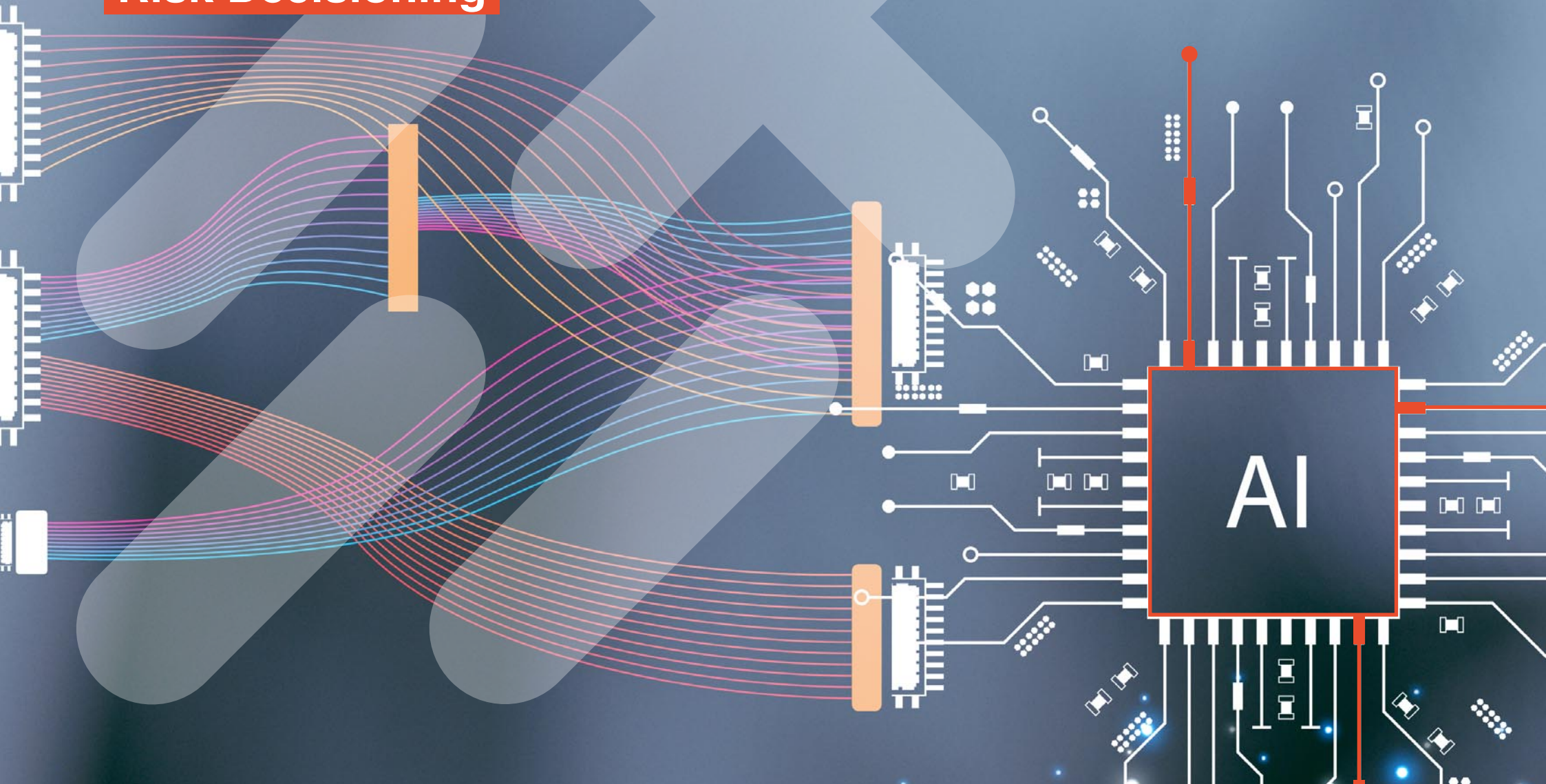
Consumer Lending Insights

Powering Financial Inclusion with AI-driven Price Optimisation and Risk Decisioning

earnix



Foreword

Our research into loan pricing in UK retail banking

With the rise of artificial intelligence (AI) and machine learning, the way consumer loans have been offered and priced has been quietly revolutionised, opening up opportunities for more consumer-centric, personalised products.

As a data scientist and advanced analytics consultant to the banking industry, I'm fascinated by the use of AI to give pricing committees a much deeper view of lending portfolios and to influence strategic outcomes.

For example, AI-driven pricing analytics and price optimisation tools can enhance loan personalisation, create greater transparency and widen financial inclusion. This, in turn, helps address the need for value, a key outcome of the FCA's Consumer Duty.[i]

To understand more about how firms plan to utilise AI, the challenges it can address and the current obstacles credit providers are facing when it comes to consumer loan pricing, we conducted a study within the UK retail banking sector.

This has provided some interesting insights, with input from product and pricing managers at leading high street banks, as well as fintechs, challenger banks and other credit providers.

For example, we found that AI is set to be the biggest technological investment for firms in the coming 24 months to help improve their consumer lending processes. That includes data analytics and prescriptive AI for credit decisioning, loan personalisation and fraud prevention.

In sharing our findings, we hope to support the development that's taking place within the banking sector at this exciting time, bringing to bear our global expertise as a leader in AI and data analytics, whilst examining specific solutions and growth opportunities for the UK market.



Giovanni Oppenheim
Director of Banking Solutions
Earnix

[i] Consumer Duty, Financial Conduct Authority (FCA), updated May 2024

Five key findings revealed by our study

1

Rapidly changing consumer circumstances making it difficult to get an accurate view of the individual's financial situation pose the biggest challenge banks and credit providers face when pricing consumer loans. Nearly six in 10 (59%) cite this as their main concern

2

Fast and unpredictable market changes and balancing regulatory and commercial requirements are also key concerns currently within loan pricing, according to 49% and 42% of respondents respectively

3

Brand loyalty, tailored pricing and immediate approval or pre-approval – based on risk profile and up-to-date information with an easy, streamlined process – are the top three areas of focus for banks and credit providers when competing for consumer loans

4

Data analytics and prescriptive AI for credit decisioning, loan personalisation and fraud prevention – as well as greater use of automated decisioning – are amongst the three key priorities for the next two years within consumer lending, according to over a third (34%) of credit providers

5

Increased use of AI is the biggest technology investment which banks and credit providers are planning in the coming 24 months, in order to improve consumer lending operations

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Methodology

A nationwide survey of 350 UK decision-makers in retail banking, including product and pricing managers, was conducted from 17 to 20 June 2024 on behalf of Earnix by an independent company and member of the British Polling Council.

The respondents came mostly from high street banks (46%), followed by fintechs (30%), then smaller/challenger banks (7%) and others, notably including vehicle finance providers and supermarket banks.

Unless otherwise stated, all figures quoted within this white paper refer to our proprietary research.

Introduction

In recent years, the cost of living crisis in the UK has seen consumers face a myriad of financial pressures. In the three years to May 2024, consumer prices saw an increase of over 20%[ii] whilst inflation reached record highs, peaking at 11.1% in October 2022 before finally returning to the targeted 2% in May 2024.

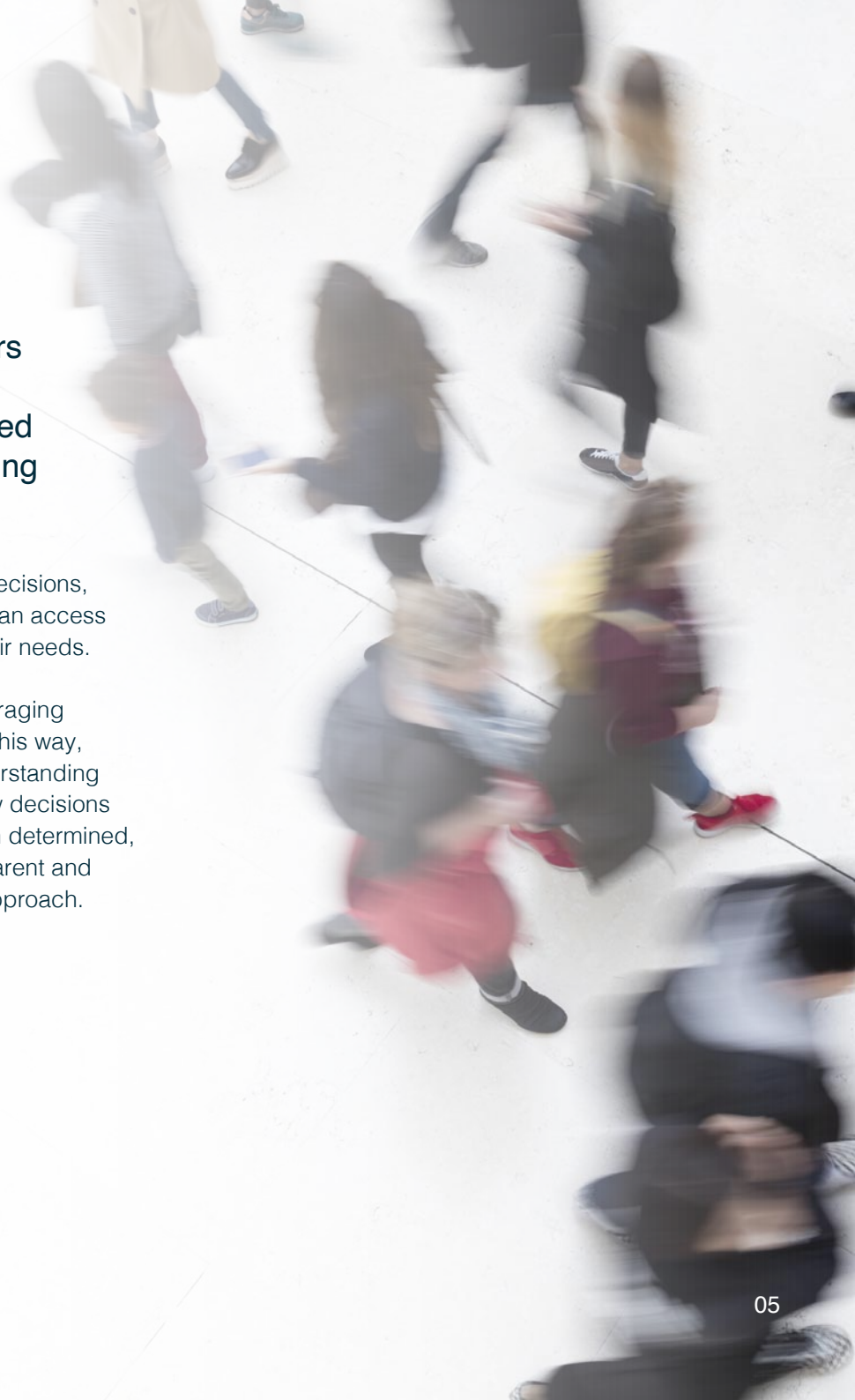
Access to finance has been particularly important in this time for consumers navigating changing circumstances.

According to an ONS survey, 55% of adults saw an increase in their cost of living in May 2024 when compared to the previous month, and 14% of those had used credit in some form as a result of this.[iii]

With household outgoings much higher than seen previously, and many coping with increased mortgage costs resulting from sharp hikes in interest rates for those exiting fixed term periods, it's challenging for lenders to get a clear picture of nuanced and sometimes fluctuating financial circumstances.

Yet this is essential so that they can provide the right level of support at the most appropriate rates, and that's where the importance of loan pricing comes to the fore. Technology, in the form of AI and data analytics, can empower lenders to make the most informed decisions, so that consumers can access credit suitable to their needs.

Additionally, by leveraging financial insights in this way, there is a clear understanding on both sides of how decisions and rates have been determined, supporting a transparent and consumer-centric approach.



[ii] Rising Cost of Living in the UK, House of Commons Library, July 2024
[iii] Public opinions and social trends, Great Britain: 8 to 19 May 2024, Office for National Statistics (ONS), released 24 May 2024



The lending landscape in the UK

Our research with UK banks and other lenders affirmed that the biggest challenge banks and credit providers are facing when pricing consumer loans is that rapidly changing consumer circumstances make it difficult to get an accurate view of the individual's financial situation. Nearly six in 10 (59%) of those surveyed put this at the top of their list.

This is unsurprising in light of the cost of living crisis that has gripped the UK. Whilst wider economic changes are under-way and a new government is in place, consumer confidence remains lower than before the pandemic, according to UK Finance.[iv]

Assessing affordability

Equally, it's no surprise that fast and unpredictable market changes came in second (at 49%) on the list of key challenges for credit providers.

From increased energy prices to slow wage growth and a rise in rent and housing costs, as well as other factors, consumers have felt the force of economic turbulence that has been reflected in shifts in disposable income and changing borrowing needs.

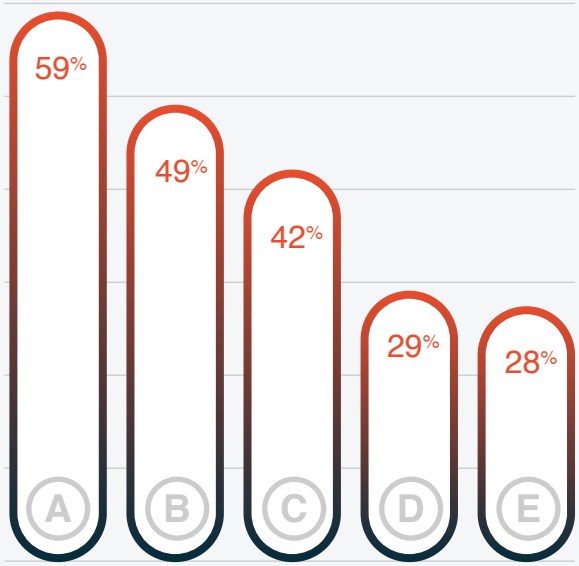
Mortgages have been a key focus, with the Mortgage Charter introduced in June 2023 to alleviate consumers' immediate challenges when dealing with increased rates.[v] Thanks to the support from the UK's banks and other mortgage providers in implementing this charter, over 1.4 million mortgages had benefited by September 2024.[vi]

However, temporary changes to outgoings further fuel the changing picture when it comes to financial profile and affordability. When looking at any form of credit, whether that's cards, loans or mortgages, lenders need to have an up-to-date and holistic view in order to make an informed assessment.

[iv] Household Finance Review – Q1 2024, UK Finance, published June 2024
[v] Mortgage Charter, updated March 2024, Gov.uk
[vi] Mortgage Charter uptake data, 10 September 2024, Financial Conduct Authority (FCA)

Figure 1

The biggest challenges firms face when pricing consumer loans



- (A) Rapidly changing consumer circumstances
- (B) Fast and unpredictable market changes
- (C) Balancing regulatory and commercial requirements
- (D) Limitations of internal loan origination systems and IT infrastructure
- (E) Difficulty forecasting loan profitability

Looking at consumer credit overall, Geraldine Kilkelly, director of research and chief economist at the Finance and Leasing Association (FLA) said there is an "improved outlook for household spending power" and that their research suggests "total UK new consumer credit by value is likely to grow in 2024 by 6% and by a further 5% in 2025." [vii]

Addressing increased credit risk

Against this backdrop, to be able to harness that anticipated growth and support consumers with loans, credit cards and mortgages tailored to their needs and circumstances, the relevant technology must be in place to assemble all the information in real-time and help ensure that products are priced appropriately.

AI strategies become essential here, as by using real market and customer data, lenders can test their models and adapt them for different customer profiles. With AI-powered risk-based pricing, banks can fine-tune products to suit a particular customer need or market condition.

> “UK consumer credit to grow 6% by value in 2024”

As a result, a more tailored product is created, so it’s more likely the consumer will be accepted, with the positive outcome creating the foundation for a long-term loyal customer relationship.

Focusing on compliance

The third main concern is revealed as balancing regulatory and commercial requirements, see **figure 1**. Given the regulatory landscape in the UK, including the introduction of Consumer Duty in 2023, firms are undoubtedly coping with increased regulatory pressure.

However, when looking specifically at consumer lending, the consumer-first approach that’s now largely embedded within the industry should help ensure that the regulatory and commercial elements complement one another.

[viii] Latest Consumer Finance Statistics, FLA, August 2024

Anna Roughley, head of insight at The Lending Standards Board, the leading non-statutory regulator for the UK financial services sector, covering around 90% of the personal lending market, said: “Regulators and the firms they oversee should be pulling in the same direction – after all, innovation can help drive the better customer outcomes that regulators are looking for.

“At the same time, new products and services mean new risks to customers, and regulators can play an important role in innovation by making sure firms manage these risks effectively.”

Implementing the correct tools should also ease this pressure and support regulatory compliance.

The advent of Consumer Duty

Having come into force in 2023, the Consumer Duty is intended to set a higher standard of consumer protection in financial services by ensuring firms put their customers’ needs first.

It comprises a new FCA principle for business, along with three key conduct standards (known as the cross-cutting rules) and four consumer outcomes, all of which AI-driven tools can support.

These outcomes are:

- Products and services
- Price and value
- Consumer understanding
- Consumer support

Our research identified the ways that Consumer Duty has affected lending operations, and the changes firms have made to their consumer lending operations as detailed in **figure 2**.

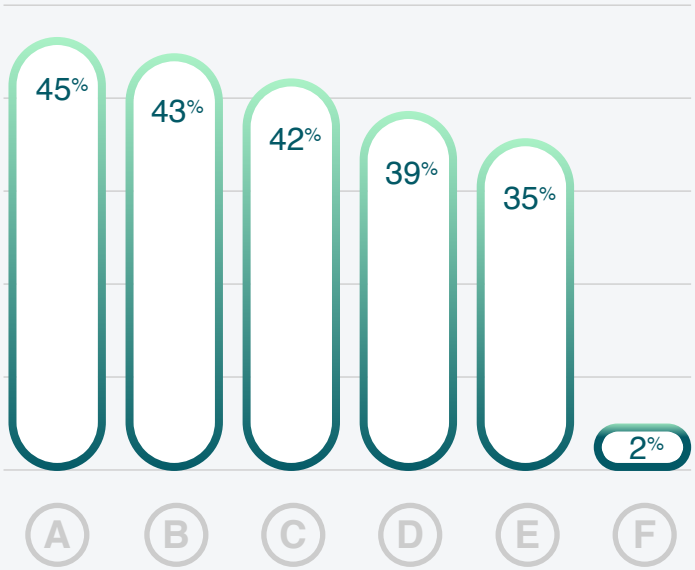
Whilst the implementation of Consumer Duty has required an intensive resource commitment from many firms, the intention is to support lenders and drive growth, as Sheldon Mills, executive director of consumers and competition at the FCA explained: “If applied correctly, the Consumer Duty should help firms retain and attract customers and will enhance the competitiveness of our financial services sector.” [viii]

In terms of the economic outlook, “modest positive growth” is predicted for the remainder of 2024 and 2025, according to KMPG’s chief economist Yael Selfin.[ix] As consumer confidence gradually recovers, lenders need to be poised to support access to finance by having a clear and detailed picture of risk.

[viii] FCA warns of impending Consumer Duty deadline, FCA, May 2023
[ix] UK economy is turning a corner amid..., Yael Selfin, KPMG, 1July 2024

Figure 2

How Consumer Duty has affected consumer lending operations and pricing processes



- (A) We’ve become more transparent in our approach to pricing
- (B) We’re using more data-driven insights in our pricing processes
- (C) We’ve revised and updated our customer communications
- (D) We implemented additional solutions to provide a clear audit trail of our pricing processes
- (E) We’ve had to make changes to our pricing process
- (F) Consumer Duty has not affected our consumer lending operation

AI to transform consumer lending

The lending landscape is more competitive than ever, with consumers having more choice when it comes to ways to pay, whilst digital evolution has driven increased competition amongst the established high street banks and smaller competitors.

According to the Bank of England, lenders did not see a change in the availability of unsecured credit to households in Q2 2024[x] and expect it to remain unchanged in Q3. In this environment, credit providers need to bring to the fore their competitive edge if they want to attract consumers.

Improving access to credit

The top three areas of focus for banks and credit providers when competing for consumer loans, according to our research, are:

- **Brand loyalty –** retaining and attracting loan customers that already use the company's products
- **Tailored pricing –** based on risk profile and up-to-date information
- **Automatic credit approval –** offering an easy, streamlined process to get immediate approval or pre-approval

There are a variety of elements that will feed into the first area of brand loyalty, including broader brand reputation, but tailored pricing will also be a factor and should be viewed as a top priority that can be easily addressed with the right analytical tools.

Lenders need up-to-date information to obtain an accurate risk profile, particularly in light of factors such as rapidly changing consumer circumstances and fluctuating market conditions.

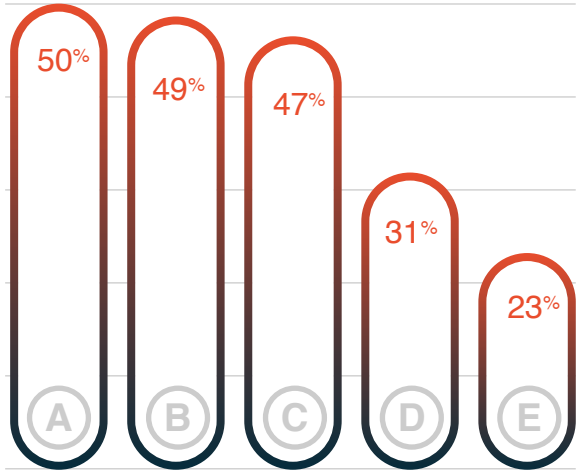
However, when we combine that with the expectations of today's consumers, who want banks to anticipate their needs based on their everyday experiences with online retail, social media, streaming and other digital platforms, it's clear to see why this ranks so highly in terms of how banks and credit providers are hoping to attract new customers.

The full list is revealed in **figure 3**.

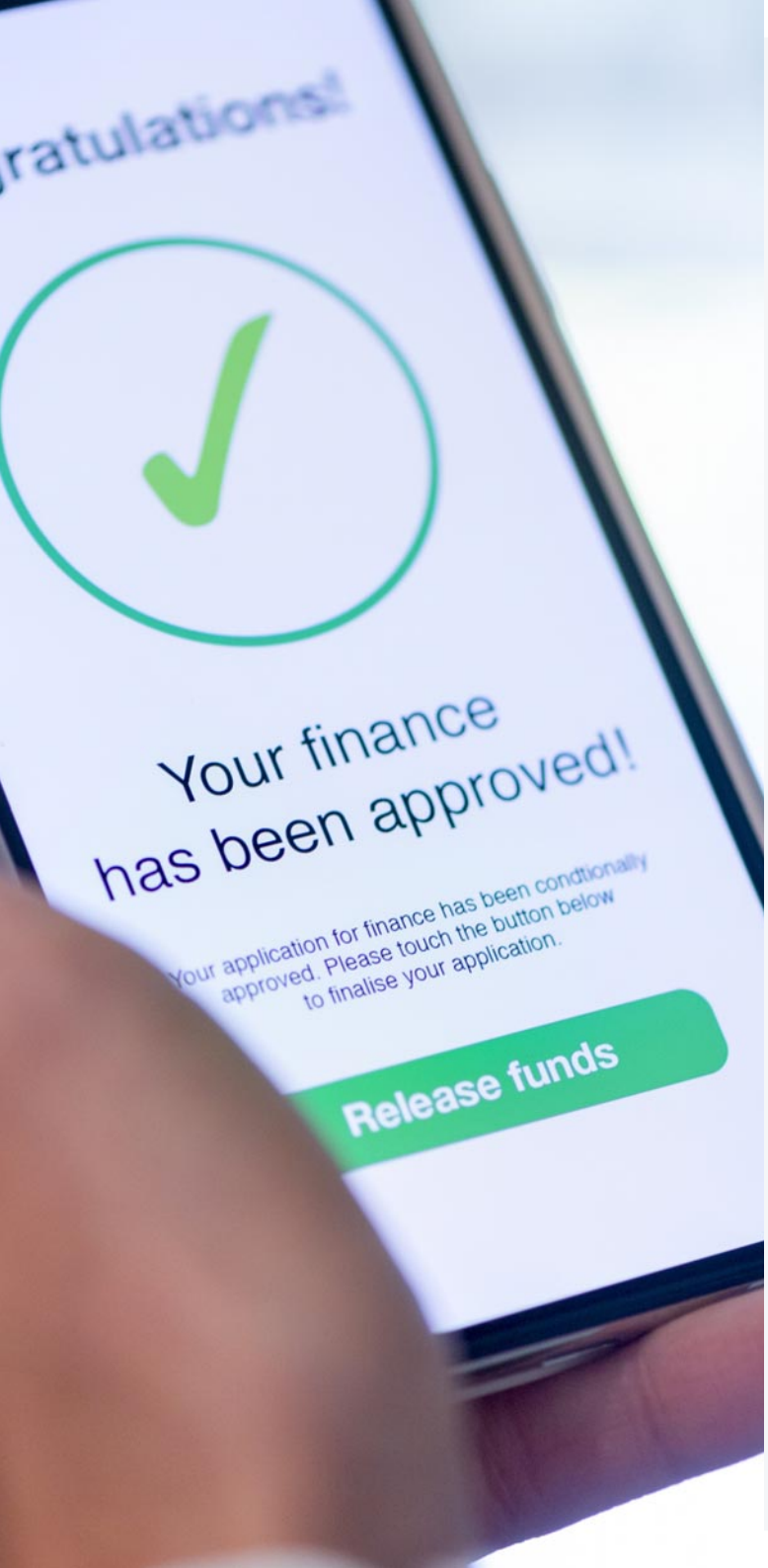
[x] Credit Conditions Survey - 2024 Q2, Bank of England, published 11 July 2024

Figure 3

The main areas of focus when competing for consumer loans with other banks/credit providers



- (A) **Brand loyalty –** retaining and attracting loan customers that already use our products
- (B) **Tailored pricing –** based on risk profile and up-to-date information
- (C) **Automatic credit approval –** offering an easy, streamlined process to get immediate approval or pre-approval
- (D) **Digital only deals –** offering special rates via app or online
- (E) **Aggregators –** ranking high on comparison websites



> “Banks and credit providers need to adopt innovative pricing solutions that will feed seamlessly into their growth strategies”

User experience and loan personalisation

Consumers are looking to secure the best deal, considering both the monthly payments and the long-term cost of the debt, and lenders are seeking to make the deals as attractive as possible whilst also ensuring that the payments sit comfortably with the consumer’s affordability, so that the customer could cope if their circumstances changed.

From either side, there’s an optimal spot that will deliver those positive outcomes all around and that’s what AI and data-driven analytics can identify.

To ensure they’re getting the best outcome however, it’s essential that customers are aware of the options available to them, know how to apply and – more importantly – if they’re likely to be accepted. That’s where the automatic credit approval, or pre-approval, comes into play, and again the tailored pricing is an essential component in unlocking that.

Giovanni Oppenheim, director of banking for Earnix has headed up the delivery of analytics and implementations for global financial institutions for almost a decade, spanning consumer lending, car finance, cards, mortgages, and more.

Oppenheim explains: “In our work within the UK banking sector, we’re hearing that legacy technologies that have been constructed over the years from disparate systems simply cannot meet today’s challenges.

“Banks and credit providers need to adopt innovative pricing solutions that will feed seamlessly into their growth strategies by meeting these core requirements, offering fast personalised pricing that’s tailored to customer needs.

“Our research also showed that in many cases, it’s taking too long to change prices on products and that’s something that shouldn’t be the case with the tools available today.”

Speed and agility

Just over half (58%) of credit providers are able to update their rates in less than a week. This leaves a significant number lagging behind the market and potentially losing out on market share or underwriting unprofitable loans. See **figure 4**.

Implementing the latest technology ensures lenders aren't dependent on multiple systems, handovers and cross-system testing, and reduces risks. To retain a competitive edge, it's imperative to be able to deploy new prices in the market that reflect the latest information available, not information from one or two weeks ago.

Oppenheim continues: "Speed of pricing deployment is likely to be one of the main reasons why the fluctuating market conditions and rapidly changing consumer circumstances are viewed as the biggest challenges, as the pricing needs to be quickly reviewed and updated with a clear and robust audit trail. Simplifying your infrastructure can make a huge difference here, saving weeks in some cases."

Transparency, regulatory compliance, and audit tracking are all supported by AI-driven pricing development and deployment processes. This makes it easy for banks to fulfil their own auditing requirements and receive supporting documentation at the click of a button.

Streamlining systems and solutions

In the next 24 months, AI is the biggest technology investment banks and credit providers are planning to help improve consumer lending operations. This will impact a variety of areas, from customer experience to loan pricing.

Looking specifically at the pricing side, AI-driven technology means pricing managers can deploy speedy adjustments on things like interest rates and fees to personalise the product.

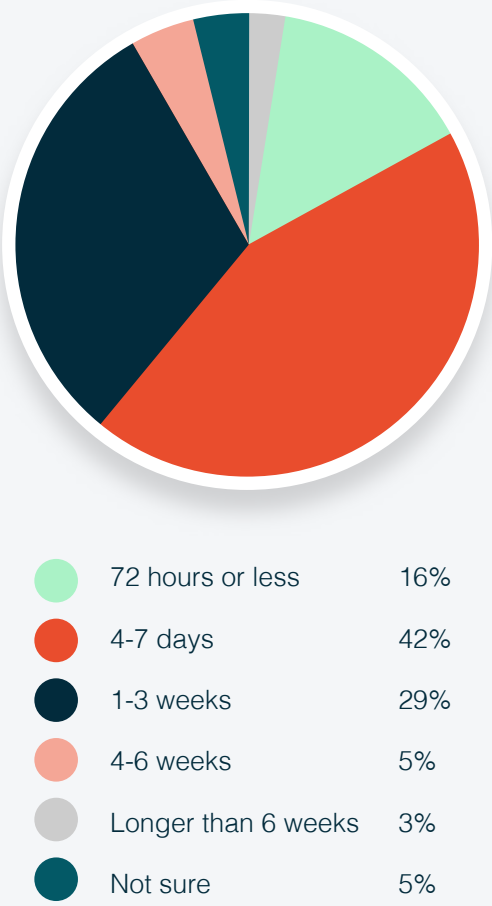
Such technology can also empower product owners and pricing managers to focus on customer inclusion, as well as being able to offer better alternatives in line with market conditions, thanks to the swift deployment cycle.

Along with the clear audit trail that the software provides, the technology gives transparency to the pricing process and makes it easy for banks and credit providers to explain the decisions to consumers.

Ideally, the pricing system should be the same for all customer segments, channels and sub brands within a given organisation. Banking director of Earnix, Giovanni Oppenheim explains: "Even if the pricing logic you use for current customers is different from the logic you use with new customers, or those coming from comparison websites, having a one-stop shop for analysis, decisioning and online rule management and deployment is priceless."

Figure 4

Average length of time to change pricing logic on a consumer finance product (loan, credit card or mortgage)



Powering financial inclusion

When thinking about financial inclusion, to get the best results, it's important to bring in the human knowledge that will direct the AI tools. As Anna Roughley of the Lending Standards Board said: "The team members designing, buying or implementing AI tools and products need to either reflect or understand the diversity of the customer base they are serving."

Using analytical modelling, lenders can identify and understand different customer segments, including those that may have been excluded from mainstream finance, where traditional underwriting processes may have been less responsive.

They can then personalise accordingly, helping to ensure finance is accessible on appropriate terms. For example, banks could utilise the insights to provide personal unsecured loans for small amounts to customers that may have a thin credit profile or lower credit score, and who may not qualify within the typical processes.

There are a host of reasons why an individual may fall outside of the traditional mainstream parameters and may have found it hard to access finance.

For example, they could be self-employed with a variable income, or they may be new to the country and having to build their credit profile from scratch.

In such situations, fixing the interest rates (and fees) for loans, can prove challenging within the traditional model:

- First and foremost, an accurate risk profile might not be available if they've been traditionally viewed with other customers requesting slightly larger loans and/or with better credit scores
- Secondly, historic loan quoting engines may not be able to provide the granular detail required to enable differential pricing and underwriting for such specific segments. That's especially true if the criteria by which segments are defined (such as disposable income) will vary over time
- Finally, being able to understand the customer's true repayment ability may be limited by past exclusions from that specific base

With AI, these variables can be taken into account, enabling the firm to set appropriate parameters and pricing for the loan.

Giovanni Oppenheim, banking director at Earnix said: "Loan personalisation is about delivering the right amount with the right terms to the right customer at the right moment. AI-driven analytics enables lenders to optimise their pricing strategies and fine-tune their products so they can make the most relatable and personalised offer to each applicant.

"It's a win-win approach, as by meeting customers' needs, the provider will deepen banking relationships and build loyalty."

> "The team members designing, buying or implementing AI tools and products need to either reflect or understand the diversity of the customer base they are serving."



Anna Roughley
Head of Insight
Lending Standards Board

Enhancing transparency

With a spotlight on price and value, it's unsurprising that, according to our research, over a third (35%) of UK lenders have made changes to their pricing processes to align with Consumer Duty.

Nearly half (45%) of the institutions surveyed also said they had become more transparent in their approach to pricing to help consumer understanding and to demonstrate fair value.

Lenders need to be able to show that customers are paying a reasonable price for the product they're taking, that the product is aligned with the market and that it fits the customer's specific financial profile.

By enabling greater transparency, using the latest customer insights and providing a clear audit trail, AI-led tools can ensure that loan pricing is in line with Consumer Duty and that firms can demonstrate the value of the products.

The data will also support clear customer communications and greater understanding, whilst the level of granularity can drive financial inclusion and help customers that are dealing with more nuanced circumstances.

Banks and other credit providers recognise this, with 43% planning to look at how AI can further support their goals in terms of Consumer Duty. Following the initial implementation in July 2023, this year has seen the first deadline for firms to complete internal governance reports, whilst the FCA has provided feedback on what they've seen, giving examples of good practice and poor practice.

This will likely propel further changes for some companies, so it's important to be aware of the solutions on offer and have the scope to incorporate them into plans and budgets.



35% of UK lenders have made changes to their pricing processes to align with Consumer Duty

Our software solutions

Earnix Pricing Analytics and Risk Decisioning Platform

Most lenders recognise the value brought by analytics and AI solutions for price optimisation and credit risk decisioning. However, these systems can sometimes be complex and fragmented, plagued with hundreds of business rules and workflows that are hard to maintain.

In order to help lenders overcome these challenges, we developed Earnix Lending Plus, an end-to-end AI-driven software platform that combines advanced pricing analytics, price optimisation, and simulation capabilities with automated credit risk decisioning in a single solution.

It allows lenders to streamline loan pricing and approvals using machine learning-based risk decisioning scorecards so they can make rate updates and implement credit policy improvements as frequently as needed without IT intervention.

The result is a single platform to control the entire pricing and credit decisioning process that leads to improved portfolio performance and ensures that each lending decision is optimised for risk, profitability, volume or other combination of key performance indicators set by the lender.

The two main components of this platform include:

Credit risk decisioning – Earnix Decisioning for Banking

Earnix Decisioning for Banking is an integrated, AI-driven risk decisioning engine with a specific application towards lending credit risk. It allows for the development of intelligent rules, credit decision automation and real-time impact analysis.

Due to its integrated nature, it shares data models, simulation scenarios and predictive analytics with Earnix Pricing for Banking, to allow lenders to see the big picture of their pricing and credit policies in action and predict profitability, risk, and loan volume outcomes. This results in faster and more educated offers to consumers for every loan offer made.

Pricing optimisation – Earnix Pricing for Banking and Lending

Earnix Pricing for Banking allows banks and lenders to overcome challenges related to managing portfolio risk, profitability, origination volume and speed to market while adhering to industry governance standards.

Earnix leverages price optimisation to transform the way pricing strategies are created and deployed, allowing business managers to analyse, simulate, approve, and deploy rates on a single platform via role-based workflows in real-time – all without involving IT help.

With Earnix, the power of AI will help you find the “sweet spot” for your loan prices in order to support consumers with tailored rates, drive financial inclusion and grow profitability across the entire consumer lending portfolio, including unsecured loans, cards, auto finance, mortgages and more.





Conclusion

It’s a transformative time in pricing analytics and the AI revolution brings a host of opportunities that can help businesses streamline processes, attract new customers, support vulnerable customers and widen financial inclusion.

With greater personalisation comes greater customer satisfaction, helping to build trust and support long-term, loyal customer relationships to drive growth.

By implementing the latest software solutions, banks and credit providers can ensure smooth customer journeys, positive consumer outcomes and streamlined resource and infrastructure requirements.

Next steps

- Find out more about our solutions at **earnix.com**
- **Request a demo** with our team to find out how our solutions can support your business objectives and boost financial inclusion
- **Get in touch** to arrange a meeting



About Earnix

Earnix is the premier provider of mission-critical, cloud-based intelligent solutions across pricing, rating, underwriting, and product personalisation. Its fully integrated solutions provide ultra-fast ROI and are designed to transform how global insurers and banks are run by unlocking value across all facets of the business. Earnix has been innovating for insurers and banks since 2001 with customers in over 35 countries across six continents and offices in the Americas, Europe, Asia Pacific and Israel.

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