

The
FemTech 2023
White Paper

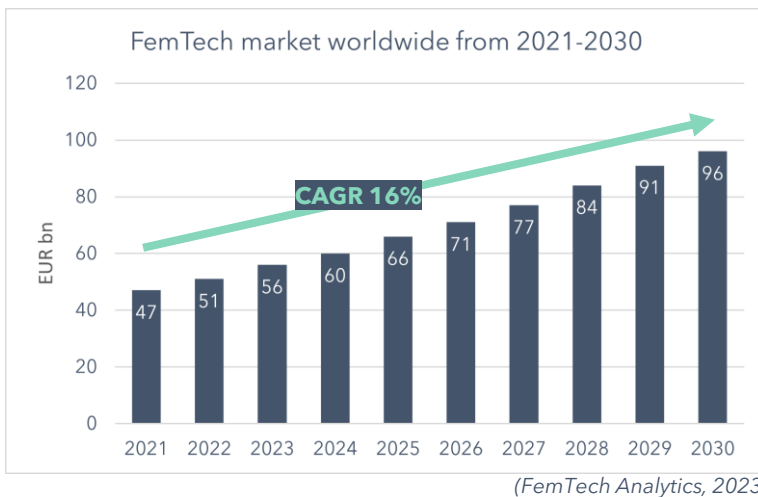
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FemTech in a nutshell

What is the meaning of FemTech?

Female Technology or FemTech refers to technological solutions invented to empower women’s health conditions and needs.¹ The FemTech industry encompasses a wide range of products and services, including applications, medical devices, software, wearables and other solutions that cater to female biological needs.² The term FemTech originates with Ida Tin, co-founder of a mobile fertility tracking app called Clue. Tin pioneered the term FemTech in 2016 and brought together everything related to women's health under one umbrella term. Since Ida Tin coined the term, FemTech has experienced rapid growth and has already proven itself as a distinct industry.¹

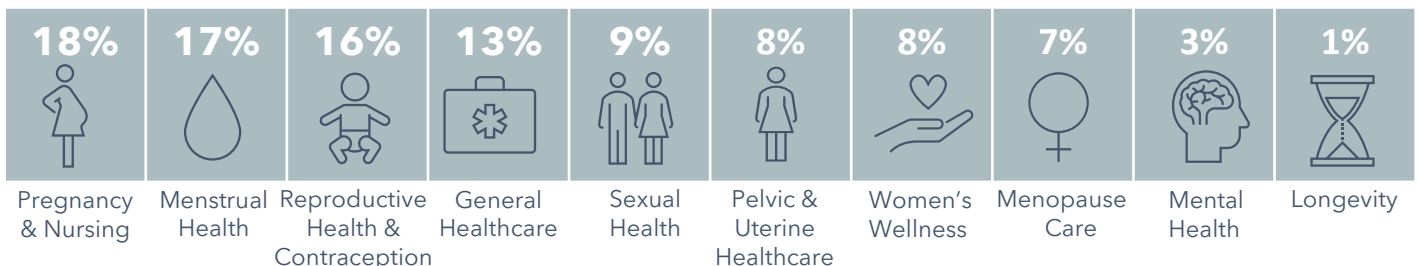
How does the future of FemTech look like?



The growth opportunities of FemTech can not be ignored. According to Statista, the global **FemTech market size shows exponential growth** with an average CAGR of 16% from 2020 to 2030, FemTech is expected to reach EUR 96 billion (bn). Despite increasing interest in recent years, the industry remains underestimated and has high growth potential.³ This growth is largely driven by three main reasons³:

- Increasing use of technology to address women’s health.
- Rising knowledge and acceptance of women’s health issues.
- Growing prevalence of women-related diseases.

What is included in FemTech?



What is the link with SDGs?

FemTech has the potential to contribute to multiple SDGs, making it an important area of focus for policymakers, healthcare providers, and technology companies.⁴



Good Health and Well-being

FemTech can help women to manage their health and well-being by providing access to personalised healthcare solutions, promoting disease prevention and improving maternal and reproductive health.



Gender Equality

Gender equality can be improved by addressing the unique health needs of women and increasing access to healthcare services and information. FemTech can consequently provide women with the tools and resources they need to manage their health and well-being.



Reduced Inequalities

FemTech helps to reduce health inequalities by improving access to healthcare services and information for women, particularly those who may face barriers to accessing healthcare due to socioeconomic factors or geographical location.



Industry, Innovation, and Infrastructure

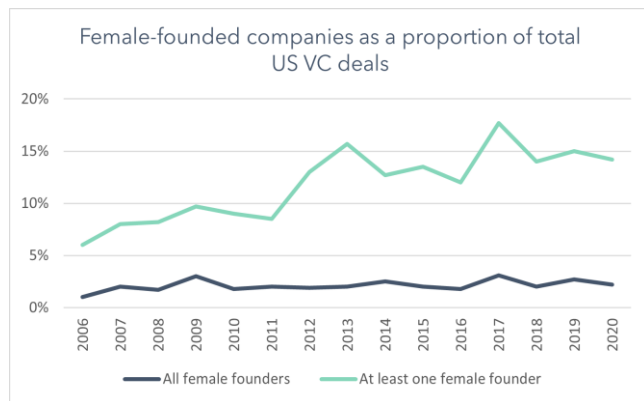
The FemTech industry is an innovation within the healthcare sector, promoting the development of new technologies and services tailored to the needs of women. This contributes to the growth of the industry, creates jobs, and supports economic development.

Challenges and threats faced by FemTech

Despite the increase in healthcare developments (more information can be found in our [HealthTech White Paper](#)), improvements in women's health have not experienced the same momentum. This page provides an overview of research insights and existing statistics about the most challenging issues experienced by the FemTech market.

Lack of investments

Female founders only accounted for **7% of deals in the US and 5% in Europe in 2022**.⁵ Likewise, 2% of global investment funding went to female-led startups.⁷ The pandemic exacerbated this number with a decrease of 27% compared to 2019.⁷ Only 0.6% goes to women of colour. Now, what is the connection between these facts and FemTech companies? According to a study by McKinsey, **more than 70% of FemTech companies were created by women**. A shortage of funding for female-led companies results consequently in a challenge for FemTech startups to finance their investments.⁶



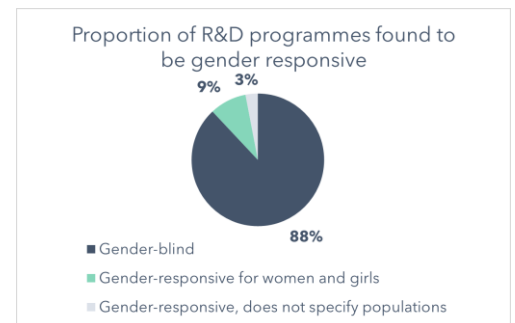
(FemTech Insider, 2023)

Despite the FemTech sector's great development potential, female-led startups receive much less funding than their male-led competitors. As we can see in the graph on the left, research shows that only 2% of venture capital financing flowed to female-led businesses. Mixed teams with at least one woman receive on average 14% of the total US Venture Capital (VC) deals.⁷ This inequality limits the ability of FemTech startups to scale and innovate as the industry experiences a lack of funding access.⁸ VCs need to embrace gender diversity by investing in the other half of the population to address the world's problems.⁵

Insufficient R&D funding

4%

Only 4% of healthcare research and development was targeted at women's health issues in 2020, despite the estimated EUR 460bn in annual medical expenses.⁹ The graph on the right shows that 88% of the organisations working in this area appear to be gender-blind whereas 9% are focused on benefitting women.⁹



(Global Health 5050, 2021)

Minority of female leaders in the healthcare industry

25%

Merely 25% of leadership roles are held by women in the healthcare sector, while women make up around 90% of front-line healthcare workers and 70% of the workforce. These numbers show that the healthcare sector is still mainly dominated by male leaders. This makes it very challenging for women to achieve leadership positions in the healthcare sector.¹⁰

Lack of public support

15%

Just 15% of General Partners (GPs) at a VC firm in Europe are women, according to a survey by European Women in VC.⁵ A consequence of minority female GPs in VCs is the lack of investments in female-led startups and FemTech startups.¹ Fortunately, this challenge can be overcome. Lowering barriers for FemTech entrepreneurs is achieved through increased public awareness and a drive for diversity.¹¹

Lack of data and cybersecurity

A concern for FemTech users is the usage of confidential information. Confidential information includes, among others, menstrual cycles, fertility, and sexual information.⁷ Not only is this information highly sensitive, but also frequently inaccurate or incomplete. Because electronic health records are not uniform, it can be challenging to collect and evaluate data on women's health on a large scale. Consequently, FemTech businesses might find it difficult to develop solutions that effectively meet women's demands without having gathered this data.⁷

Why is FemTech important?

Contradicting numbers

The existing gender inequality reflects substantial capital and profits that are being overlooked.

6%



According to an S&P Global survey, only **6% of the S&P 500 companies have female CEOs**. However, they significantly outperform the market average in terms of stock performance.¹²

63%



According to Forbes, firms with at least one **female founder have 63% higher valuations** than startups with all-male founding teams.¹³

2x



According to a BCG study, women obtain much less initial cash when they pitch their ideas to investors. However, **businesses founded by women return 2x more per dollar invested than those founded by men**.¹³

Why FemTech matters

- 1 Femtech is driven by strong female role models where women produce goods for other women.¹⁴ Women-led startups are finally developing solutions for women that address their healthcare requirements by listening to women's needs.¹⁴
- 2 Women's health presents significant business opportunities for organisations, stakeholders, and investors. This is because women make up about 80% of consumers of health and wellness products. McKinsey cites that: "Because women are not just consumers but the primary healthcare decision-makers for themselves and often for their families, better health outcomes for women can lead to better outcomes for society."⁶
- 3 FemTech can relieve the high workload of lower-status healthcare workers, who are mostly female (86%) and low-income women of colour (51%). This can be done through apps monitoring patients at home, coordinating care, and supporting older relatives.¹⁶

Consequences of the gender inequality

The resolution of FemTech is now more important than ever as COVID-19 was responsible for a social and economic fallout that further exacerbated gender inequalities.¹⁶

The current situation

As a result of gender inequalities, there is an unfair distribution of the different needs of genders.¹⁶ Women spend fewer years in good health, despite living longer than men. Women of racial or ethnic minorities in the USA report even worse health than white women, including higher incidence rates of diseases.¹⁶ Reasons for these inequalities are rooted in structural racism.¹⁶

The drawback for women

The Lancet's Women's Issue in 2019, which was dedicated to advancing gender equality in science, medicine, and global health, asserted: "Women are dying because of the gender data gap in medicine, medical research, medical education and in medical practice—and it needs to be closed as a matter of absolute urgency".⁸

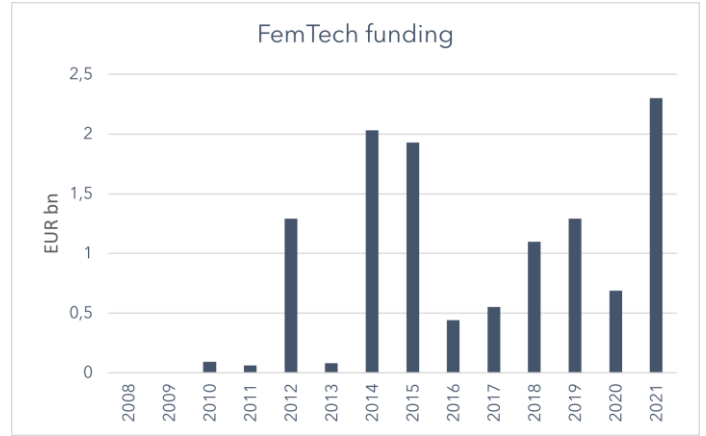
The contribution of FemTech

This is where the rise of FemTech becomes evident. When qualitative and quantitative gender analysis in digital health studies are incorporated, it will be possible to effectively tailor digital health interventions to the female population. Also designing interventions that are ineffective for everyone can be avoided by paying attention to heterogeneity.¹⁶

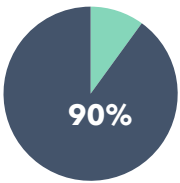
The opportunities for FemTech

Promising facts

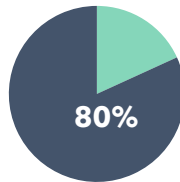
Research by McKinsey shows that the trends supporting FemTech are speeding up. The company investigated 763 FemTech companies. The results revealed that both public awareness and funding are rising.⁶ This is driven by the increasing awareness of women's health and the high incidence of chronic or infectious diseases among females.¹¹ With the rise of SHEconomy which refers to the trend that more businesses are approaching their consumers and developing products from the female perspective,¹⁷ women are increasingly playing an influential role across the healthcare continuum.¹⁸



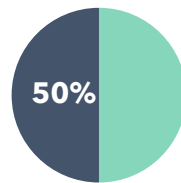
(McKinsey, 2021)



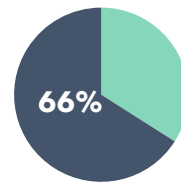
90% of women are primary healthcare decision-makers for their family or friends.¹⁸



80% of healthcare professionals are women, mostly nurses.¹⁸



50% of global healthcare customers are women.¹⁸ They are also seen as the main caregivers.

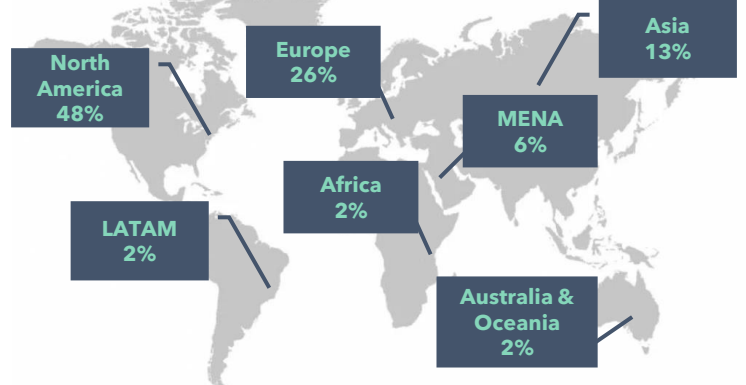


66% of female internet users look online for healthcare information.¹⁸

The market drivers behind the growth³

- Inclusive solutions for women's well-being
- Increasing demand for reproductive health
- Increasing demand for digital health solutions
- Normalising the taboo topics in women's health
- Promoting women's sense of self-worth
- The growing interest of VCs and Angels

The distribution of FemTech companies worldwide in 2022³



The road ahead

While the FemTech industry has tremendous growth potential, several issues must be addressed to ensure its success. If these challenges are taken care of, the FemTech industry can reach its full potential and significantly impact women's health and wellness.⁷ Until the VC sector and society as a whole can recognise the equal importance of women's health, FemTech is the term used by startups that focus on improving the health of women.⁵

Our mission and our portcos

As Leanox, a European, gender parity focused, impact VC fund (#fifty50female), we empower female and diverse changemakers. With our impact and female angle, we aim to significantly outperform benchmarks in terms of female founder support. We aim to invest with a 50% female founder presence across our portfolio. In our portfolio, we have two companies that focus on the industry of FemTech namely theblood and Dr. Vivien Karl.



theblood is on a mission to close the gender data gap. The company enables females to test their menstrual blood regularly to have a better overview of their overall health and blood data. It hereby offers healthcare analytics from menstrual blood samples. The results will be shown through an app.

DR. VIVIEN KARL

Dr. Vivien Karl is in the process of building a premium FemHealth brand. It is the first doctor brand which uses scientific research to provide intimate care based on natural ingredients for women. Its aim is that no woman should suffer from intimate discomfort anymore.

Deep dive into menopause care

About the term

Menopause is a term that is infrequently discussed and poorly understood. However, it is gaining more attention from employers, who are reviewing the health benefits they provide to women.¹⁹ Women enter their menopause twelve months after their last period. The years leading up to that point are called the menopausal transition or perimenopause, which most often begins between the ages of 45 and 55.²⁰

Why it matters

Awareness around menopause has become more important since COVID-19. During the pandemic and its economic shockwaves, measurements have been taken to both prevent the spread of COVID-19 and provide care to those who fell ill. Especially women aged 40 to 60 are at a high risk to suffer from COVID-19. This caused a disproportionate number of female healthcare workers who have faced additional risks to their health and wellbeing. Support for workers exhibiting telltale symptoms linked to menopause is becoming more crucial. Symptoms of menopause could be seen as hot flashes, exhaustion, mood swings, and difficulty sleeping.¹⁹ To give a clearer idea, it is estimated that **by 2030, about 1bn women are expected to be menopausal or postmenopausal worldwide.** However, nearly no one is satisfied with the treatment they are currently receiving. This presents a huge opportunity to offer better products and services for menopausal women.²¹

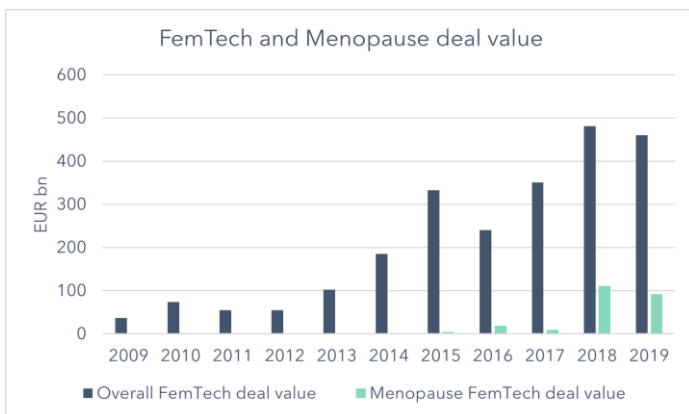
By the numbers

➔ According to a study from Grand View Research, the worldwide menopause industry is predicted to expand with a **CAGR of 5% from EUR 14bn in 2021 to EUR 22bn by 2030.**¹⁹

➔ According to a poll from Biote, up **to 40% of respondents claim that their symptoms from menopause interfered with their work performance or productivity weekly.** Nearly one-fifth of respondents had either quit their jobs or have seriously considered it.¹⁹

➔ **Menopause-related productivity losses** can total more than **EUR 138bn annually,** according to Bloomberg.¹⁹

The current evolution

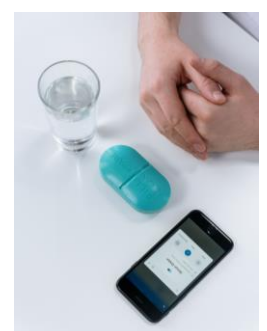


(Pitchbook, 2020)

Femtech startups bring technological solutions to problems related to women's health. Yet menopause startups continue to endure significant social stigma. The graph on the left shows that since the beginning of 2009, startups with a business linked to menopause have raised a total of EUR 233 million (m) globally, while femtech startups as a whole raised more than EUR 460m in 2019 alone.²²

The opportunities of the menopause care market

Between the ages of 45 and 55, many women begin to experience menopause. Because of this age range, menopause frequently affects women during the prime of their careers. Many women who are experiencing menopause, are empty-nesters and therefore have a bigger purchasing power than they ever had. According to an American Association of Retired Persons (AARP) survey released in January, 93% of menopausal women said they are interested in non-invasive tech solutions, including apps, to manage their symptoms.²² "These are your senior leaders, your executives. You want to retain these women and there is no reason they shouldn't have basic access to healthcare," said Tammy Sun, CEO of Carrot Fertility, a women's health company that rolled out menopause services on its platform.¹⁹



Menopause care

Deep dive into reproductive health & contraception

About the term

The contraceptive market refers to the market that utilises medication or a device as a technique to prevent unwanted pregnancy. It is sometimes referred to as fertility control and birth control. Growing awareness of the importance of family planning and preventing unplanned pregnancies is what drives its market expansion. Additionally, the rising use of oral tablets, increased awareness of contemporary contraception and health problems related to teenage pregnancies all contribute to the growth of the contraceptives business.²³

Why it matters

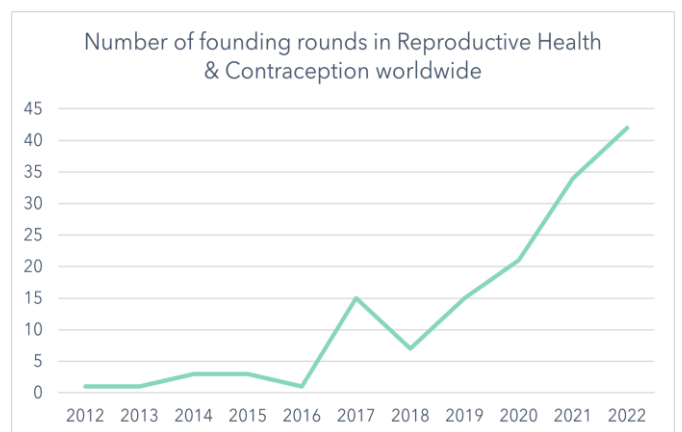
Numerous businesses in the global contraceptive market were compelled to temporarily halt their operations because of COVID-19. In this way, the pandemic has hampered the expansion of the contraceptive business due to national lockdowns and delays in the manufacturing of contraceptive pills, devices used in households, and speciality clinics.²³ According to The Lancet Global Health, around 121m unintended pregnancies occurred globally between 2015 and 2019. This accounts for 64 unintended pregnancies per 1000 reproductive-aged women.²⁴ Moreover, the rising number of unintended pregnancies is expected to propel the growth of the contraceptive market during the forecast period from 2023 to 2030.²⁴

By the numbers

- ➔ The global contraceptive market was valued at EUR 26bn in 2022 and is expected to reach EUR 47bn in 2030 with a **CAGR of 6% from 2023 to 2030**.²³
- ➔ **Only 4% of medical research funding is allocated to reproductive health**, even though one in three women globally will experience a reproductive health issue during their lifetime.⁹
- ➔ According to the World Health Organisation, **around 1bn women require family planning**. Among them, around 842m women are using contraceptive methods for family planning and around 270 m women have an unmet demand for contraception.²⁵

The current evolution

Over the past 50 years, research on contraception has made steady progress. Modern hormonal and non-hormonal contraceptives have improved women's lives by lowering a variety of health issues that significantly increase morbidity. Hormonal contraception is widely used to reduce the number of births. However, more contraceptive options are required to accommodate those who cannot use existing methods. Younger generations are also increasingly refraining from accepting the pill and are moving towards non-hormonal options. This opens up new opportunities for the FemTech market to introduce new devices to address hormonal contraception concerns.²⁶



(FemTech analytics, 2023)

The opportunities of the contraceptive market



Contraception

Several initiatives have been launched by governments and healthcare organisations to promote the contraceptive market and address unintended pregnancies.²⁴ The rising prevalence of Sexually Transmitted Diseases (STDs) together with the unmet contraceptive demands among women contribute to the industry growth. To summarise, the expansion of the worldwide contraceptive market is fueled by, among others, a high abortion rate, increased female labour force participation, high population awareness around family planning and rising disposable income in developing countries.²⁴

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