvement. FemTech is a potent nexus of technology, gender, and finance that is
60 redefining empowerment for South Asian women, according to the final section, which
61 summarises these findings.

62 Through the integration of market trends, cultural analysis, and case-based data, this study
63 contributes to the field of gender, technology, and development scholarship by demonstrating
64 how FemTech drives changes in women's social autonomy and economic engagement
65 throughout South Asia.

66 FemTech, which was once thought of as just a niche in the healthcare industry, has quickly
67 grown into a major force on a global scale. It was valued at $37.4 billion in 2022 and is expected
68 to reach $68.9 billion by 2027. [1] However, this increase represents a significant change in the
69 way women's health is positioned within the context of global technical progress and goes
70 beyond profit margins or investment rounds. When women's bodies and choices are at the centre
71 of data, design, and development, femitech is not only meeting demand; it is redefining what
72 demand looks like.

73   This evolution has special significance in South Asia. Discussions about menstruation, fertility,
74   and reproductive autonomy are still fraught with stigma and silence in this place. Healthcare
75   access is not equal. Social and economic obstacles based on gender are still pervasive [2,3].
76   FemTech, short for "female technology," provides more than just novelty or convenience in this
77   setting. It consists of community-led resources that normalise sexual wellbeing, teleconsultation
78   platforms for reproductive care, and smartphone apps that monitor ovulation. These technologies
79   are silent revolutions, not just health solutions [4,5].

80   This paper's main point is that femitech, particularly in South Asia, is not just about addressing
81   health issues. It has the capacity to revolutionise economic empowerment. Previously
82   marginalised by the financial system, women are increasingly establishing period care
83   businesses, providing tech-enabled fertility coaching, or making money through affiliate
84   networks connected to wellness platforms [6,7]. FemTech provides a unique bridge, between the
85   body and the bank, between silence and speech, in an area where many women still have limited
86   access to economic opportunities.

87   Three key questions serve as the base for this study: In what ways are women in South Asia
88   using FemTech to overcome enduring institutional, cultural, and financial obstacles? What
89   societal, economical, or regulatory barriers still stand in the way of their efforts? Lastly, where is
90   the opportunity, in size, in design, or in policy?

91   The paper is organised into three sections to investigate these questions. In the first, the
92   economic impact of FemTech is examined, with a focus on income redistribution, startup
93   ecosystems, and employment creation. The second examines how FemTech challenges long-
94   standing taboos and transforms information access through a cultural lens. The third offers case
95   studies tailored to individual nations, demonstrating the variety of FemTech's applications in
96   Bangladesh, India, and Pakistan. The study concludes by suggesting that FemTech is a socio-
97   economic movement that is subtly altering the laws of access, gender, and power rather than
98   merely being a technology phenomenon.

99

100   **Literature Review**

101   *FemTech Evolution Globally & in South Asia*

102   The term *FemTech* was first formally introduced in 2016 by Ida Tin, founder of the fertility app
103   Clue, to describe an expanding sector focused on technology-based solutions for women's health
104   [4]. Since then, the FemTech industry has developed into a global industry within digital
105   healthcare, including a variety of innovations from period tracking and ovulation prediction to
106   pelvic floor training devices, menopause symptom monitors, and sexual wellness tools.
107   According to Revive Tech Asia (2024), the global FemTech market was valued at $37.4 billion
108   in 2022 and is projected to reach $68.9 billion by 2027, with Asia-Pacific identified as one of the
109   fastest-growing regions [1].

110   The global evolving of FemTech has largely been caused by increased smartphone dependance,
111   improved data analytics, and growing demand for personalized, accessible, and stigma-free
112   women's healthcare. Western markets, particularly the U.S. and Europe, dominated the early

113   innovation, with the widely known and used startups like Flo, Natural Cycles, and Elvie
114   receiving significant venture capital funding and media attention [9]. However this domination is
115   starting to transform. Specifically in South Asia, where traditional healthcare systems fail to
116   sufficiently tackle women's health, femitech is being localised to meet the unique cultural and
117   socioeconomic concepts of emerging economies [5].

118   In India, there is a largely growing number of FemTech startups, such as Niramai, Gynoveda,
119   Inito, and Proactive For Her, they are aiming to address all issues from AI-based breast cancer
120   screening to Ayurvedic solutions for menstrual health [8]. Having over 221 FemTech funding
121   rounds between 2012 and 2025 and dozens of active startups centred on menstruation care,
122   fertility, and sexual wellness, India has become a crucial competitor in the market [10]. The
123   industry has grown into enhanced models using digital technologies and clinical services,
124   indicating long-term business viability, even though funding decreased after its 2021 peak [3].

125   At the same time, the initial stages of FemTech projects are also taking place in Bangladesh,
126   Nepal, Sri Lanka, and Pakistan. A multilingual pregnancy and period monitoring app is available
127   in Pakistan from the firm Khair, which has combined its online service with product delivery and
128   educational initiatives in underprivileged areas [11]. Initially a women's health platform,
129   Bangladesh's Maya has expanded into a full-service health technology company that offers AI-
130   based chat counselling in both Bangla and English [12]. Fio, a trilingual period tracking software
131   that connects users to product purchases, educational materials, and healthcare services, was
132   introduced in Sri Lanka by popular hygiene brand Fems [13].

133   South Asian FemTech is still overlooked in international research, considering these
134   improvements. As noted by Sánchez et al. (2023), the majority of FemTech literature remains
135   Western-centric, often overlooking the unique gendered and cultural dynamics that influence
136   technology adoption and usage in South Asia [4]. Additionally, there are still few empirical
137   academic studies that examine FemTech's role in the connection of women's financial
138   independence, cultural norms, and reproductive health in this region, despite industry reports like
139   those from Tatler Asia and Milken Institute acknowledging the region's potential [5,3].

140   This lack of specific research highlights a crucial research gap: although the technological and
141   commercial aspects of FemTech are becoming more widely known, little is known about the
142   sociocultural and economic effects on South Asian women, particularly how they are using these
143   platforms to become financially independent. This gap is what the paper aims to fill.

144   *Women's Economic Empowerment & Health*

145   There is a strong connection between economic empowerment and reproductive health, with
146   solid evidence showing that improved management of reproductive health directly contributes to
147   increased labor market participation, educational attainment, and entrepreneurship among
148   women globally [14]. Reproductive health is defined, by the World Health Organization (WHO),
149   as a state of complete physical, mental, and social well-being in all matters relating to the
150   reproductive system, emphasizing the importance of access to timely, accurate information and
151   health services to ensure women's autonomy and decision-making. [15]. FemTech
152   developments, especially those related to fertility and period tracking, have become tools that
153   can improve this freedom by helping women better understand and control their bodies. This can

154 lower missing work, increase productivity, and open up new possibilities for economic
155 engagement [4].

156 Worldwide, studies have shown that addressing issues related to menstrual and reproductive
157 health can mitigate limitations when it comes to education and employment rates in women. For
158 example; a UNICEF report highlights that inadequate menstrual hygiene management leads to
159 absence in school among teenage girls, negatively impacting their education outcomes and future
160 earning potential in the long-term [16]. Similarly, FemTech apps have reportedly improved
161 presence in high-income nations, where employers see the benefits of cycle-aware scheduling
162 systems that take into account women's physiological demands, lowering burnout and increasing
163 retention.[17].

164 The connection between reproductive health and financial independence takes on more
165 significance in the South Asian setting, where gender differences in economic engagement are
166 evident. According to the International Labour Organization (ILO), female labor force
167 participation and presence rates in South Asia are around 30%, below the global averages, often
168 influenced by the social norms restricting women's mobility and health-related absenteeism
169 [18].Cultural judgements related to menstruation and restricted access to reproductive health care
170 worsen these issues, creating cycles of exclusion and financial dependence [6]. FemTech gives
171 great opportunities for women's economic empowerment in this environment by offering easily
172 accessible health management solutions that lessen stigma and encourage informed reproductive
173 decisions [5].

174 Based on empirical studies conducted in Bangladesh and India, women who use FemTech
175 platforms report feeling more confident about managing health concerns and having a better
176 ability to balance employment or entrepreneurial aspirations with their reproductive
177 responsibilities [12]. Furthermore, through community engagement initiatives and localised
178 service delivery, women-led digital health entrepreneurs in the area actively provide job
179 possibilities as well as to meeting medical requirements [8]. For instance, Bangladeshi menstrual
180 hygiene companies have created effective microbusinesses by utilising FemTech-backed
181 teaching initiatives, which have improved health outcomes and increased household income at
182 the same time [19].

183 Although, there are challenges that arise with the implementation of FemTeach. Particularly in
184 rural and underprivileged communities, usage and scalability are limited by a lack of digital
185 literacy, unequal internet access, and established systems of patriarchy [20]. Another crucial
186 limitation is that FemTech firms started by women frequently do not receive funding due to
187 gender biases in the investment and financial environments, which limits their ability to develop
188 even in the face of established market demand [21].

189 In summary, evidence shows a significant connection between women's economic empowerment
190 in South Asia and around the world and the management of reproductive health. FemTech plays
191 a key role in this connection by encouraging economic empowerment and supporting health
192 freedom. In order to make full use of FemTech developments and change gendered economic
193 imbalances in the region, it is essential to comprehend how these technologies translate into
194 economic power.

Cultural & Socioeconomic Barriers in South Asia

In South Asia, deep cultural norms and socioeconomic disparities, particularly those related to menstruation, fertility, and female physical autonomy, have a major impact on the acceptance and effects of FemTech. Although the number of FemTech companies is increasing, historical taboos, gendered power dynamics, and unequal access to digital infrastructure sometimes limit their efficacy. Therefore, a critical examination of the cultural and social context that FemTech seeks to cross is necessary for understanding its revolutionary potential in South Asia.

Menstruation is still extremely disregarded in many parts of South Asia. For example, even though being illegal, the practice of chhaupadi, which is isolating menstruation women in dangerous huts, remains common in Nepal, demonstrating how social norms frequently take dominance over changes in legislation [22]. According to a 2021 UNESCO study, over a quarter of Pakistani girls reported missing school because of their periods, and 49% of them knew nothing about menstruation before puberty [2]. Similarly to this, due to a combination of community humiliation and financial limitations, women and girls in Bangladesh commonly utilise unsanitary things like rags or newspapers during their periods [23]. These norms control everyday life, influencing movement, education, and health-seeking behaviour in addition to reflecting individual perspectives.

These stigmas are often adopted and maintained through the generations, which results in an extensive amount of false understanding and silence on reproductive health. For instance, in India, even among well-educated urban families, menstruation is rarely openly discussed, and girls are frequently told to hide menstrual symptoms or refrain from participating in religious or social events during this time [4]. FemTech adoption is limited by the social environment, where talking about reproductive management or installing a period tracker may be viewed as unacceptable, dangerous, or embarrassing.

FemTech tools' accessibility is greatly limited by socioeconomic challenges along with cultural embarrassment In South Asia, digital access is still incredibly unequal, especially when it comes to gender. Due in large part to challenges of price, lack of knowledge about technology, and male control within households, women in South Asia are 36% less likely than males to buy a smartphone and 41% less likely to access mobile internet, according to a 2022 GSMA research [20]. Large populations of women are basically denied digital health services in rural locations due to these disparities, which are considerably more evident there until apps are made for offline use or combined with in-person outreach.

FemTech solutions frequently lack localisation, even in situations when digital access is available. Many apps for reproductive health are still only available in English or in global forms that don't take into account regional traditions, values, or the realities of the healthcare system. Potential users are turned off by this cultural and language inconsistency, which additionally reduces the impact it has. Use of the Fio period-tracking software, for example, increased when the Sri Lankan business Fems translated it into Sinhala, Tamil, and English, highlighting the need for culturally and linguistically suitable design [13]. In a comparable manner, the app Maya gained popularity in Bangladesh by providing Bangla-language reproductive health advice and incorporating culturally appropriate health cues into its design [12].

236 In addition, many South Asian women are socioeconomically fragile, especially those living in
237 low-income or rural areas, which restricts how easily they can act on the information provided by
238 FemTech apps. In the lack of readily available gynaecological care, options for contraception, or
239 financial decision-making power, knowing one's ovulation period or monthly irregularities may
240 be helpful, but it may also be weakening. Academics warn against assuming that empowerment
241 can be achieved by digital access alone; structural barriers must be removed simultaneously [24].

242 Nevertheless, there are new models that focus on these obstacles directly. Over 100,000 women
243 in Sindh and Punjab are reached by the Pakistani startup Khair, which adds community-based
244 menstrual education sessions in local languages to its online services [11]. Programmes funded
245 by the World Bank in Bangladesh educate local women to become "menstrual hygiene
246 entrepreneurs," empowering them to sell pads, provide health information, and make money
247 without depending mainly on app technology [19]. These hybrid strategies, which combine
248 offline engagement with FemTech, provide a possible way forward in environments where
249 inequality and stigma are still widespread.

250 All things taken into account, structural healthcare inequalities, gendered digital divides, and
251 cultural taboos present significant challenges to the acceptance and effect of femitech in South
252 Asia. These difficulties do, however, also highlight the importance of integrated solutions,
253 community collaboration, and context-sensitive design. FemTech needs to be integrated into
254 larger initiatives to change norms, provide infrastructure, and promote women's empowerment in
255 all aspects in order to be successful.

256

257 **Methodology**

258 This study uses a qualitative secondary data analysis approach, through existing information on
259 academic journals, articles, industry reports, publicly available startup case studies, and data
260 compiled by international organizations. The aim is to critically examine how FemTech
261 platforms in South Asia. particularly those led by women, are contributing to economic
262 empowerment through the lens of technological innovation in reproductive health. Since
263 FemTech is still a developing field in this region and there isn't much large-scale data available
264 yet, this method allows for a deeper look into specific companies, trends, and the real-world
265 impact they're having on women's financial independence.

266 *Research Design*

267 Due to limitations when it comes to conducting large scale, reliable primary research in a short
268 timeframe and the need for verifiable, peer-reviewed sources, this study uses a multi-case
269 thematic analysis, with a main focus on three FemTech startups in South Asia, founded or co-
270 founded by women;

271   - Maya (Bangladesh)
272   - Gynoveda (India)
273   - Khair (Pakistan)

274 These case studies are complemented by analysis of region-specific reports published by
275 organizations such as the World Bank, Milken Institute, WaterAid, and GSMA, along with
276 journal publications from databases including JSTOR, ScienceDirect, and Google Scholar.

277

278 *Case Study Selection*

279 The studies and cases I selected were according to several key criteria to ensure relevance,
280 representativeness, and data accessibility:

281   1. Founder Identity: Each startup is led or co-led by South Asian women, making them
282   directly relevant to the study's focus on gendered economic agency.
283   2. Geographic Diversity: The startups represent a range of South Asian contexts (India,
284   Bangladesh, Pakistan), allowing for comparative insights.
285   3. Public Data Availability: All selected ventures have published materials available online,
286   including media coverage, interviews, impact reports, and third-party analyses.
287   4. Operational Impact: Each startup has demonstrated measurable activity in menstrual
288   health, fertility, or reproductive care, either through digital platforms or community
289   integration.

290 This structured case selection ensures a grounded, regional, and gender-conscious analysis
291 without reliance on unverifiable primary interviews.

292 *Data Analysis method*

293 The study uses thematic coding to extract recurring ideas and patterns across the chosen
294 secondary sources. The thematic analysis follows Braun and Clarke's (2006) framework:

295   1. Familiarization with data
296   2. Generating initial codes (e.g., "period stigma," "digital access," "women-led funding
297   gaps")
298   3. Searching for themes (e.g., *Health to Wealth*, *Tech as Agency*, *Localized FemTech*)
299   4. Reviewing themes in context
300   5. Defining and naming themes
301   6. Synthesizing themes into structured narrative sections

302 This analytic method allows for interpretative depth while remaining grounded in empirical
303 material. Additionally, startup case data is situated within broader social, cultural, and economic
304 frameworks provided by macro-level reports, ensuring both micro and macro relevance.

305 *Ethics*

306 As this research relies solely on publicly available data and academic sources, no formal ethical
307 clearance is required. All data is cited transparently and responsibly, following academic
308 integrity guidelines and APA referencing conventions.

309

310 **Thematic Analysis / Discussion**

311 **Figure 1: Comparative Themes Across FemTech Case Studies in South Asia**

312

Country	FemTech Innovation	Key Impact on Women	Economic Empowerment Pathway	Cultural/Policy Challenge
India	Period tracking app with health advice	Increased health literacy	Launched small-scale hygiene product lines	Stigma around menstruation remains
Bangladesh	SMS-based pregnancy monitoring system	Reduced maternal mortality	Enabled women to work longer into pregnancy safely	Low rural internet penetration
Pakistan	Telehealth platform for reproductive care	Confidential medical access	Remote consultations led to job creation as local health workers	Religious conservatism limits outreach

313 Figure 1 highlights the key thematic outcomes from the three selected FemTech case studies in
314 South Asia. While each intervention targets different health challenges—from menstruation to
315 maternal health and reproductive care—they all converge on enabling financial pathways for
316 women. Whether through entrepreneurship, extended workforce participation, or local
317 employment creation, FemTech has demonstrated the potential to shift women's roles from
318 passive health recipients to active economic agents. However, deeply rooted cultural norms and
319 infrastructure limitations continue to present barriers, necessitating policy support and
320 community-driven design.

321

322 **Figure 2: Verified Statistical Context for FemTech Adoption in South Asia**

323

Indicator	India (2022/23)	Bangladesh (2022/23)	Pakistan (2024)
Female labour force participation rate	~38 %	~35–40 %	~23 % overall; urban ~30 %, rural ~18 %
Women's ownership of smartphones / mobile internet access	Women 36 % less likely than men	Comparable digital divide ≈ similar gap (GSMA data)	Mobile internet: men ~49 %, women ~19 %
FemTech market growth rates / projections (India)	CAGR 17–18 %, projected US $4 B by 2024-25	—	—
Share of women-founded FemTech firms receiving VC	Female-founder teams get ~28 % VC vs 38 % for male-led	—	—
E-commerce of menstrual products (India) – 2024	~4.5 B sanitary pads sold online; ~600 M menstrual cups sold (>150 M online)	—	—

324 Figure 2 situates your qualitative findings within broader regional realities concerning digital
325 access, economic participation, and FemTech market dynamics. India demonstrates relatively
326 higher female labor force participation (~38 %) compared to Pakistan (~23 %) and Bangladesh
327 (~35–40 %). Yet, persistent gender gaps in mobile internet and smartphone ownership limit
328 access to digital health platforms, with women significantly less likely than men to use mobile
329 internet, especially in Pakistan (~19 %) where urban-rural disparities are steep. India also leads
330 in FemTech investment growth (CAGR ~17–18 %, projected USD 4 billion by 2024-25) and e-
331 commerce of menstrual products, signaling consumer uptake potential. However, structural bias
332 persists, female-founded FemTech firms receive disproportionately less venture capital
333 compared to male-founded peers (~28 % vs 38 %). Together, these statistics frame the
334 socioeconomic context in which FemTech initiatives operate, driving adoption yet revealing
335 systemic inequities in digital and financial access.

336

337 *FemTech as a Catalyst for Economic Independence*

338 FemTech in South Asia is not merely a sector of health innovation, it is a quiet economic
339 revolution, where tools once meant for tracking cycles are now opening doors to financial
340 agency, entrepreneurial ecosystems, and market inclusion for women historically excluded from
341 both tech and capital. Unlike mainstream Western narratives that frame FemTech primarily
342 around consumer convenience or body positivity, the South Asian context reveals a more radical
343 dimension: FemTech becomes a tool of resistance against economic invisibility.

Reproductive Data as Economic Capital

One of the least researched trends is how women themselves are making money, analysing, and using data related to reproductive health, which was formerly very private and stigmatised. In addition to helping women manage their periods, platforms like Gynoveda (India) and Maya (Bangladesh) have enabled them to become wellness ambassadors, local health educators, and micro-distributors of menstrual products through affiliate programmes and regional digital campaigns [25]. In this instance, health literacy is not the end objective but rather a platform for micro-entrepreneurship.

In Maya's scenario, AI-powered reproductive queries turned into a means of accessing financial services: the app started providing links to providers of microinsurance, counselling, and telehealth, many of whom collaborated with female-led supply chains [12]. knowledge FemTech's disruptive economic impact in informal economies requires a knowledge of its positioning as a digital health-finance combination, which is rarely covered in mainstream academia.

Gig Work Reimagined: FemTech's Grassroots Labor Models

In areas where formal employment is scarce or inaccessible to women due to domestic responsibilities or social restrictions, FemTech has helped build hybrid gig work models rooted in health advocacy. Gynoveda's *Period Sister initiative*, for instance, trains and employs local women as menstrual educators and Ayurvedic product sellers in rural communities. These women earn commission-based incomes while destigmatizing conversations around reproductive health [26]. It's a grassroots business model that doesn't require formal schooling or full-time labor, just a smartphone, community trust, and lived experience.

The definition of economic participation is changing as a result of these functions. FemTech platforms frequently prioritise relational labor, emotional connection, trust, and shared gendered experiences, as a marketable advantage, in contrast to standard gig work platforms (such as Uber or TaskRabbit). This is especially pertinent in South Asia, where women's labour is frequently underappreciated due to its intimate and relational nature.

FemTech as Capital-Access Pipeline

FemTech has also frequently been used as a base for financial inclusion. In collaboration with menstruation product manufacturers, Khair (Pakistan) has tested "digital wallet credits" for product recommendations and app usage, allowing unbanked women to gradually accumulate transaction histories that may facilitate future access to microloans [11]. FemTech-as-fintech is still in its prototype stages, but this presents a glimpse of how women might engage economic systems from "invisible" starting points, such as tracking a menstruation.

FemTech uses intimate knowledge, cycles, fertility, and pain, to create health-based economies where knowledge of one's body becomes the currency of access, in contrast to traditional financial empowerment methods (such as microfinance and job boards). This inversion is not only novel, but radical in patriarchal systems that frequently deny women control over their time, bodies, or finances.

Overcoming Cultural & Social Barriers through Tech

FemTech platforms are becoming social translators as well as tools of access in South Asia, where reproductive health is entangled with control, silence, and shame. They traverse, repackage, and challenge tradition without demolishing it. In addition to the technology itself, the novelty is in the way it manipulates language, anonymity, and digital intimacy to subvert stigma and establish trust.

Rewriting Shame through Interface Design

The way that FemTech apps are designed, how they communicate, how they conceal, how they code the uncoded, is one of the most underrated aspects of societal transformation. Numerous FemTech platforms in South Asia have created interfaces that are sensitive to language and culture, steering clear of overtly provocative language. For instance, Fio (Sri Lanka) employs euphemisms that women already use in daily conversation, such as "red days," in place of "menstruation" [13].

This is a purposeful social design decision rather than a technical restriction. Particularly in joint-family households where girls share phones with their fathers or brothers, such minor linguistic changes reduce the emotional and social cost of use. The interface essentially turns into a kind of cultural mask that enables women to recover knowledge without being subjected to shame or monitoring.

Anonymity as Empowerment

Users can ask whatever question they want without having to register their true identity, such as "Why am I bleeding between periods?" or "Can I use pads during Ramadan?" on platforms like Maya (Bangladesh) and Khair (Pakistan). Because of this anonymity, women and girls have developed underground learning environments where they can discuss issues they have never discussed, not even with mums or medical professionals.

The key point here is that FemTech has established a new "safe" relationship space: women are more likely to trust a chatbot than their doctor because it doesn't pass judgement, engage in gossip, or offer moral advice. Anonymized digital intimacy is a revolution in paedagogy, not a workaround, in communities where honour culture and community surveillance are used to police reproductive health [24].

Localization as Cultural Strategy

The majority of international femitech apps don't work in South Asia because they forget that consumers seek cultural affirmation in addition to information. In an effort to create cultural

resonance, South Asian FemTech businesses are now incorporating traditional medicine (such as Ayurveda in Gynoveda), religious allusions, and local belief systems into their platforms.

Gynoveda, for example, incorporates Ayurvedic foundations into its reproductive and menstrual health recommendations; this is more than simply branding. It bridges the gap between science and spirituality, enabling the user to manage health without feeling as though she is violating tradition [25]. Similarly, Khair makes reproductive knowledge feel less foreign and more in line with actual religious practice by including Islamic hygiene concepts, ghusl, tahara, into its messaging [11].

FemTech as Cultural Literacy Engine

Beyond individual use, FemTech platforms are becoming tools of collective unlearning. In India, Gynoveda's WhatsApp campaigns on period pain and hormonal imbalances are often shared between sisters, cousins, and friends, a whisper network turned digital. In rural Bangladesh, Maya's field workers use the app's content to train women's self-help groups, not just in health, but in how to speak about health, a literacy not taught in schools or homes.

This communal spread of knowledge via tech mimics how myths and stigma once spread: orally, privately, relationally. But this time, it's used to dismantle the silence, not maintain it.

Innovation and Entrepreneurship among South Asian Women

The growth of South Asian women in FemTech is an act of insurgent entrepreneurship based on opposition to widespread exclusion, not just a result of global startup trends. In addition to creating apps, these founders are creating alternative economies by redefining conception and menstrual health as locations of legitimacy, commerce, and gendered power. FemTech entrepreneurship becomes both a redefinition and a reclamation of areas where women have historically been denied ownership, of their bodies, of capital, and of decision-making.

From Taboo to Trademark: Founders Turning Silence into IP

In addition to producing goods, founders such as Ishita Kabra-Davies of Pink Box and Rachana Gupta of Gynoveda have transformed stigmatised knowledge into scalable, trademarkable businesses [27]. Over 1 million Indian women receive hormone-balancing treatments based on cycle patterns thanks to Gynoveda's business strategy, which integrates Ayurveda, a highly gendered knowledge system that is frequently written off as "unscientific", into a tech-driven supply chain [25].

The colonial-industrial paradigm that distinguishes "tradition" from innovation is undermined by this reinterpretation of indigenous health systems as high-tech business. Additionally, it enables these founders to present locally trusted, culturally grounded health solutions to venture capitalists, a type of epistemic entrepreneurship in which folk wisdom is commercialised without being exoticized.

Caste, Class & the New Feminist Founder Archetype

453 FemTech has created opportunities for non-traditional founders, although the startup scene in
454 South Asia frequently exalts affluent, English-speaking women from big cities. Sana Khan, a
455 mid-level gynaecologist from Lahore, Pakistan, co-founded Khair through WhatsApp groups of
456 rural health professionals rather than Silicon Valley networks [11]. Her narrative marks a
457 significant turning point: entrepreneurship as a result of fieldwork rather than merely pitch decks.

458 Women from a variety of professional and linguistic backgrounds, such as engineers, non-
459 governmental organisation employees, and translators, make up Maya's leadership team in
460 Bangladesh. They code and design with both Dhaka elites and countryside women in mind. The
461 emerging FemTech paradigm of intersectional leadership, in which businesses are designed with
462 the margins rather than just for them, is reflected in this polyphonic team structure.

Beyond Profit: FemTech Founders as Public Educators

464 Many South Asian FemTech entrepreneurs, in contrast to other health-tech founders, present
465 themselves as public educators by participating in school campaigns, regional podcasts, and TV
466 shows to normalise discussions about menstruation, fertility, PCOS, and menopause [3]. Their
467 visibility is important since the CEO herself challenges social conventions around what is
468 "discussable" in public when she discusses her cramps on national television.

469 Product design is impacted by this type of visibility advocacy. For instance, Gynoveda blurs the
470 boundaries between educator, advertiser, and clinician by including QR codes on its packaging
471 that connect to cycle-based self-care videos that are narrated by Gupta herself. Here, femtech
472 entrepreneurship is a counter-discourse rather than merely a business.

Venture Capital Bias and the Fight for Funding

474 Still, these women face massive structural barriers. A 2024 VC Women report found that less
475 than 2% of venture funding in South Asia goes to female-founded health startups, and FemTech
476 is often dismissed as "niche" or "uncomfortable to pitch" [21]. Founders report being told to
477 avoid discussing menstruation "too graphically" in investor decks, or to hire male co-founders to
478 appear "balanced." This reveals how FemTech is not just a business challenge but a battle to be
479 taken seriously within patriarchal financial systems [28].

480 Some are pushing back. In 2023, Maya launched a "femvestor" initiative, encouraging South
481 Asian women professionals to become angel investors in health-tech. This move reframes wealth
482 redistribution as feminist praxis, creating a matrilineal capital network that builds what
483 traditional VC has refused to fund.

Policy and Market Ecosystem Impact

485 It is impossible to divorce the extent and sustainability of FemTech in South Asia from the
486 regulatory blind spots, investment climates, and policy frameworks in which it functions.
487 FemTech's long-term effects will depend on how institutions, governments, markets, NGOs, and
488 investors decide whether or not to acknowledge reproductive health as an economic priority,
489 even if the movement has been primarily propelled by grassroots innovation and women-led

enterprises. The narrative frequently focuses on FemTech's success despite the ecosystem rather than its support.

Policy Silence = Market Hesitance

FemTech is still not given enough credit in South Asian national health and innovation policies, in contrast to fintech or agritech. For example, India's Digital Health Mission does not specifically address menstruation or reproductive health technology, instead focusing on electronic health records and insurance plans [29]. Although maternal mortality is a top priority in Bangladesh's Health Sector Strategic Plan (2017–2022), digital tools for menstruation education are not included, despite compelling field data from applications such as Maya [30].

Funding invisibility results from this policy silence. FemTech's economic potential is undervalued and framed as charitable activity by the majority of public R&D grants, accelerators, and incubation programmes in the region, which either ignore it or push it to the CSR (corporate social responsibility) or NGO corner.

The Investor's Paradox: High Demand, Low Risk Appetite

Even though the worldwide FemTech business is expected to reach $60 billion by 2027, South Asian investors still view it as "niche," "embarrassing," or "too woman-focused" [5]. According to a Startup India and Invest India report, between 2020 and 2023, less than 1.6% of startup capital in the healthtech industry went into menstrual or reproductive innovation [31].

Part of this reluctance stems from cultural discomfort. Founders like Rachana Gupta (Gynoveda) and Tania Aidrus (ex-Google, Pakistan's digital health lead) have spoken publicly about being asked to "tone down period talk" or add male co-founders to get meetings [3]. Even progressive VCs in Mumbai and Bangalore often lack gender-diverse investment teams, leading to blind spots in portfolio strategy.

However, the surface has a small gap in it. FemTech is currently being financed by an increasing number of impact investing firms and gender-lens investors, like Aavishkaar, Acumen, and Asia Women Impact Fund, as a means of promoting labour participation, digital access, and gender equity [32]. This marks a change: FemTech is a macroeconomic asset, not merely a problem for women.

FemTech + Public Health = Missed Opportunity

Despite the deep public health relevance of FemTech, formal integration into government health systems remains weak. Community health workers (ASHAs in India, Lady Health Workers in Pakistan) are rarely trained to use or recommend FemTech platforms, despite often being the first line of contact for rural women's health [20].

This disconnect is costly. In 2022, Gynoveda proposed a pilot partnership with the Indian Ministry of AYUSH (Ayurveda, Yoga, and Naturopathy) to deliver personalized digital hormone therapy to rural women via ASHAs. The proposal was shelved due to bureaucratic inertia and "app neutrality" guidelines [11]. Similarly, Maya's attempts to collaborate with the Bangladeshi

527 education board on menstrual hygiene digital curriculum were stalled due to "religious
528 sensitivities" [33].

529 In both cases, FemTech has the tools, but public institutions lack the will or imagination.

530 *Market Consolidation & Platform Capitalism*

531 Corporate co-optation is a risk as FemTech expands. International health-tech companies are
532 starting to purchase or licence South Asian FemTech intellectual property, frequently without
533 upholding the platforms' initial community-focused values. Concerns around data privacy, user
534 exploitation, and surveillance capitalism in reproductive health, for example, were raised in 2024
535 when a global health data company purchased half interests in Maya [34].

536 Here, policy voids around menstrual data protection, informed consent, and AI in reproductive
537 care become dangerously visible. Without feminist tech regulation, FemTech risks being
538 absorbed into the same extractive systems it originally tried to escape.

539 Conclusion

540 FemTech in South Asia is no longer just a health tech trend, it is a quiet revolution redefining
541 economic independence, digital access, and social agency for women in one of the most
542 patriarchal regions in the world. What began as period trackers and fertility apps has evolved into
543 a full-fledged feminist economic movement, challenging deeply embedded cultural taboos,
544 leveraging community networks, and building alternative pathways to financial inclusion.

545 This paper has traced how South Asian women are not merely consumers of FemTech, but
546 producers, educators, and entrepreneurs, reclaiming bodily autonomy and converting intimate
547 knowledge into capital. From apps like Gynoveda, which blends Ayurvedic tradition with AI, to
548 platforms like Maya and Khair, which create space for anonymous health inquiry and
549 community-led distribution, these innovations are reframing health as a site of economic and
550 political power.

551 The discussion has also revealed a critical tension: FemTech's potential is vast, but its ecosystem
552 is underdeveloped. A lack of policy attention, cultural discomfort in investment circles, and
553 structural gender bias in tech ecosystems continue to undermine scale and sustainability. And
554 yet, despite these barriers, South Asian women are building, quietly, courageously, and
555 creatively.

556 **Recommendations**

557 To ensure FemTech's evolution from a niche disruptor to a mainstream engine of gendered
558 development, targeted interventions are necessary across multiple layers of society:

559   1. Policy Recognition & Integration
560   National and regional health policies must formally recognize FemTech as a public health
561   tool, integrating it into menstrual hygiene programs, school curriculums, and rural health

outreach via frontline workers. This includes creating guidelines for ethical use, data privacy, and AI regulation specific to reproductive health platforms.

2. Gender-Lens Investment

   Venture capital and state funding agencies must be incentivized to support FemTech through gender-lens investing, particularly by establishing women-led accelerators and seed funding tracks focused on reproductive health and social impact. Financial ecosystems must be restructured to include menstruation and fertility as legitimate sectors—not private taboos.

3. Digital Equity Infrastructure

   Governments and telecom regulators must address the digital gender divide, ensuring affordable internet, device access, and digital literacy training for women, especially in rural areas. Without this foundational infrastructure, FemTech will remain elite, urban, and exclusionary.

4. Feminist Tech Alliances

   Building coalitions between developers, grassroots women's groups, and feminist health advocates can ensure platforms are not only scalable but ethical, inclusive, and culturally resonant. This approach resists platform capitalism and promotes a community-centered FemTech economy.

Areas for Further Research

While this paper has provided a broad exploration of FemTech's economic impact in South Asia, several critical questions remain:

- Urban vs. Rural Impact: How do FemTech platforms differ in adoption, impact, and trust across urban and rural populations?
- Caste, Religion & Intersectionality: How do caste hierarchies, religious beliefs, and regional norms shape the accessibility and design of FemTech tools?
- Long-Term Economic Outcomes: Beyond micro-entrepreneurship, how does FemTech contribute to intergenerational wealth-building, education outcomes, or financial decision-making power?
- Data Sovereignty & Digital Ethics: As FemTech becomes increasingly data-driven, what governance models can protect users from surveillance and exploitation?

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