REBOUL & CO.

INNOVACTION

#01
NPL management 2.0

#02
Strategies for Real Estate Firms Amidst the Market Downturn

#03
The Impact of AI talents and GenAI on financial services

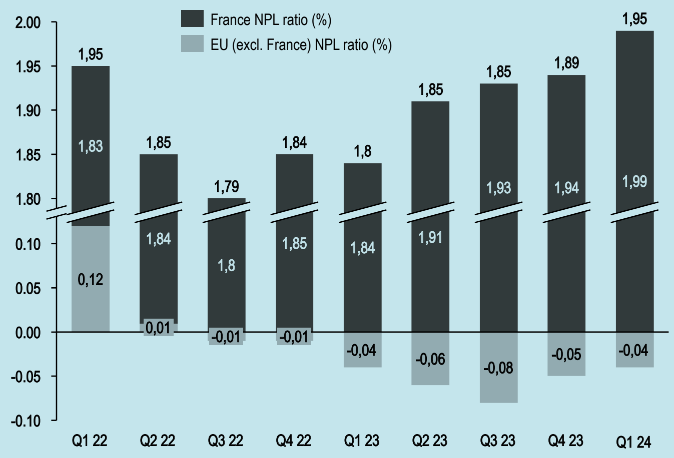
INNOVACTION #04 - NOVEMBER 2024

How Can Digital Innovations Elevate NPL Management and Bolster Financial Resilience?

We believe that significant digital opportunities (driven by advanced technologies (e.g. AI / GenAI)) are poised to revolutionize the NPL management value chain by enhancing both **effectiveness («doing the right thing»)** and **efficiency («doing the thing right»)**. Utilizing such innovations can refine **recovery economics** and improve the **market valuation** of loan portfolios.

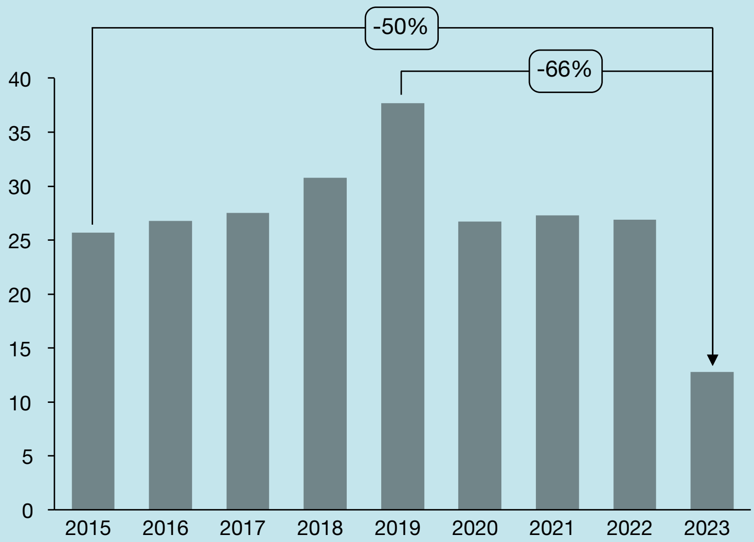
To fully capitalize on these prospects, a meticulous **"bottom-up" approach** should be employed, ensuring secure data access at scale and strategic assessment of **"make or buy" decisions**. Such an approach could yield substantial **cost savings** (~15%-20%) and enhance **risk-weighted assets** by single digits (~5%).

EBA reported non-performing loans ratio (%)



Source: ECB data

Evolution of French real estate investment volumes (EUR bn)



Source : Knight Frank - Les marchés immobiliers français Bilan 2023 & Perspectives 2024

How Can Real Estate Firms Navigate The Current Market Downturn?

In 2023, **the global real estate market faced a downturn,** with a **50% drop in investments** due to rising interest rates, geopolitical instability, and inflation. The French market saw similar declines in **office, industrial, and retail sectors,** leading to **reduced revenues and increased asset risks for real estate firms.**

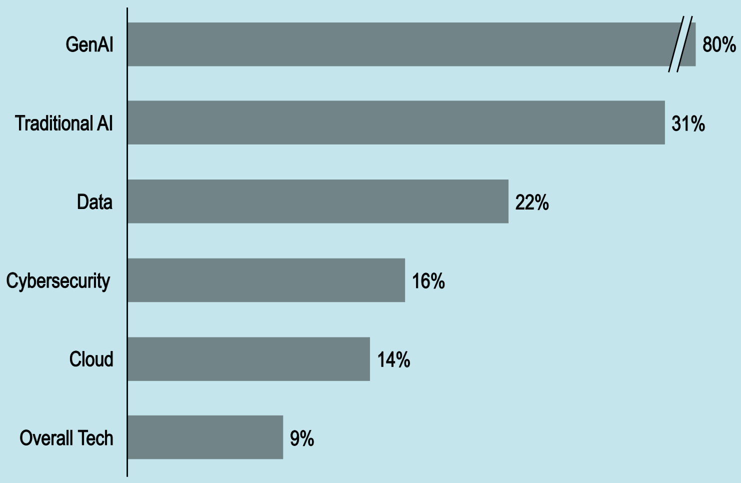
To adapt, firms should leverage **digital solutions and strategic diversification**, focusing on **ESG** assets and **technology for cost-cutting,** positioning themselves for a recovery in 2024/2025.

How is AI Talents and GenAI Transforming Financial Services?

The financial services sector is **rapidly evolving as banks invest in AI and generative** AI to enhance operations and competitiveness. With tech spending projected to grow 9% annually and corporate investment in generative AI reaching $60 billion, the demand for AI talent is critical. However, **challenges like talent scarcity persist, with AI specialists making up only 8% of the workforce.**

To harness AI's potential, **banks should focus on reskilling employees and managing change.** By overcoming these obstacles, they can **achieve 10-15% cost savings and 5-10% revenue growth through** improved risk management and personalized services.

Projected Tech Spend Increase Mix (2023–2026 CAGR)



Source : Data & AI human capital report of Darwin X – Baking edition 2024

#01 NPL management 2.0

RESEARCH ABSTRACT

In the first half of 2023, the **pace of decline in NPLs has markedly decelerated** compared to previous years, prompting considerable concern regarding a potential reversal. EU banks disclosed €361 billion of NPLs (1.8% of their total loans and advances), exceeding the record low reported in Q1'23 (357 bn€). The **alteration in NPL trends partly arises from heightened NPLs in Q2'23, signaling a shift in NPL flows** (i.e., a net inflow of €6 billion in H1'23, driven by increased NPL inflows (€112 billion) and reduced outflows (€106 billion) compared to H1'22). Across countries, the preponderance of this type of exposure is concentered in France (32.7% of the total) with an NPL ratio of 1.9% (vs. 1.8% in H1'22) (of which 4.2% of SMEs (vs. 3.9% in H1'22)).

As per the Risk Assessment Report of the EBA [1], there are discernible signals that the **downward trajectory has come to a halt. Recent inflationary pressures** resulting from supply chain disruptions and escalating food and energy costs, compounded by the **global tightening of financial conditions by major central banks,** have hampered economic growth and **escalated credit risk**. In the midst of heightened uncertainty, the **outlook for asset quality has deteriorated.**

Additionally, as **regulatory reforms continue to advance** (e.g. Basel IV), banks are expected to adopt a proactive approach in managing their balance sheets, with a **particular emphasis on risk-weighted assets (RWAs) and liquidity levels**. Financial institutions are primed not only to **sustain their efforts in selling NPLs exposures**, but also to implement a more decisive strategy in **divesting underperforming and non-core assets**.

Currently, **banks are ill-equipped** to optimize both a) the **effectiveness** (i.e. "doing the right thing") of asset sales by refining the economics of loan portfolios (i.e. capturing revenue collection, and "full cost of recovery") and their market valuation to align with constraints of limited resources and yield, and b) the **efficiency** (i.e. "doing the thing right") of the selection process by systematically managing extensive loan portfolios.

The **obstacles hindering industrialization** are multifaceted, extending **throughout the entire value chain** and encompassing:

a) data analysis and strategic options (e.g. data management, economic valuation),

b) process management (e.g. due diligence and sales management [sell option], network management [keep option]), and

c) support functions (e.g. post-trade support, service center marketing

We believe there are **compelling «digital opportunities»** (stemming from a variety of technologies including AI and Gen AI)) that are poised to optimize the NPL Management value chain and foster an augmented grasp of recovery economics (i.e. revenues, costs, risks) as well as market valuation of loan portfolios (while considering associated haircuts) thanks to:

a) enhanced data processes (e.g. raw data sourcing / acquisition / cleansing / semantic building),

b) advanced valuation techniques (e.g. pattern-based valuation, roll rates / S1-S2-S3 states analysis),

c) streamlined orchestration of recovery vs. sales processes,

d) miscellaneous automation, and

e) proficient inquiries management (e.g. chatbots, smart search engine)

We believe these digital enhancements should be identified and investigated in a "bottom-up" fashion securing data access at scale and figuring out the best combination of "make or buy" strategies. **The combination of these use cases may easily yield double digit cost savings (~15%- 20%) and single digital RWA improvement (~5 %).**

1 *Source: RISK ASSESSMENT REPORT OF THE EUROPEAN BANKING AUTHORITY – December 2023*

#02

Strategies for Real Estate Firms Amidst the Market Downturn

RESEARCH ABSTRACT

In 2023, **the global real estate market experienced a significant downturn** due to rising interest rates worldwide and an uncertain macroeconomic environment marked by armed conflicts, impending elections, and volatility in inflation. **Total investments in real estate plummeted by 51% compared to 2022.** With interest rates expected to stabilize in 2024, **real estate investments and market activity are projected to slowly increase,** although remaining relatively low, especially during the first semester.

In France, **similar trends were observed,** with a 53% decrease in investments from €26.9 billion to €12.8 billion, reaching an **all-time low since 2010.** The Parisian region experienced a **more pronounced decline than the rest of the country,** with drops of **60% and 42%,** respectively, largely due to **decreased foreign investment,** which **fell by 61%** from 2022 to 2023. Analysis of investment trends in the French real estate market by asset type reveals that **office buildings still account for over half of commercial real estate investments,** despite a 56% decrease compared to 2022. Industrial property investments followed a similar trajectory, experiencing a 55% decline. In contrast, retail spaces saw a comparatively smaller drop, ten percentage points lower than other asset types.

To mitigate the impact of increasing interest rates and inflation volatility,

investors turned to diversification, investing in specific asset subclasses. In 2023, **€550 million was invested in co-living, marking a 20% increase** from 2022. Similar upward trends were observed in private education real estate, which experienced a **record year for investments at €500 million,** a 50% increase from 2022. Investments also surged in hospitality properties and properties acquired for transformation.

Real estate investment firms thus find themselves in **a precarious position amidst the current market turmoil.** Over the past year, the **cost of doing business in real estate has steadily risen,** and this upward trend is expected to persist, driven by stricter regulation and inflation. Additionally, many assets are or will soon be sub-standard, **needing costly investments for compliance and maintaining value.** Yet, with high interest rates, **refinancing for such upgrades is expensive,** potentially rendering the improvements untenable. Ill-prepared for this current downturn, investment firms have been struggling because of three main aspects:

a) A decrease in revenue due to rising interest rates, decreased transaction volumes, and declining property prices

b) An increase in costs mainly because of a notable hike in the cost of compliance

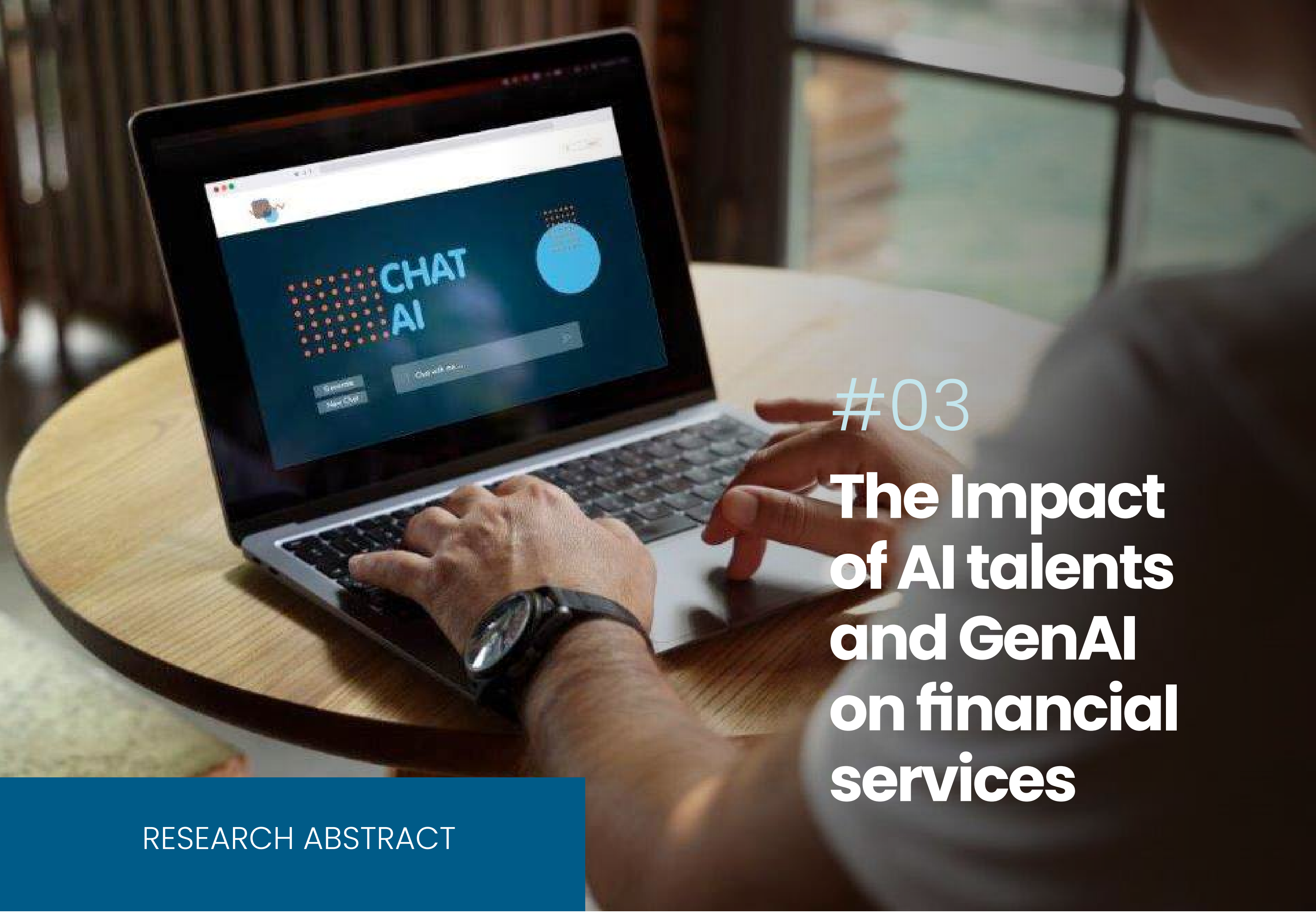
c) A riskier real estate market with many assets being too volatile and sensitive to market fluctuations and a **rising illiquidity risk.**

We believe there are compelling **digital opportunities** (stemming from a variety of technologies, including AI and Gen AI) and **strategic insights** that are poised to enhance firms' flexibility and preparedness in times of market downturn, addressing the issues mentioned above:

a) Increase revenue by expanding the volume of ESG assets as they are resilient, compliant, and financially performant even during market downturns while also investing in specific assets with higher potential performance in exchange for greater risk

b) Decrease costs by implementing digital solutions across the entire value chain

c) Diversify the portfolio through investments in different locations (Parisian region vs. the provinces) and different property types (Commercial vs. Residential).



#03

The Impact of AI talents and GenAI on financial services

RESEARCH ABSTRACT

Over the past five years, the financial services sector has **faced a multitude of challenges,** including **regulatory changes, geopolitical instability, and a prolonged period of historically low interest rates** that have significantly compressed net interest margins. These pressures have intensified the need for banks to modernize their operations and **enhance their competitive edge through technology.** In the financial services sector, **technology is not merely a supplementary tool but the fundamental means of production.** This distinction underscores why investment in **technology is particularly crucial in this sector compared to others.**

Investment in technology has surged, with banks expected to **increase their overall tech spending** at a CAGR of 9% over the next three years. **Data and AI expenditures are leading this growth,** with projected CAGRs of 22% and 31%, respectively. The rise of generative AI is particularly notable, with corporate spend on these technologies expected to skyrocket to $60 billion, reflecting a tenfold increase from current levels. This dramatic investment **underscores the crucial role of AI in transforming banking operations and customer interactions.**

Despite these significant investments, the **distribution of AI talent across the banking sector remains uneven.** As per the Data & AI human capital report of Darwin X [1], AI specialists currently make up a **small but rapidly expanding segment of the Data & AI workforce,** accounting for just 8% of the total of Data & AI professionals among 40 analyzed banks. However, this segment is growing at a remarkable rate of 38% annually. However, the **effective integration of AI and GenAI talents** into retail banking presents **several complexities:**

a) Talent Scarcity: The limited availability of skilled AI professionals poses a major challenge for retail banking (e.g., difficulty in hiring AI and GenAI experts specialized in CIB, AM, WM)

b) High Costs: Recruiting and maintaining AI talent is expensive (e.g., high salaries for top AI specialists, significant investment in ongoing training and development)

c) Knowledge Gaps in Traditional Banking: Existing employees may lack AI expertise (e.g., traditional bankers in retail banking unfamiliar with AI-based risk tools, AI-driven portfolio management and AI-enhanced client insights)

d) Integration Complexity: Merging AI technologies with existing systems poses challenges (e.g., technical hurdles in integrating AI-based systems, disruptions during system updates)

To effectively **address these challenges and harness the potential of AI and GenAI talents,** banks need to adopt several strategic approaches:

a) Reskilling and Upskilling: Develop and implement comprehensive training programs tailored to retail banking sectors to address the skills gap and prepare employees to handle AI roles internally rather than relying solely on external hires

b) Employee Feedback Integration: particularly through the Employee Net Promoter Score (eNPS) which measures employee satisfaction and helps tailor training and communication strategies to better meet workforce needs and improve engagement

c) Change Management Initiatives: Develop programs to manage change and address employee concerns about job security (e.g. workshops on AI benefits, clear communication about the impact of AI highlighting successful AI integration examples)

By effectively integrating AI and GenAI talents, banks can realize significant enhancements in operational performance and cost efficiency. With the strategic deployment of AI professionals, financial institutions can streamline their processes and **achieve cost savings of approximately 10-15% through improved automation and resource optimization.** Additionally, this talent boost can also **drive revenue growth by 5-10% through better risk management and personalized services.**

1 *Source: Data & AI human capital report of Darwin X – Baking edition 2024*

About Reboul&Co.

Reboul&Co. is an **"open strategy" to value extraction consulting firm** of new kind. We provide forward looking vision and contribute to tailor tomorrow's world. We are committed to make transformation happen and yield positive impact for all stakeholders.
We focus our shop on **two meta-industries** which correspond to key economical stakes of our territories: **Finance** including Sustainable Finance of Tomorrow and **Midcaps**.
We tackle **growth strategies, cost and expense optimization, scarce resource management** while innovating continuously by crossbreeding and cross-fertilizing our Research and Experimentations across sectors.
Our industrial model is built around a **true independent name Partnership** backed by scalable partnering companies of reference. Since we are not omniscient, we work in an **open architecture mode with partnering ecosystems** (e.g. scientific, technological, environmental) on a finite number of well-chosen differentiating topics.
We are a House of Consulting Taylors. Our brand is a wink at the eponymous French luxury suit company.

About our ecosystems

AIQ, Artificial Intelligence Quartermaster, is an AI Investment House. AIQ invests in deep-tech AI companies throughout their lifecycle, innovates by incubating novel AI-first businesses, and infuses corporates with AI technology, insights and expertise.

La Javaness is an Artitificial Intelligence factory. La Javaness helps large organizations to succeed by using machine intelligence responsibly and efficiently. Make AI at Scale

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