

EIOPA PENSIONS TECHSPRINT 2025

Post-event report: reflections and findings

EIOPA-25/734
26 November 2025



eiopa

European Insurance and
Occupational Pensions Authority

CONTENTS

EXECUTIVE SUMMARY	3
1. TECHSPRINT APPROACH AND METHODOLOGY	4
1.1. Objective of the pensions techsprint	5
1.2. Methodology: Developing consumer profiles	6
1.3. Regulatory framework	8
2. BEHAVIOURAL AND DIGITAL INSIGHTS	9
3. CONSUMER PROFILES AND PENSIONS JOURNEYS	11
3.1. Consumer profile 1: Women	12
3.2. Consumer profile 2: Young Starter (Gen Z)	14
3.3. Consumer profile 3: Self-employed & Gig workers	15
4. PENSIONS TECHSPRINT INSIGHTS	17
4.1. Future Me A Smart Co-Pilot for Women	17
4.2. FIRE Financially Independent Retire Early	18
4.3. GIG Great Income Generator	19
5. MAIN INSIGHTS	21
6. LESSONS LEARNED	24
7. CONCLUSIONS	25
ANNEX A: PENSION JOURNEYS	26
ANNEX B: TEAM COMPOSITION AND TECHSPRINT STRUCTURE	27
Participants and team composition	27
Structure of the techsprint	27

EXECUTIVE SUMMARY

This report presents the results and insights from EIOPA's Pensions Techsprint¹, held on 17–19 June 2025. Over three days, multidisciplinary teams co-created prototypes to boost pension awareness, engagement, and adequacy for three specific consumer groups: women, generation Z, and self-employed/gig workers. Three concepts emerged, 'Future Me', an AI-enabled co-pilot tailored to women's life courses; 'GIG: Great. Income. Generator', a save-as-you-earn pension savings system with a gig-economy focus; and 'FIRE', a mobile-first, gamified app for young starters. All three solutions illustrate how behaviourally informed design, layered information, and artificial intelligence (AI) can translate into sustained saving habits and better retirement outcomes. This report outlines the Techsprint's approach and methodology, behavioural and digital insights, pension journeys, and key lessons learned from the Techsprint.

These efforts are timely as the pension gap continues to widen, with one in five consumers not yet considering personal pension products, rising to 31% among 18–24-year-olds and 25% among 25–39-year-olds. Women's participation rates in occupational and personal pensions lag behind men's, and 47% of women feel negatively about their retirement outlook compared to 37% of men. Such disparities underscore the urgent need for Member States to adopt targeted measures that guarantee adequate retirement income for all EU citizens, regardless of age, gender, or employment status.

¹ A Techsprint is a multi-day, intense, collaborative event that brings together experts from diverse fields to rapidly develop innovative, practical solutions to complex challenges through prototypes or proofs-of-concepts (see Section 1).

1. TECHSPRINT APPROACH AND METHODOLOGY

A Techsprint is an intensive, collaborative event, typically held over various days, where participants from different disciplines, including technology, finance, academia, and regulation, come together to develop innovative solutions to well-defined challenges. These events are often convened by regulatory authorities to address complex, system-wide issues and to produce rapid, tangible outcomes such as prototypes or proofs-of-concept. To achieve this, Techsprints are built around a number of key attributes that make them effective:

- ▶ **Cross-functional collaboration:** Brings together expertise across technology, industry, academia, and regulation, often cutting across sectors and borders. This diversity fosters dialogue and joint problem-solving on topics that require collective efforts, beyond the capacity of any single stakeholder.
- ▶ **Focused problem-solving:** Targets specific market or regulatory issues, such as the pension gap, and breaks them down into actionable components.
- ▶ **Rapid development:** Encourages participants to work intensively over a brief period of time to produce prototypes or working concepts by focusing on manageable building blocks and fostering rapid, collaborative ideation.
- ▶ **Innovative outputs:** Generates new tools, data models, or processes that can advance regulatory capacity or directly address consumer needs.

In this context, pensions were selected as the focus of EIOPA's first Techsprint as they represent a policy area where demographic, economic, and behavioural factors intersect, and where digitalisation offers a strong potential to deliver meaningful improvements in transparency, consumer engagement, and long-term participation.

Additional considerations reinforced this choice: Across the EU, demographic trends such as ageing populations, low birth rates, and shrinking workforces are placing increasing pressure on pension systems, raising concerns about both their adequacy and long-term sustainability. At the same time, consumer engagement with pensions remains low. Research consistently shows that many individuals find pensions difficult to understand, perceive them as complex or costly, and often

postpone critical decisions about saving for retirement². These issues are further compounded by distributional effects, as certain groups, including women, younger workers, and those in self-employment or the gig economy, are disproportionately exposed to the risk of inadequate retirement income.

Yet, pensions also represent an area of opportunity. Advances in technology and behavioural insights create the possibility to present information with greater clarity, support decision-making, and encourage higher participation in pension saving. By beginning with pensions, the Techsprint provided a platform to explore how collaborative and technology-driven approaches could contribute to better consumer outcomes in an area that is relevant across all Member States and that carries far-reaching implications for EU citizens' long-term financial security.

1.1. OBJECTIVE OF THE PENSIONS TECHSPRINT

The objective of this Techsprint was to design and refine technology-driven solutions that address the pension gap by enhancing consumer engagement with retirement planning and empowering individuals to make informed choices about their pension savings. This Techsprint focused on Pillar 3 (personal and private pensions) because this part of the system is where individuals have the greatest responsibility and flexibility when planning for retirement. Unlike Pillar 1 (statutory state pensions) and Pillar 2 (occupational pensions), which are largely shaped by public policy or employer arrangements, Pillar 3 requires individuals to actively make decisions about if, when, and how much to save, as well as which products to choose.

Despite progress, participation in Pillar 3 remains uneven³, with many consumers deterred by a lack of understanding, low trust, or perceptions of complexity and cost. This makes it a particularly suitable area for exploring the potential of digital tools, data-driven insights, and innovative communication approaches to simplify choices, improve transparency, and ultimately increase engagement. By focusing on Pillar 3, the Techsprint sought to identify solutions with a direct impact

² See [EIOPA Consumer Trends Report 2023](#) and [EIOPA Consumer Trends Report 2024](#)

³ According to [EIOPA Consumer Trends Report 2024](#), only 20% of EU consumers are members of an occupational pension scheme, and 18% own a personal pension product.

on consumer behaviour, while generating lessons that could also be relevant for the wider pension landscape.

Working in teams, participants were given a problem statement centred on a specific consumer profile and pension journey. They were challenged to create solutions that enhance awareness, accessibility, and engagement for three key groups:

1. Women, who often face pension gaps due to career breaks, work patterns and pay disparities.
2. Generation Z (Gen Z), a digitally native group that requires modern, engaging financial tools.
With the aging population placing increasing pressure on pension systems, early engagement and planning are essential for Gen Z to secure their future benefits.
3. Self-employed and gig workers, who may perceive pensions as inaccessible or a low priority.

The overarching objective was to rethink how pensions are presented and accessed and how to make them more relevant, transparent, and engaging for those most at risk of pension shortfalls. While the focus was on personal pension products and the three profiles, many of the challenges - such as low participation and decision inertia - are equally relevant to occupational pensions (Pillar 2) as well as to other consumer groups.

1.2. METHODOLOGY: DEVELOPING CONSUMER PROFILES

EIOPA's Pensions Techsprint was designed around the principle of understanding consumer realities across the EU and using those insights to identify different pension journeys. To achieve this, EIOPA drew on a combination of research, publicly available data, and targeted consumer insights. The process was deliberately structured to be EU-wide and Member State neutral, ensuring that the findings could be applied across different national systems without prioritising one model over another. The foundation of the methodology was based on a combination of data sources: EIOPA's annual Consumer Trends Reports provided evidence on the structural challenges faced by different groups of consumers in the insurance and pensions markets, while Eurobarometer surveys contributed representative data on consumer perceptions, attitudes, and behaviours across the EU.

From this foundation, EIOPA initially identified seven pension journeys that described how consumers typically engage with pensions at distinct stages of life and employment. These journeys, ranged from the “young starter” at the beginning of their career, through the “mid-career professional” and “late starter,” to the “near-retiree”. In addition, the gig worker, the low-income worker, and the financially engaged investor, were designed to cut across national systems and instead reflect life-stage challenges, financial behaviours, and barriers to engagement. Each journey combined an exploration of motivations, pain points, and potential strategies for better engagement, providing a structured way of mapping consumer realities (see Annex A).

Although seven journeys were identified, EIOPA narrowed the focus to three profiles for the Techsprint. These were women, young starters (Gen Z), and gig workers or the self-employed. The decision was guided by two considerations: first, the extent of vulnerability that these groups face within pension systems; and second, the potential for digitalisation to provide meaningful solutions. Each of the three consumer profiles was then developed into a detailed journey (see Section 3). The aim of these journeys was to map how challenges evolve over time, from early career to pre-retirement and into retirement itself. They highlight both systemic barriers, such as lower lifetime earnings for women, uncertainty about the sustainability of public pensions for Gen Z, and irregular contributions for gig workers, as well as opportunities for intervention. In parallel, the profiles explored where digitalisation could play a transformative role. For instance, gamification and digital nudges for younger savers, AI-driven financial education and personalised planning tools for those with low financial literacy, flexible contribution models for those with irregular incomes, and transparent, user-friendly platforms to build trust and accessibility.

The outcome of this methodology was a set of three problem statements that framed the Techsprint challenges. Each problem statement was firmly grounded in data from Eurobarometer and EIOPA’s consumer research, while also being forward-looking in identifying the potential for digital innovation. This approach ensured that the exercise remained focused on consumer needs, structurally neutral across Member States, and oriented towards solutions. The methodology created a bridge between evidence and innovation, turning data into lived consumer journeys that could inspire practical and inclusive digital pension solutions.

1.3. REGULATORY FRAMEWORK

When designing the Techsprint, EIOPA anchored its approach in the existing regulatory EU framework while encouraging innovation in digital delivery and consumer engagement. The objective was to ensure that new technologies support consumers in making better decisions without undermining established safeguards. This approach sought to balance regulatory compliance with digital innovation. By embedding consumer protection requirements into design considerations, the Techsprint aimed to demonstrate how digital pension solutions can remain safe, transparent, and fair while improving accessibility and engagement. Therefore, when developing the prototype, participants were encouraged to consider the regulatory frameworks portrayed in Table 1, focused on consumer protection within personal pension products (note that the list below is non-exhaustive).

Table 1: Regulatory frameworks for consideration

NON-EXHAUSTIVE REGULATORY FRAMEWORKS			
Area	Regulation / Rule	Key Consumer Protection Requirements	Design considerations
Product Information & Transparency	PRIPs Regulation (EU No. 1286/2014) (please note this is dependent on national rules)	Clear, standardized Key Information Document (KID) must be provided before sale.	<ul style="list-style-type: none"> • Present KIDs accessibly in-app. • Highlights key risks, costs, and returns clearly. • Provide interactive or layered information if complex.
Fair Distribution & Advice	Insurance Distribution Directive (IDD) (EU No. 2016/97)	Product must meet user's needs; suitability or appropriateness assessments required for advice.	<ul style="list-style-type: none"> • Include needs assessment questions. • Explicitly distinguish between advice and no-advice journeys. • Transparent disclosure of conflicts of interest and remuneration.
User Consent & Data Protection	GDPR (EU No. 2016/679)	Lawful basis for processing personal data; clear consent; user rights over data.	<ul style="list-style-type: none"> • Use plain-language privacy policies. • Obtain granular, informed consent. • Allow access, correction, deletion of data.

Digital Fairness & Accessibility	EU Consumer Rights Directive (2011/83/EU)	Clear terms, no dark patterns, right to withdraw; inclusive design for all users.	<ul style="list-style-type: none"> • No hidden fees or misleading user experience. • Digital interfaces should be accessible and clear. • Easy opt-out and cancel flows.
Artificial Intelligence & Personalisation	AI Act (EU No. 2024/1689)	High-risk AI (e.g. for credit scoring, suitability, life, and health) must be transparent and human interpretable.	<ul style="list-style-type: none"> • Explain how algorithms work. • Enable human override or appeal. • Log decisions for auditability.
Pension-Specific Conduct	PEPP Regulation (EU No 2019/1238)	Fair treatment, regular statements, complaint handling.	<ul style="list-style-type: none"> • Provide pension balances and projections. • Offer feedback & complaint channels. • Support portability and switching (see further detail below)
Occupational pensions- Specific Conduct	IORP II Directive (EU No 2016/2341)	Information disclosure requirements.	<ul style="list-style-type: none"> • Pre-enrolment phase: Provide layered information on investment options, ESG factors. • Provide an annual pension benefit statement (including accrued rights, projections, breakdown of costs). • Retirement-phase: include pay-out options. • Upon request ensure information on annual accounts, statement of investment policy principles, further information about assumptions used to generate projections.

2. BEHAVIOURAL AND DIGITAL INSIGHTS

Behavioural insights played a significant role in shaping the Techsprint, recognising that consumer decisions around pensions are often driven by cognitive biases. In line with EIOPA's report on *Good Practices on Information Provision for DC schemes*⁴ and *Report on the Pension Benefit Statement: guidance and principles based on current practices*⁵, the Techsprint encouraged solutions that simplify disclosures, present choices in a way that supports long-term decision-making, avoid

⁴ [EIOPA Report on Good Practices on Information Provision for DC Schemes](#)

⁵ [EIOPA Report on the Pension Benefit Statement: Guidance and Principles Based on Current Practices](#)

“choice overload,” and reduce inertia through timely prompts and nudges. Fundamental to these efforts is empowering consumers through simple, transparent, and jargon-free language. Using plain, clear, and concise language is essential to making pensions more appealing and easier to understand. Complex jargon and technical terms often create unnecessary barriers, especially for those less familiar with financial products. Therefore, the objective of the Techsprint was not only regulatory compliance but also ensuring that digital pension tools are designed around actual consumer behaviour, thereby increasing engagement with pension information.

Digitalisation and behavioural economics provide the means to operationalise these insights and to overcome psychological and structural barriers that prevent participation and savings. EIOPA highlights several key challenges faced by consumers:

- ▶ **Present bias:** prioritising immediate needs over long-term goals, leading to inertia and delayed pension decisions.
- ▶ **Loss aversion:** reluctance to reduce disposable income today despite future benefits.
- ▶ **Information overload:** complexity of pension systems causing disengagement.
- ▶ **Low financial literacy:** further compounding these challenges, particularly for vulnerable groups.

When designed with these barriers in mind, digital tools can improve retirement planning and savings habits. For instance:

- ▶ **Reducing complexity:** clear, digestible formats, user-friendly interfaces, and pension calculators can make long-term benefits tangible and motivating.
- ▶ **Behavioural nudges:** subtle prompts, such as reminders or default settings, can encourage contributions without requiring active effort.
- ▶ **Gamification:** reward-based approaches can make saving more engaging and fulfilling.
- ▶ **Financial literacy tools:** Interactive modules, videos, and AI-driven chatbots can make complex pension concepts accessible and build consumer confidence.

EIOPA's work has been instrumental in shaping this approach. In its *Technical Advice on the Development of Pension Tracking Systems (PTS)*⁶, EIOPA emphasised layered information structures (levels 1, 2, and 3) to help users gradually deepen their understanding. Similarly, the *2018 Pension Benefit Statement (PBS) Report*⁷ provided principles and voluntary models for defined contribution pension schemes, with statements designed to:

- ▶ Follow behavioural approaches that support informed decisions.
- ▶ Be attractive and easy to read.
- ▶ Use layers of information to guide members.
- ▶ Provide clear projections of pension pots and potential retirement income.

EIOPA also aligned the PBS development with the PEPP Regulation (EU) 2019/1238, which introduced a standardised PBS layout, QR code-enabled digital access, visual analogies (e.g., coin stacks), and layered information structures for greater clarity. Furthermore, EIOPA in its *Technical Advice for the Review of the IORP II Directive* recommends that the PBS should be designed with a behavioural purpose⁸.

3. CONSUMER PROFILES AND PENSIONS JOURNEYS

A central reason for focusing on only three consumer profiles is that they provide sufficient diversity to capture the most meaningful differences in consumer needs without introducing unnecessary complexity. EIOPA deliberately designed the profiles to represent distinct dimensions of consumer behaviour and vulnerability, such as levels of digital literacy, financial resilience, and engagement with long-term planning. This ensured that the solutions developed during the Techsprint can be more broadly applied to different user journeys. For example, those who are digitally confident versus those less comfortable with technology, or consumers who actively plan for retirement compared with those who take a more passive approach. By grounding the profiles in these essential contrasts, EIOPA created a framework that is both inclusive and practical, ensuring that

⁶ [Technical advice on the development of pension tracking systems](#)

⁷ [EIOPA Report on the Pension Benefit Statement: Guidance and Principles Based on Current Practices](#)

⁸ [Technical advice for the review of the IORP II Directive, page 125](#)

innovations address the breadth of consumer realities while remaining manageable within the concentrated, sprint-based format.

It is important to note, however, that these profiles should be understood as illustrative snapshots rather than exhaustive representations. They do not capture the full diversity of experiences within groups such as women, members of Gen Z, or self-employed and gig workers. Instead, the profiles serve as simplified archetypes designed to highlight certain challenges and behaviours, enabling structured design of solutions during the Techsprint.

3.1. CONSUMER PROFILE 1: WOMEN

The gender pension gap is a complex issue rooted in various structural and social factors. Across all EU Member States, women receive lower pensions than men. In 2024, women aged 65–79 received a gross pension that was on average 24.7% lower than that of men in the same age group⁹, contributing to higher poverty risks among older women.

One of the main drivers is the gender pay gap: women in the EU currently earn about 12% less than men¹⁰. Lower pay translates into lower pension contributions and, ultimately, lower retirement income. Women are also more likely to have shorter or interrupted careers, to work part-time, or to work in the informal sector, all of which limit their ability to build pension rights. In addition, many women prioritize short-term financial needs over long-term savings, particularly when balancing caregiving responsibilities with paid work.

The pension gap is not only about amounts but also about participation. Fewer women qualify for pensions compared with men, reflecting persistent inequalities in the labour market and social protection systems. According to EIOPA's 2024 Eurobarometer survey¹¹, women are less likely than men to participate in occupational or personal pension schemes by 5 and 6 basis points, respectively. This contributes to women's greater pessimism about retirement: 47% of women feel negative about their retirement outlook, compared with 37% of men. Finally, women face the

⁹ [Eurostat - Gender Pension Gap by Age Group](#)

¹⁰ [Eurostat - Gender Pay Gap in Unadjusted Form](#)

¹¹ [EIOPA Consumer Trends Report 2024](#)

additional challenge of longer life expectancy. They tend to live longer in retirement but with fewer financial resources, exacerbating the risks of poverty and financial insecurity in old age.

Table 2: Women Pension Journey

Pension Journey	Actions & Considerations	Areas of concern / Pain Points
Early Career (20s - Early 30s)	<ul style="list-style-type: none"> • Entering the workforce and contributing to Member State public pension system. • More likely to work in lower-paying jobs or part-time roles impacting pension contributions. • Less financial education on long-term pension planning. 	<ul style="list-style-type: none"> • Gender pay gap: Lower earnings lead to lower pension contributions. • Job instability: More likely to work in temporary or part-time jobs, reducing contributions. • Low pension awareness: Limited knowledge about how career and personal choices can impact future retirement income.
Mid-Career (30s - 50s)	<ul style="list-style-type: none"> • Potential career interruptions due to maternity leave or caregiving responsibilities. • Higher likelihood of working part-time to balance work and family life. • Return to the workforce after years of absence, with lower wages and fewer pension contributions. • May start private pension savings, but often with lower contributions than male counterparts. 	<ul style="list-style-type: none"> • Career breaks (maternity and caregiving): Reduced pension contributions due to time off for raising children or caring for elderly relatives. • Part-time and informal work: Contributions are lower or even non-existent in some cases. • Difficulties in catching up: Once back in the workforce, earning potential is lower, making it hard to compensate for missed contributions. • Low pension awareness: Limited knowledge about how personal decisions can also have pension implications.
Pre-Retirement (50s - 65s)	<ul style="list-style-type: none"> • Assessing pension entitlements and potential retirement age. • Need to work beyond the legal retirement age to compensate for lower pensions. • Considering ways to supplement income (e.g., savings, property assets, family support). 	<ul style="list-style-type: none"> • Lower pension benefits: Due to lower lifetime earnings and interrupted career paths. • Increased caregiving responsibilities: Women may become caregivers for aging relatives, affecting their ability to remain in the workforce.
Retirement (65+)	<ul style="list-style-type: none"> • Receiving a public pension, typically lower than men's due to lower lifetime earnings. • Relying on additional sources of income (family, savings, or property). • Higher medical and long-term care costs due to longer life expectancy. 	<ul style="list-style-type: none"> • Pension gender gap: Across the EU, women receive pensions that are on average 24.7% lower than those of men, rising to 40.3% in some Member States. The proportion of women participating in an occupational pension or holding a personal pension is five and six basis points lower, respectively, compared with men. As a result, women hold a significantly more negative view of their retirement prospects: 47% of women report concerns about their retirement outlook, compared with 37% of men¹². • Longer life expectancy: Women live longer but often with less financial security, leading to risks of poverty in old age. • Increased healthcare and dependency costs: More likely to need long-term care but may struggle with affordability.

¹² [Eurobarometer 2024: consumer trends in insurance and pension services - European Insurance and Occupational Pensions Authority](#)

3.2. CONSUMER PROFILE 2: YOUNG STARTER (GEN Z)

Gen Z, born between 1997 and 2012, faces significant challenges in securing adequate and sustainable pensions due to many of them being employed in non-traditional jobs (that often lack access to traditional pension plans) with low salaries and a rising cost of living. These factors make it difficult for young people to prioritize long-term savings, while financial literacy gaps can further discourage engagement with pension planning.

Another significant hurdle facing Gen Z are economic trends (e.g., inflation, the low-interest rate environment, and volatile financial markets) which may affect the returns on pension investments, making it more challenging for them to accumulate adequate retirement savings. Furthermore, demographic shifts (e.g., the context of aging population that place increasing pressure on pension systems, as fewer workers support more retirees) may also lead to lower investment returns and higher contribution requirements, making it harder for Gen Z to accumulate sufficient retirement savings.

The complexity of the pension systems and the lack of transparency surrounding their benefits, makes it increasingly difficult for Gen Z to plan their financial future. As a result, they face a pension journey that is markedly different from that of previous generations. Economic instability, non-traditional career paths, and a shifting retirement landscape mean that they need to approach pension planning differently.

Table 3: Young Starter (Gen Z) pension Journey

Pension Journey	Current and Predicted Actions & Considerations	Areas of concern / Pain Points
Early Career (20s - Early 30s)	<ul style="list-style-type: none"> • Entering the workforce, often in precarious or freelance jobs. • Contributing to a public pension system if in formal employment. • Gig economy jobs, self-employment, or remote work, leading to irregular contributions. • Low engagement with long-term financial planning. • Greater reliance on investment apps, and fintech solutions over the traditional pension system. • Gen Z investors are increasingly focused on ESG investments and sustainability factors. By leveraging digitalisation, ESG communication can be enhanced, making it more engaging and accessible. 	<ul style="list-style-type: none"> • Precarious employment: Employment in temporary or low-paying jobs, leading to inconsistent contributions. • Gig and self-employment issues: Autonomous workers (self-employed) must contribute higher amounts but earn lower benefits. • Low pension awareness: Lack of education about how today's decisions impact future pensions. Many pension products are complex to understand for consumers, leading to confusion and poor decision-making (e.g., use of jargon and complex terms). • Low levels of financial literacy: Limits consumer ability to engage with pensions.
Mid-Career (30s - 50s) Future Outlook	<ul style="list-style-type: none"> • Likely to have multiple career changes and non-linear employment paths with workers holding several jobs over their working life and, therefore, with different pensions from different employers. • Increased cross-country mobility, requiring pension coordination between states. • Greater reliance on state-run pensions • Uncertainty about the retirement age and pension system sustainability. 	<ul style="list-style-type: none"> • Pension sustainability concerns: Uncertainty over the evolution of pension systems. • Low homeownership rates: Unlike previous generations, many of Gen Z will not rely on property as a financial safety net. • High cost of living and inflation: Harder to save for retirement when wages fall behind rising expenses.
Retirement (65+ in 2070 and beyond) Speculative Future	<ul style="list-style-type: none"> • Retirement age could be much higher than 67 due to demographic changes. • Pensions may be lower, leading to increased reliance on personal savings, part-time work, or government support. • Digital financial services and Decentralized Finance (DeFi) could play a significant role in managing retirement income. 	<ul style="list-style-type: none"> • Uncertain public pension availability: will there be a shift to a more privatized model, leaving some behind? • Longer working lives: Many of the Gen Z may work well into their 70s. • Higher retirement costs: As people live longer and require income for more years, the adequacy of their savings becomes uncertain.

3.3. CONSUMER PROFILE 3: SELF-EMPLOYED & GIG WORKERS

Self-employed and gig workers represent a highly heterogeneous group encompassing individuals from diverse professions with different skills, income levels, and work patterns. Gig workers depend

on online platforms (e.g., Uber, Deliveroo) for providing their services. Some engage in gig work as a primary source of income, while others participate occasionally to supplement their earnings.

Traditional pension systems, largely based on full-time employment, struggle to accommodate these shifts, making it difficult to accumulate pension entitlements or include self-employed individuals to benefit from an occupational pensions plan. Pensions for self-employed individuals are projected to be on average a third lower than those of full-time employees with a similar career, due to differences in rules and in average earnings¹³. Meanwhile, digitalisation is accelerating change, expanding gig work with limited or no social protection.

Table 4: Self-Employed & Gig Workers pension Journey

Pension Journey	Current Status & Actions	Predicted Status & Actions	Areas of concern / Pain Points
Early Career (20s - Early 30s) Retirement Feels Distant	<ul style="list-style-type: none"> Focused on establishing income streams, managing short-term expenses, and growing their careers. No automatic pension enrolment, so retirement savings often not a priority. May use fintech apps for budgeting and savings but lack structured retirement planning. 	<ul style="list-style-type: none"> Likely to seek flexible savings solutions that can adapt to irregular income. Greater interest in digital-first pension platforms that integrate with banking and investment apps. Increased engagement if pensions are made more visual, interactive, and goal-oriented (e.g., gamification, social finance). Early adopters of AI-driven financial coaching and automated micro-saving tools. 	<ul style="list-style-type: none"> Income volatility: Difficulty to commit to regular pension contributions. Low financial literacy about pensions: They may be seen as complex and not yet relevant. No employer-matching contributions: Saving feel less urgent. Short-term financial focus: Priority to rent, education loans, and day-to-day expenses.
Mid-Career (30s - 40s) Recognizing the need to save	<ul style="list-style-type: none"> More financially stable but still experiencing fluctuating income. Beginning to consider long-term financial security, but may lack structured savings. Some start investing in property, stocks, or side businesses as alternative retirement strategies. 	<ul style="list-style-type: none"> More likely to engage with automated and adjustable pension contributions that align with income fluctuations. Looking for real-time tracking dashboards that provide a clear view of pension growth and expected retirement income. Increased interest in sustainable investing (ESG pensions). More open to collective pension models for freelancers or industry-specific retirement schemes. 	<ul style="list-style-type: none"> Inconsistent savings behaviour due to competing financial priorities. Complex pension products feel inaccessible, making decision-making challenging. Lack of trusted, tailored guidance. Concerns about missed years of contributions and strategies to recover them.

¹³ [2024 Pension Adequacy Report \(pg. 174\)](#)

Late Career & Pre-Retirement (Ages 40–60s) Securing the future	<ul style="list-style-type: none">• Prioritizing retirement savings after years of inconsistent contributions.• Actively seeking pension consolidation and optimization strategies.• Considering alternative income sources for retirement, such as property, annuities, or part-time work.		<ul style="list-style-type: none">• Catching up on missed contributions is burdensome, particularly with uncertain future earnings.• Lack of clear withdrawal strategies, including timing and amounts.• Concerned about retirement security without a traditional employer pension safety net.• Navigating pension regulations and tax incentives is complex and often unclear.
--	---	--	---

4. PENSIONS TECHSPRINT INSIGHTS

The Techsprint focused on practical, user-centric prototypes addressing specific pain points along the different pension journeys. Teams translated known barriers, present bias, complexity, low trust, and irregular incomes, into design requirements for clear user experience, default-based nudges, and flexible contributions. Each team concentrated on a different consumer profile producing three different concepts designed to address long-standing challenges in retirement planning. These solutions recognise the structural barriers faced by different demographic groups and attempt to bridge pension gaps by using digital technology, behavioural economics, and user-centric design.

The next section examines the proposed solutions in detail: FIRE (Financially Independent Retire Early), which targets Generation Z; Future Me, which is designed to improve pension awareness among women; and GIG (Great.Income.Generator.), which seeks to provide a pension pathway for self-employed and gig economy workers.

4.1. FUTURE ME | A SMART CO-PILOT FOR WOMEN

Future Me aims to improve pension awareness and engagement by providing a personalised, accessible, and empowering pension co-pilot, specially designed for women who face structural disadvantages in pension systems. Job instability, career breaks, and the gender pay gap

disproportionately impact women, reducing their lifetime pension contributions and increasing the risk of financial insecurity in retirement.

Future Me provides insights based on demographic and lifestyle data, allows women to compare themselves to peers in similar life situations, and offers simple, scenario-based simulations that make complex pension projections easier to understand. It also provides tips and nudges that encourage corrective action when poor financial decisions threaten long-term savings. Importantly, the solution is designed to be scalable beyond the initial target group of younger women, with potential application to older demographics and men, as well as adaptation to different national contexts.

Future Me appeals to consumers by positioning pension planning as a form of empowerment. It reframes saving for retirement as a way individuals have to take charge of their future rather than as a purely financial necessity. The use of peer comparisons builds a sense of community and relatability, showing users that they are not alone in facing pension challenges. The simplicity of the tool, which presents projections in one-click scenarios rather than complex calculations, lowers the entry barrier to engagement and helps overcome the perception that pensions are too complicated to understand.

From a behavioural perspective, Future Me draws on social proof by allowing users to benchmark themselves against peers, a mechanism known to increase motivation and engagement. It reduces cognitive overload by simplifying pension concepts into accessible scenarios, which encourages long-term engagement with the tool. The focus on early adoption among younger women is intended to build sustainable habits before critical career and family decisions create irreversible gaps. Finally, the empowerment framing links retirement planning to identity, which research shows strengthens long-term behavioural persistence.

4.2. FIRE | FINANCIALLY INDEPENDENT RETIRE EARLY

The FIRE solution was designed specifically for Generation Z, a group that is highly digital, mobile-first, and often reluctant to engage with traditional financial services. At its core, FIRE combines gamified financial education with a personalised digital journey that nudges users from simple savings habits into more sophisticated investment and pension products. Central to the approach is

an AI-driven companion, available around the clock, which provides non-biased financial guidance and progress updates for informational purpose only and not intended as regulated financial advice. The solution also segments users by life stage, recognising the different savings behaviours of students, young professionals, and early career workers.

The consumer appeal of FIRE lies in its ability to meet Gen Z on their own terms. The solution avoids the top-down model of traditional financial advice, instead allowing young people to learn through short videos also known as “reels”, stories, communities, and achievements. Its design reflects Gen Z’s preference for transparency, self-directed learning, and digital interaction. The emphasis on achievements and progress tracking provides intrinsic motivation, while comprehensive savings dashboards build trust in the process.

Behaviourally, FIRE leverages various key principles. It builds habits by nudging users toward small, regular savings contributions and gradually increases their confidence to engage with investment products. Gamification elements, such as achievements and peer comparisons, maintain engagement and tap into Gen Z’s preference for peer validation. By framing savings as gains and achievements rather than contributions, FIRE reduces the psychological barriers that may prevent younger individuals committing to long-term saving.

4.3. GIG | GREAT INCOME GENERATOR

The GIG solution is designed for self-employed workers and participants in the gig economy, who often lack automated savings tools and are at heightened risk of poverty in old age. Traditional pension systems are poorly suited to workers with irregular and unpredictable incomes. GIG responds to this challenge by creating a flexible, integrated, and automated savings system that aligns with the income streams of gig workers.

The defining feature of GIG is its “save-as-you-earn” model, which automatically triggers contributions each time income is received. These contributions can be channelled into both pension accounts and an emergency fund, which addresses liquidity concerns and reduces resistance to long-term savings. The strength of the solution is that it can be embedded within banking apps seamlessly. In addition, the marketing approach would involve promoting it via gig platforms (for example, Uber, Wolt, or Revolut), ensuring integration into the financial lives of

workers. Users are guided by an AI pension planner, real-time dashboards, and nudges that track progress and encourage sustained engagement.

For consumers, the appeal of GIG lies in its ability to fit irregular income streams without imposing rigid savings requirements. The onboarding experience is designed to take only a few minutes, reflecting the expectations of gig workers who rely primarily on their smartphones and value speed and simplicity. The transparency of real-time dashboards builds trust, while the safety fund provides reassurance that savings will not lock away all available liquidity. In short, GIG balances the immediate needs of “today-me” with the long-term security of “future-me.”

Behaviourally, GIG tackles some of the most persistent barriers to pension saving. It combats inertia by embedding default savings triggers into every income event. It addresses liquidity concerns by offering an additional savings account, reducing the fear of being unable to access funds when needed. Present bias is countered by linking contributions to each income event, making savings immediate and proportional rather than a distant or abstract commitment. The design also minimises information overload with clear app-based dashboards, and it strategically uses “sludge” by adding friction to withdrawals, thereby discouraging premature depletion of savings.

While each solution is targeted at a different demographic, they share a common foundation in behavioural economics, digital-first design, and the recognition that pension engagement requires more than financial literacy alone. FIRE focuses on Generation Z by making saving fun, engaging, and community driven. Future Me empowers women by simplifying pension planning and building social proof through peer comparisons. GIG supports self-employed workers by creating an automated, flexible, and liquidity-sensitive system that integrates directly with their irregular income flows.

Together, these solutions illustrate three different strategies for overcoming the barriers to pension participation. FIRE emphasises gamification and habit formation. Future Me focuses on empowerment, simplicity, and relatability. GIG addresses structural financial challenges through automation, defaults, and liquidity management. These solutions collectively demonstrate how pensions can be made relevant, engaging, and accessible to diverse groups with quite different needs. Each draw on behavioural insights to overcome inertia, complexity, and mistrust, while tailoring engagement strategies to the unique circumstances of their target audiences. FIRE speaks

to the digital habits and community orientation of Generation Z. Future Me reframes retirement planning as empowerment for women, helping them overcome systemic disadvantages. GIG creates a practical pathway for gig workers to balance their immediate liquidity needs with long-term security.

Taken together, these approaches highlight the potential for digital innovation and behavioural science to reimagine pension engagement across the EU's workforce. They also underline the importance of tailoring solutions to the lived realities of specific groups, recognising that one-size-fits-all approaches will not be sufficient to address the pension gaps of the future.

5. MAIN INSIGHTS

It is important to note that the **solutions were not tested on consumers due to the limited time of the Techsprint**, but the composition of the teams ensured that the target segments were represented in the design process. This produced many valuable insights:

- ▶ **Changing attitudes towards pensions, particularly among younger generations.** Among the group members working on Gen Z¹⁴, there was a keen sense that traditional pension products no longer matched their financial realities or aspirations. Many felt that pensions were outdated, inflexible, and ill-suited to the fast-changing nature of modern careers. Instead, they expressed a preference for more transparent, liquid, and growth-oriented products such as Exchange-Traded Funds (ETFs), which they perceived as offering greater transparency, autonomy, and control. Given the long investment horizon of Gen Z today, group members also expressed their interest in products which allow a significant allocation of funds to risky investments such as equity. This shift reflects not only the digital expectations of younger consumers, who value seamless, app-based interactions, but also a deeper questioning of whether pensions in their current form are still the right tool for long-term financial security. This insight suggests that future solutions may need to blend elements of pensions with investment products that feel more relevant and adaptable to the needs of a generation accustomed to flexibility and choice.

¹⁴ It should be noted that participants in this group were, on average, significantly younger than those of the other groups.

- ▶ **The need to integrate financial tools into products and services that people already use daily.**
Across the consumer profiles there was an increasing preference for pension functionality to be embedded within familiar platforms, rather than offered as a separate, standalone product requiring additional effort. This reflects a broader behavioural principle: the less friction there is in accessing and engaging with a tool, the higher the likelihood of sustained use. By aligning pension engagement with existing routines, whether through banking apps, shopping platforms, or other everyday services, solutions become less of an extra task and more of a natural extension of daily life. This seamless integration not only reduces barriers to entry but also normalises long-term saving behaviour by weaving it into the fabric of ordinary financial activity.
- ▶ **Empowering decisions with integrated pension information.** Many people lack a clear and consolidated view of their pension savings, making informed decisions difficult. Without integrated information across state, occupational, and private schemes, individuals are left with only a partial picture of their future security. Delivering transparent and accessible pension information from the outset helps build confidence and supports better long-term planning.
- ▶ **Rethinking engagement with bold strategies to connect with consumers.** Consumers increasingly expect financial products to adapt to their habits, in both language and delivery. Engagement can work best when messages are relevant, delivery happens through trusted platforms, and formats feel familiar, whether that means social media, gamified tools, or other digital experiences. Partnerships with credible intermediaries such as employers, community organisations, or online networks can help build trust and widen reach. Future strategies should adopt innovative approaches and trusted channels to ensure pensions are perceived as accessible, practical, and aligned with how people manage their financial life.
- ▶ **Structural barriers require structural solutions.** This was particularly apparent for gig workers and women who face systemic challenges such as the pay gap and career breaks, which demand more than financial literacy interventions. Gig workers with irregular incomes need flexible, automated, liquidity-sensitive systems. Addressing these realities requires not simply better communication, but a re-design of systems themselves. These discussions underline the value of exploring more flexible and responsive pension models that resonate with how people live and work today.

- ▶ **The need to balance consumer regulation with behavioural insights and innovation.** On the one hand, regulation is essential to protect consumers, safeguard against mis-selling, and maintain trust in financial systems. On the other hand, rigid frameworks can sometimes stifle the flexibility and creativity needed to design solutions that resonate with how people live, work, and make decisions. The Techsprint demonstrated that behavioural tools—such as nudges, defaults, or gamification—may be able to significantly improve engagement, but they also introduce questions about transparency, fairness, and consumer autonomy. Similarly, digital innovations like AI companions and embedded finance bring new opportunities for inclusion but also raise issues of oversight, data use, and accountability. These dynamics highlight that future policy and regulation will need to evolve alongside technological and behavioural developments. Frameworks will need to recognise both the risks and the potential of innovation, ensuring that solutions are not only safe and compliant but also effective in driving positive consumer outcomes. This means moving beyond a purely compliance-driven approach to one that actively incorporates behavioural science into policy design, while providing space for experimentation with new digital models. Policy must therefore adapt in tandem with innovation, ensuring that consumer protection and behavioural effectiveness are not seen as competing goals but as complementary priorities.
- ▶ **Digital tools play a key role in personalization and can support trust building.** While EIOPA's Eurobarometer has indicated that consumers still prefer telephone and in-person advice (69%), digital tools can support trust-building when they focus on transparency, control, and reliability. Features such as real-time dashboards, simple progress tracking, and unambiguous language can make pensions less abstract and more tangible, which contributes to reducing uncertainty. Critically, digital tools can also simplify communication. Elements like pop-up explanations, accessible design, and chatbot support can help users better understand their pension savings and make informed decisions. These tools serve as intuitive guides, empowering consumers with clarity and confidence. Similarly, allowing consumers to access, compare, and simulate different scenarios can give them a stronger sense of agency and control, which are critical to trust. Integration into familiar platforms (like banking or gig apps that people use daily) also helps reduce the perception that pensions are something distant or unfamiliar. However, if digital innovations are perceived as overly complex, biased, or intrusive, they risk reinforcing the very scepticism they are meant to overcome. This further highlights the dual role of design

and regulation: innovation needs to be transparent and consumer-friendly, while policy frameworks must ensure oversight and accountability. In this way, digital tools do not automatically generate trust, but they can create the conditions for it to grow if they are simple, consistent, and aligned with consumers' best interests.

6. LESSONS LEARNED

Beyond policy considerations, the Techsprint highlighted several practical lessons learned regarding design, data, and implementation.

- ▶ **Organising a pan-EU Techsprint posed significant challenges.** The pensions domain remains largely Member State-driven, with substantial variations in regulation, market structures, and supervisory practices. Designing a common Techsprint framework that was both meaningful across jurisdictions and sensitive to national specificities required careful balancing. This underscored the complexity of fostering digital innovation in an area where fragmentation is real and where supervisory authorities may face differing incentives, priorities, and resource constraints.
- ▶ **Team composition and perspectives.** The Techsprint teams were predominantly regulatory and supervisory, which ensured that discussions remained focused on the consumer and the user experience. However, this regulatory focus, may have also limited the diversity of perspective and the exploration of more tech-driven solutions. Striking a better balance between regulatory expertise, academia, and industry might have generated even more innovative outcomes and identified alternative approaches.
- ▶ **Stakeholder engagement.** By bringing together supervisors, start-ups, academics, industry representatives, and consumer organisations, the Techsprint fostered collaboration and strengthened relationships across the European supervisory ecosystem. This type of engagement is typically hard to achieve through bilateral initiatives, making the Techsprint a practical model for fostering cross-stakeholder collaboration.
- ▶ **Knowledge transfer and capacity building.** Building on stakeholder engagement, the Techsprint provided a practical platform for learning about emerging technologies, methods, and

approaches, thereby building capacity within EIOPA and among NCAs. This can support supervisory convergence and strengthen the collective expertise of the European supervisory community. Importantly, the knowledge transfer also extended to innovators, who gained clearer insights into the priorities and expectations of regulators—perspectives that are often less visible outside such collaborative settings.

7. CONCLUSIONS

The Pensions Techsprint demonstrated how digital innovation, behavioural insights, and user-centric design can be harnessed to address long-standing structural barriers in retirement planning. The Techsprint provided regulators with a clear window into how consumers interact with innovative technologies and where solutions can both empower and protect them. Importantly, it underscored that one-size-fits-all approaches are insufficient, and different groups may require tailored tools that reflect their realities.

For regulators, the Techsprint can be a powerful instrument for three reasons. First, it allows supervisors to engage directly with innovators and consumer perspectives, ensuring that emerging solutions are grounded in real needs while remaining aligned with policy objectives. Second, it provides a safe, collaborative environment to explore new behavioural and digital approaches, surfacing both their potential benefits and regulatory risks, such as fairness, transparency, and accountability, before they scale. Third, it strengthens supervisory capacity by fostering knowledge exchange across jurisdictions and building a shared understanding of how regulation and supervision may need to evolve alongside technology.

A Techsprint that is well designed can be a practical tool that bridges industry and oversight, supports evidence-based policymaking with practical insights, and equips regulators to steer policy into a digital, consumer-centred future.

ANNEX A: PENSION JOURNEYS

Journey	Age/Group	Motivation	Barriers	Engagement Strategy
The Young Starter	18-25, Early Career	<ul style="list-style-type: none"> • Low awareness on pensions. • Focused on short-term financial goals (rent, student loans, lifestyle). 	<ul style="list-style-type: none"> • Does not perceive pensions as relevant yet. • Overwhelmed by financial jargon. 	<ul style="list-style-type: none"> • Gamification. • Digital nudges. • relatable social media content.
The Mid-Career Professional	30-45, Family-Oriented	<ul style="list-style-type: none"> • Concerned about mortgage, childcare, and household expenses. 	<ul style="list-style-type: none"> • Perception that income is not enough to save • Pensions appear to be complex. 	<ul style="list-style-type: none"> • Personalized pension projections. • Life-stage calculators. • Employer incentives.
The Late Starter	45-55, Catching Up	<ul style="list-style-type: none"> • Realizing retirement is approaching. • Regrets not saving earlier. 	<ul style="list-style-type: none"> • Fear of not having enough pensions savings. • Overwhelmed by pension options. 	<ul style="list-style-type: none"> • Simple 'catch-up' strategies. • Case studies of late savers. • Tax relief explanations.
The Near-Retiree	55+, Transitioning	<ul style="list-style-type: none"> • Wants to maximize pension savings. • Concerned about retirement lifestyle. 	<ul style="list-style-type: none"> • Unclear on pension withdrawal options. • Worried about investment risk. 	<ul style="list-style-type: none"> • Clear guidance on drawdown options (e.g., annuities vs. lump sums) and tax implications.
The Self-Employed & Gig Worker	N/A	<ul style="list-style-type: none"> • Income fluctuates • Flexible savings options are appealing. 	<ul style="list-style-type: none"> • No automatic employer contributions. • Pension contributions feel optional. 	<ul style="list-style-type: none"> • Flexible pension contributions. • Automated micro-savings tools. • Tailored tax benefits.
The Low-Income Worker	N/A	<ul style="list-style-type: none"> • Prioritizing essential expenses. • Pension appears to be out of reach. 	<ul style="list-style-type: none"> • Does not believe they can afford to save • Distrusts financial services. 	<ul style="list-style-type: none"> • Emphasize employer matching, auto-enrolment benefits, and real-life success stories.
The Financially Engaged Investor	N/A	<ul style="list-style-type: none"> • Interested in maximizing returns. • ESG (ethical) investing. 	<ul style="list-style-type: none"> • Wants more control and transparency over pension investments. 	<ul style="list-style-type: none"> • Tools for fund comparison. • Personalized investment options. • ESG-oriented pension plans.

ANNEX B: TEAM COMPOSITION AND TECHSPRINT STRUCTURE

The Techsprint was designed as a collaborative innovation exercise bringing together diverse perspectives.

PARTICIPANTS AND TEAM COMPOSITION

The Techsprint brought together participants drawn from a mix of backgrounds, including supervisors, industry representatives, consumer groups, start-ups, and academic experts. They were selected to ensure a balance of expertise, fresh thinking, and practical insight. Groups were deliberately kept to a manageable size (10 -12 members) to foster interactive discussion and active contribution.

To guide the process and provide expert input, each group was joined by two EIOPA professionals who functioned as moderators. Their role was to frame discussions, ensure that all voices were heard, and bring supervisory context to the ideation process. Expert input was also introduced during the first day of the Techsprint, through the Pre-Sprint briefing where industry and academia shared their insights with all the participants.

STRUCTURE OF THE TECHSRPINT

The programme combined structured inspiration with direct collaboration:

- ▶ **Kick-off & Inspiration:** Idea-generation was triggered through presentations by start-ups highlighting innovative approaches and new technologies.
- ▶ **Group work:** Teams then worked intensively at TechQuartier, an environment chosen for its innovative and entrepreneurial setting, to co-develop solutions and exchange ideas.
- ▶ **Final presentations:** On the last day, each group pitched its proposals to a panel of judges, allowing for critical feedback and recognition of the most promising insights.

EIOPA

Westhafen Tower, Westhafenplatz 1

60327 Frankfurt – Germany

Tel. + 49 69-951119-20

info@eiopa.europa.eu

<https://www.eiopa.europa.eu>