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DEVELOPING NEXT-GENERATION RETAIL BANKING PRICING STRATEGIES

The Evolution of Product to Enterprise Pricing

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EXECUTIVE SUMMARY

Growing competitive pressures in retail banking have led banks to shift from product-centric to customer-centric value propositions, bringing together combinations of products and services with personalized pricing. Enterprise pricing is critical here; however, customer offers must still be executed accurately to manage compliance and remediation risks.

Retail banks face an array of pressures around pricing. Competition means banks must create innovative value propositions through bundled capabilities that can be rapidly adapted and flexibly offered with personalized pricing to customers. However, heightened regulatory scrutiny means this pricing must be fair, transparent, well understood, and accurately implemented and billed.

Next-generation retail banking pricing strategies shift pricing and product management away from design and implementation within individual core banking systems toward enterprise services that provide centralized capabilities around the product catalog, loyalty, relationship pricing, product bundling, product development and management, and billing. Importantly, these enterprise services don't only support internal products and services; they also allow banks to create and manage value propositions that comprise both internal and third party products and services.

Speed to market Customer experience Faster time to market for new products Faster onboarding and reduced and services, with augmented value disputes/queries around errors propositions from bundled capabilities Compliance risk Revenue leakage Lower remediation risks Plugged leakage from and protected reputational tracking of commitment and risk and brand value from greater pricing/discounting overcharging control Operational efficiency Revenue growth Lower costs related to errors, rework. Revenue uplift from customerand manual processes, as well as costs centric relationship pricing and for product setup value propositions

Figure 1: Benefits of Enterprise Pricing and Product Management

Source: Celent

The advantages of enterprise pricing are highlighted in Figure 1, with gains available to banks through revenue growth and efficiency while also delivering benefits to customers through stronger, more personalized value propositions and more coherent and painless onboarding and billing experiences. Significantly,

Source: Celent

it can also help banks manage compliance risk and reduce the chance of expensive customer remediation when pricing goes wrong.

For banks looking to implement next-generation enterprise pricing, there is a small pool of established and new vendors that are offering innovative platforms to address the complex requirements of most established banks in implementing these capabilities. Key vendors are highlighted in Figure 2.

ZAFIN
Vancouver, Canada

Palo Alto, CA

ORACLE
Redwood City, CA

Chesterfield, MO
India

THE NEED FOR ENTERPRISE PRICING

Retail bank pricing has been tightly integrated into individual product management, with pricing driven by bank requirements for each product rather than by the needs of customers as a whole. This is changing, with banks forced by regulation, competitive pressures, and new ecosystem-based value propositions to shift to enterprise-level value propositions centered around the customer and their overall relationship with the institution.

Pricing has always been a cornerstone component of the banking business model. The net interest margin, the difference between what a bank pays to its depositors and what it charges for borrowing, is the primary controllable factor for driving net interest income, and non-interest income for most banks is heavily driven by fees levied on customers for various services, transactions, or penalties. As such, the ability to implement optimal pricing strategies is critical to the underlying financial performance of any financial institution (alongside the ability to manage credit and conduct risk).

On the customer side, pricing is the top criterion when choosing a product from a particular provider and, as such, is similarly a core part of the bank's overall value proposition. While the interest rate is often the driving component here, the pricing or value proposition is generally far wider than this, including factors such as term, flexibility, up-front and additional fees payable over the lifecycle of the product, and any terms, conditions, or commitments attached to receiving a particular rate or service.

Banks need to move from product to enterprise pricing

In its strategies around this broader pricing and overall value proposition concept, this report considers developments in the retail banking sector overall, taking into account both pricing and product management dimensions. The industry is undergoing some fundamental shifts in its approach, driven by a combination of regulatory shifts, consumer demands, new competition, developing ecosystems, and structural changes in industry operating models.

Key factors highlighted in Figure 3 will be individually explored in this chapter. However, the primary impact for banking is a switch from pricing management centered around individual products to an enterprise pricing approach that offers and implements value propositions based on capabilities inside and outside the institution that combine to meet the customer's needs.

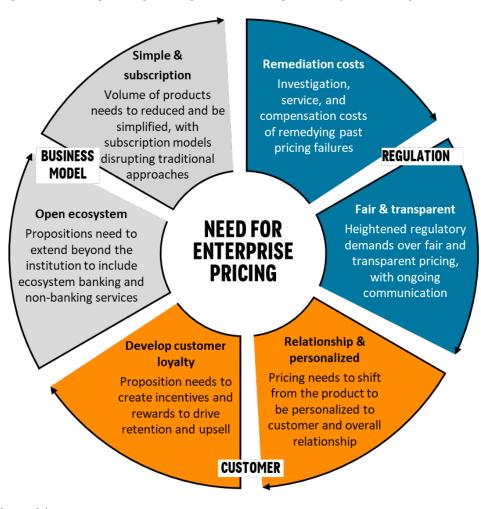


Figure 3: Banking Pricing Strategies Are Shifting to Enterprise Pricing

Source: Celent

Remediation for overcharging and mispricing remains an ongoing and significant concern

While it may seem like it should just be a hygiene factor, ensuring that agreed-upon pricing and terms have been implemented correctly is not just a necessity as a fundamental capability, but also a perennial challenge for many banks. Failures here present two key issues. The first is undercharging, where customers are not billed the full amount as agreed based on terms and conditions. This represents a loss of potential revenue for a bank (referred to as revenue leakage). The second is overcharging, where customers are billed wrongly, or with unauthorized fees, or correctly but with the pricing having been set wrong in the first place (for example, if the price offered does not reflect the correct credit score).

While in the short term the latter may seem like a potential benefit, overcharging is in fact highly problematic for a bank. One problem lies with increased customer servicing costs if incorrect charges are noticed by customers. Most customers will wish to use human-based channels in this situation (e.g., branch or contact center) to query and resolve issues. This often can require manual intervention

and can be challenging to remedy at first point of interaction. Even if quickly resolved, overcharging tends to have a highly detrimental effect on customer satisfaction and trust. This can drive higher ongoing servicing costs (if customers feel they need to regularly query bills/statements) and reduce customer loyalty and retention.

Another problem is that banking regulators have been increasingly paying attention to overcharging, as well as sales and communication practices around pricing (such as whether correct/appropriate pricing was offered to customers in the first place). When issues are detected, banks are being forced to undertake remediation steps, often accompanied by the imposition of significant regulatory penalties. In extreme cases, regulators have imposed restrictions on banks growing their balance sheets; consider the Fed's handling of Wells Fargo in 2018, although that was the result of mischarging and mis-selling— for example, customers had banking or credit cards accounts opened on their behalf without any authorization.

The costs of remediation do not lie solely in direct financial burdens like customer reimbursement and regulatory fines, either—although these can be significant; Wells Fargo's settlement with the Consumer Financial Protection Bureau (CFPB) in December 2022 was \$3.7 billion. They also come in the disruption remediation tends to have on business operations. Regulators can require in-depth audits of customer charges that often extend back several years, generally requiring information in short timeframes. Particularly if these audits span multiple product areas, this can be an extremely resource-consuming and painful process, with customer reimbursement often dragging on for years.

Regulatory objectives are extending requirements around fairness and transparency

Particularly in the last decade, following the stabilization of the industry after the 2008 financial crisis, most banking regulators have shifted the weight of regulatory objectives toward consumer protection aspects. The founding of the CFPB in the US in the early 2010s is a good illustration here. In this, the focus of regulators around pricing falls not just on overcharging, but also on whether fees are "excessive" or "exploitative" to begin with.

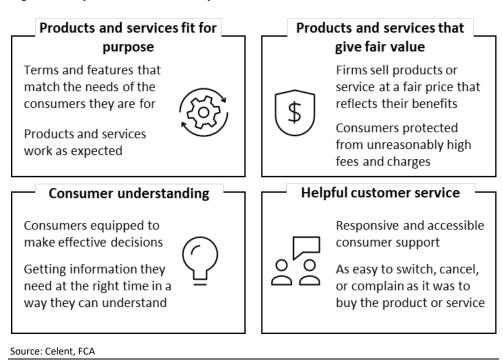
This is particularly a concern around penalty-type fees (e.g., for late payments or non-sufficient funds), looking at whether these are proportionate to the marginal costs institutions must cover and whether such fees are effectively "hidden"— especially if mandatory (or quasi-mandatory) fees are added to a transaction after a consumer has chosen a product based on a front-end price. This is on top of the stringent disclosure requirements most markets already have around potential fees during the application process, as well as effective fee caps in many cases (e.g., \$30 for the first credit card late fee under Regulation Z in the US).

One of the leading regulators in this regard is the UK's Financial Conduct Authority, which is implementing a new Consumer Duty requirement (initial deadline for implementation is July 31, 2023). This new Consumer Principle (Principle 12) to "act to deliver good outcomes for retail customers" extends existing requirements to act in the interests of customers and treat them fairly

(Principle 6), as well as to pay due regard to clients' information needs and communicate information to them in ways that are clear, fair, and not misleading. (Principle 7).

The important shift here is that regulatory objectives have shifted to ensuring good outcomes over preventing bad ones (although the latter is still important). Within this is a specific outcome goal centered upon price and value, with the key concept here of the need to provide "fair value." Firms need to make sure the price the customer pays for a product or service is reasonable compared to the overall benefits a customer can expect to receive. As part of this, firms must undertake fair value assessments to demonstrate their pricing is reasonable, requiring the development of evaluation frameworks to assess both financial and non-financial costs and benefits.

Figure 4: Key FCA Consumer Duty Outcomes



Fees must be fair, transparent, and proportionate

In this evaluation, based on recent FCA feedback, an important point here is that firms need to consider outcomes for different groups of customers, not rely on broad averages. The latter could mask situations where certain types of customers, such as those with low incomes or in vulnerable circumstances, receive poor value. Such groups may be unable to benefit from important product features or be more likely to pay certain charges (e.g., late payment fees). Firms also need to provide fee transparency and ensure that fees are fair and proportionate. For instance, do exit fees reflect actual costs, or do they unreasonably discourage consumers from switching accounts or providers?

Fees also must be appropriate to the customer segment and drive fair profitability

Similarly, firms need to assess whether fees are appropriate to the target customer segment. For example, top-up charges or redemption fees for electronic money accounts may not be appropriate to meet the needs of the vulnerable customers who often use such products. Significantly, firms are expected to challenge themselves not just on fees per se, but whether overall product profitability is justifiable. A high profit margin on a certain product or from a particular customer segment could be a sign that the customer is not getting fair value. A historical example here is payment protection insurance, which before its demise often had claims ratios in the 20% range, well below ratios commonly seen for general insurance products. Here, it is important that firms can assess individual product profitability rather than rely overall firm margins as a fair value indicator.

Alongside this, firms need to consider if and why different customer segments might pay higher prices and drive higher margin—for example, whether new business customers are offered preferential rates over back book customers. While price and value outcomes rules don't require firms to charge customers the same amount or obtain the same profit per customer, firms should consider whether systemic product cross-subsidization between different segments could impact fair value delivered, particularly in the case where vulnerable or low-income customers are driving disproportionate levels of income (such as previously was the case with overdraft fees).

Costs and benefits should be assessed over the lifetime of product with effective proactive communication and access

Firms should not only assess up-front fees but also consider likely costs and benefits over the lifetime of the product. This should include consideration of ongoing benefits. Pricing structures that offer attractive teaser rates before declining to below-market rates after offer periods (such as saving accounts offers) need careful customer and product management around disclosures and effective communication concerning pricing changes (such as notifying customers when offer periods end), with an onus to communicate to customers throughout the lifetime of the product as to whether the product continues to provide value.

This also includes consideration of non-financial costs, such as the time and effort required for customers to make decisions and similar ease in being able to amend, cancel, or switch a product. Many firms have recently focused on driving a strong, seamless digital origination experience for customers, but such practices should also be applied for customers seeking to change or cancel.

While this regulation is currently specific to the UK, as a leading banking regulatory market it is likely that such requirements (or similar ones) will extend to most other markets over the next five years, particularly European and North American ones.

From product to relationship and personalized pricing

The main underlying drive from this regulatory push is to try to shift thinking in banks from designing products and pricing strategies primarily around the needs of the bank (such as to drive product profitability) to designing for the needs and requirements of the customer.

On this point, the concept of customer-centricity is a longstanding one in banking. Indeed, in many markets, banks started the process of evolving from product-centric models several decades ago. Organizationally, at least, banks in most regions have made progress here. Primary operating structures tend to be around customer segments rather than products, and distribution channels generally support customers across products. Likewise, most banks, to perhaps varying degrees of capability, work with a collated view of the customer across products. The dominant strategy here is a desire to cross-sell, as well as up-sell, products to the customer base.

However, in contrast, propositions offered to customers still tend toward an orientation back to product areas (e.g., transaction accounts, savings, investment, or lending buckets), with products often pitched and sold to customers on a drugstore-like basis. Banks act with a duty of care to sell appropriate and suitable products, but offerings and promotions (product/services features and pricing) typically focus on individual products rather than overall customer needs.

The requirement for customer-centric product propositions

This approach has been changing in recent years. In part, banks have been somewhat coerced by the aforementioned regulatory focus on excessive or exploitative fees. Seeing a curtailment in certain fees that had once driven a significant proportion of profits has forced banks to rethink how they drive profitability. Increasing products held per customer has become more critical as major cash cows have been removed, driving a shift to product bundling (such as packaged bank accounts) and some steps toward relationship pricing to incentivize customers in this regard (such as preferential rates for existing customers).

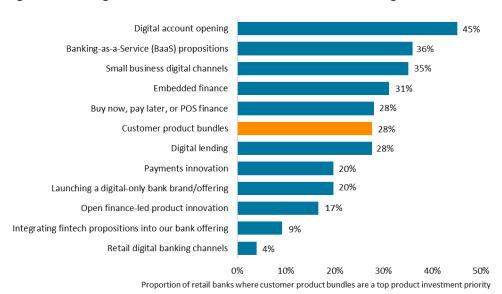


Figure 5: Leading Product Investment Priorities in Retail Banking in 2023/24

Source: Celent CTISS 2023

Question: What are your leading investment priorities in the next 18 months from a product perspective?

There are maturity differences in this shift to customer-led product positions across the global retail banking industry. Celent's Technology Insight and Strategy Survey 2023 (CTISS), which surveyed senior technology and business executives at 228 retail banks worldwide in 2Q23, found that customer product bundles were a top product investment priority for more than a quarter of banks (28% of banks overall). However, as shown in Figure 5, many banks are still focused on investing in digital account opening as well as in new business models around Banking-as-a-Service, or embedded finance.

That said, there are regional differences in the importance of product bundling. As shown in Figure 6, CTISS found that investment in customer bundles is being led by MEA and European banks (particularly in UK and Nordics), with Latin American banks in contrast prioritizing investment in new business models. In North America, focus on customer product bundling is heavily led by mid-large banks (particularly those above \$50 billion in assets).

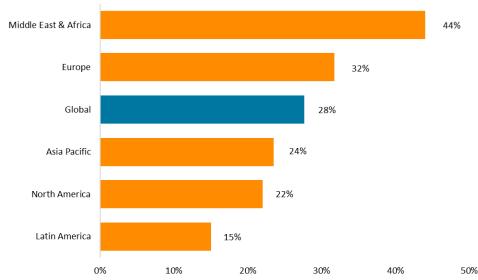


Figure 6: Importance of Customer Product Bundles by Region

Proportion of retail banks where customer product bundles are a top product investment priority

Source: Celent CTISS 2023

Question: What are your leading investment priorities in the next 18 months from a product perspective?

The next stage is going to see a shift toward greater personalization, even within product bundles for targeted customer segments. This would include the ability for individuals within a bundled proposition to adapt or even remove components to meet their own requirements.

Developing customer loyalty through rewards and incentives

Alongside personalized value propositions around the underlying products and services being offered, the role of rewards and incentives to enhance the value proposition and develop customer loyalty is still very important for many banks. The main shift here, though, is that loyalty schemes are being considered as part of the overall banking value proposition rather than as relatively independent

Source: Celent

and separate schemes that historically have sat outside of core product management, often driven through marketing and/or specific loyalty functions.

Figure 7: Customer Loyalty Schemes Increasingly Form Part of Value Proposition

LOYALTY TYPE		APPROACH
Reward points		Accrual system where points are earned through various activities (often transaction based) that can be redeemed against a reward catalog of products and services.
Referral incentives	\$	Reward incentives (often cash-based) for recommending and verified sign-up of new customers.
Tiering		Membership status tiers, with entry based on qualification criteria, fees, or commitments, with different levels of benefits within each tier.
Preferential pricing	ģģ	Access to discounting pricing, such as reduced fees or interest rate discounts for financial products, based on qualification criteria/commitments (such as tier status level).
Banking offers	£	Time- or criteria-based promotional offers offering discounted pricing or higher returns to encourage new product sales or deposits.
Cashback		Monetary reimbursement back to account, typically calculated as proportion of transactions, subject to qualifying criteria.
Discounts / offers	₹	Access to discount vouchers or offers (often from a bank's merchant customers).
Selectable benefits		Choice of specific benefits as an immediate or recurring reward for financial activity (e.g., opening an account).

Figure 7 details some of the main loyalty reward approaches banks are taking, although it should be noted that these are non-exclusive and many loyalty schemes operate with a combination of approaches. For example, tier levels may be based on a reward points system, with higher tiers offering access to more preferential pricing, discounts, or selectable benefits in addition to the point-accrued value system itself. Similarly, while banks may run banking offers in conjunction with loyalty schemes, many will also run them as part of broader marketing and promotional campaigns to drive new business.

From a pricing and product management perspective, the key challenge for many banks often lies with banking offers and preferential pricing, which both typically create a contingency between price provided and customer activity/status. For

example, pricing may be based on the customer performing a set number of transactions, maintaining a certain balance or a minimum incoming-funds amount, or staying at a certain tier level. This may require tracking across both product and loyalty systems, often creating reconciliation challenges and additional operational overheads around customer communications and query support / dispute resolution. As discussed earlier, failure to provide required pricing (particularly if this results in overcharging) presents significant regulatory risks through remediation costs.

Partnering models are shifting to ecosystem-based value proposition modes

The catalyst for customer-centric propositions and the need to drive greater customer loyalty has been the growth of the digital neobanks in many regions. These are highly customer-focused both in terms of delivering a strong customer experience and, increasingly, targeting the needs of specific customer groups. This could be at the overall bank level, as with Longevity Bank's targeting of the elderly with a mixture of banking and healthtech services, or as a specialized proposition with the bank, such as with Revolut Pro, recently launched to provide a collection of services for the freelance/contract community. A key difference here is that these value propositions revolve around a tailored collection of products/services for the targeted group, with services often incorporating a combination of banking, wider financial services, and non-banking services, alongside unified pricing, rather than individual product pricing.

The other aspect of this shift to customer-led propositions is the role of third party providers as part of the underlying value proposition itself. While in one sense working with strategic partners is not new, the shift here is in how value is provided and received. Typically, banks have a relatively small number of strategic partnerships, such as with major airlines, coffee chains, or media outlets, where customers can earn rewards based on certain behavior. While such schemes may include an element of the bank's product (such as the requirement to have/use a particular credit or debit card), these are typically driven through the bank's brand/marketing functions to drive customer acquisition and loyalty through tie-ins to respective brands.

As such, the loyalty platforms that support these partnerships often run quite separately to the bank's core business processes and banking platforms. Of course, there is often some integration required—for example, rewards may be tied to credit card usage. However, the underlying propositions offered by both partners tends to remain distinct. Rewards points may be used to obtain a free cup of coffee, flight, or movie to stream, but bank customers would obtain the service through the partner, not the bank. Despite this, the complexity of loyalty platforms, and the cost and effort involved in monitoring, reconciling, and managing such partnerships, means that banks typically operate with a limited number of partners at any one time.

While such traditional brand-led partnerships remain, the shift to a customercentric product propositions ecosystem world is driving a dramatic shift in partnership strategies. For many banks, this initially started with collaboration with fintechs to enhance or augment customer proposition, but now it extends to

the provision or use of banking services within wider customer processes (such as embedded finance) with non-banking enterprises. Three main models are emerging here:

- 1. **Embedded Fintech** (bank sells from partner), where partner services are combined with the bank's services to create an overall proposition sold by the bank.
- 2. **Banking-as-a-Service** (bank sells to partner), where banking services are consumed by the partner to create wider propositions sold by the partner.
- 3. **Embedded finance** (bank sells through partner), where banking services are distributed by a partner (e.g., agency business).

A key difference compared to traditional brand partnerships is that there may be a two-way relationship—i.e., a partner might both provide and consume services. For example, a bank may provide payment services to a merchant (as the bank's customer) but also partner with the merchant to provide financing at point-of-sales to the merchant's customers.

The other notable development is that the resultant partner management is shifting from dealing with a relatively low number of strategic but loosely integrated relationships to dealing with a significant number of less individually strategic but more embedded relationships. Banks need to be able to think and operate in a more ecosystem-based model. For example, a bank may provide a car marketplace service where customers can search for, evaluate, sell/trade-in, purchase, and finance new cars, as well as obtain supporting insurance and roadside assistance, or it may provide a financing service that is sold through such an auto marketplace.

Integrated ecosystem propositions require a new approach to value and pricing management

In such relationships, the customer may make a single transaction with price and billing managed as an integrated payment; however, behind this may be a quite complex value share agreement. (Value here could be based on revenue or other agreed-upon metrics.) This may be based upon the specifics of the service obtained by the individual customer, but also may be impacted by wider volumes of activity between the bank and the partner(s). Commission levels may vary depending on volume of business, but they might also be subject to conditions such as customer usage levels, customer retention beyond certain period(s), the extent of the relationship being two-way, or certain service level agreements (SLAs) being met. This has important implications for both sales and servicing, requiring the bank to be able to easily agree to, implement, maintain, and importantly co-innovate such partnerships.

Banks need to simplify pricing and consider subscription approaches

A major difference between neobanks and traditional banks lies in pricing. Indeed, while neobanks invariably deliver a strong, intuitive digital customer experience, for most customers, the primary switch factor is the allure of a free or low-cost core service with the option to select additional services for a predictable price. In line with widespread trends seen in the media or software sectors (think Netflix and Spotify, or Microsoft 365 and Adobe Creative Cloud),

these models are typically based on subscription pricing, where consumers pay a set recurring monthly fee for access to a bundle of products/services.

A key point to note is that subscription pricing is not a marketing rebrand of the monthly maintenance fee common to banking services in many markets. The move to subscription pricing is part of a far wider rethink of the customer value proposition and the underlying banking business model. It should be a bigger change than offering a collection of prepaid fees or a product bundle for a fixed fee.

The fee structure for most banks is complex, often resulting in unpredictable and unequitable charges

While the typical structure of pricing models for transaction accounts does vary considerably by country, most banks operate with a mix of monthly maintenance fees together with individual charges for various services. These may relate to payments transactions (use of checks, credit or debit cards, or non-bank ATMs), overdraft usage, or other provided services (such as sending a letter, reissuing statements, new cards, returning a check). Admittedly, there has been a move to simplify structures in some markets, but in the main overall pricing structures remain complex.

For customers, such pricing intricacy is often one of the primary sources of dissatisfaction with their banks. Of course, banks must provide full information around fee charges, but this complexity means fee documents can run in the dozens of pages, leaving the intricate details of pricing unknown by most. Particularly for those unable to regularly meet waiver requirements, this can leave customers feeling that fees are both high and unpredictable, with hidden costs behind the up-front price.

As mentioned earlier, this is part of the reason that many regulators are focused on driving greater pricing transparency and simplicity (e.g., the CFPB with its recent guidance around junk fees). While most banks will be providing required disclosures and conforming to fee caps, the overall complexity of charges is often part of the reason certain fees can feel hidden.

Subscription pricing provides control to customers in setting predictable, transparent, and flexible recurring fees

Subscription pricing can address many of these issues. Here, customers pay a set recurring fee (typically monthly) that they choose up front for a desired level of service. As this includes per-use items, this is a predictable and fully transparent cost for consumers. Depending on the options available, this can also offer the perception of greater flexibility, with customers able to upgrade, downgrade, or suspend the service as required. As pricing is based on service bands and is common to all, it can also more seem more equitable, particularly if the base level of service is free.

Interestingly, consumers are often willing to pay more for this predictability, as most overestimate their likely usage. The gym membership phenomenon is a good example here: A customer may pay \$30 a month for unlimited access if one-time access is \$8, despite most people ending up using the gym fewer than five times a month. Similarly, for banking, a subscription that includes all ATM fees in the US for a set monthly cost may appear attractive even if actual average

monthly usage would suggest a lower amount in one-off fees. Consumers generally prefer the predictability.

Subscription pricing requires a shift to a service over product approach

For banks, the challenge is that a move to subscription pricing can seem painful. Banks need to give up what can be several highly profitable fee-income streams in return for a few regular recurring ones. However, pricing for many banking products already combines periodic fixed pricing with usage-based pricing (e.g., an overdraft or revolving credit facility may have both a commitment fee and interest calculation based on usage), so in reality, a shift to subscription pricing is less dramatic than it can first appear.

A bigger issue for most banks is that it a requires a shift in product management thinking from selling products to offering a subscription to services. This requires a change in key performance metrics away from individual product profitability, and indeed even individual customer past profitability (how much economic profit a customer made in the last 12 months), to focus on future customer value (e.g., annual recurring revenues), customer lifetime value, and customer churn.

The emphasis then is placed on monitoring and encouraging usage to drive customer loyalty. For example, rather than enjoy the profit benefit of having a customer with no usage, Netflix prefers that you watch, hence the provision of the recommendation engine. They know that a non-watching customer will eventually stop subscribing. Similarly, in banking the focus is on finding new ways to deliver value to customers to strengthen the customer relationship. Advisory, value-add services—like financial management, financial wellness support, or concierge-type services—become easier to justify as a means of enhancing the service proposition rather than being seen as a cost associated with a banking product. Indeed, over time these value-add services will be seen as the main source for driving customer value rather than individual product components.

Banks therefore need to think about the shift to subscription pricing as one of business model, questioning how they create value for clients, rather than merely one of pricing. The good news for banks is that the shift to a service-based value proposition can help move them away from the highly commoditized banking product market, where interest rate/fees, rather than value delivered, is the main determinant in selection.

Benefits of enterprise pricing extend across revenue, efficiency, customer experience, and risk

The cumulative impact of these regulatory, competitive, and business model drivers is that next-generation pricing and value proposition strategies need to shift from being primarily driven through individual products to being an enterprise-level capability. Products can be packaged (as a bundle or subscription) with features, terms, eligibility, suitability, and stipulations set and managed to meet needs of the customer with customer-level pricing, loyalty, and billing.

As shown in Figure 8, this can bring an array of benefits around for banks around both top and bottom line, as well as in improving the customer experience and reducing risk.

Figure 8: Benefits of Enterprise Pricing



Source: Celent

The challenge is that for most banks, pricing has been heavily integrated into product core banking systems, which in turn has constricted product management to operate around product siloes. A shift to enterprise pricing requires a new banking architecture.

DEVELOPING NEXT-GENERATION PRICING ARCHITECTURE

Pricing has historically been heavily embedded into product core banking systems in most established banks. This has impeded pricing innovation, particularly around customer-centric pricing, and often resulted in banks maintaining thousands of product variations. Banks need to create new enterprise services around offer and deal management, pricing, loyalty, billing, and product catalogs, with the ability to design and manage both internal and third party products and services.

Pricing is heavily integrated into product core systems

The prime challenge for most banks, in comparison to most neobanks, lies heavily with their underlying banking platforms. With most platforms, product creation and pricing, as well as pricing execution (e.g., fee or interest calculations), lie within individual core banking systems (CBS). How this is configured and managed will depend heavily on the nature of the bank's CBS platforms themselves. Full detail on the evolution of CBS can be found in Celent's report *Toward a New Retail Banking Architecture: Defining the Future Digital Core Platform*; however, a summary of the main stages of development over time is illustrated in Figure 9.

1980/90s Next-gen Full legacy Traditional integrated Modern traditional Infrastructure Mainframe Open Systems Internet-based Virtualization Cloud-native Application Centralized Client/Server N-tier Microservices architecture Componentized Monolithic Layered Event-driven Processing Batch-based Real time Customer Basic static Common customer Rich customer Rich & event-based information customer data information file information customer information Branch ATM Online Mobile Chatbot Open Banking Telephone channels OS2 / Windows Bank users Green screen Browser Banking Product-specific Integrated retail Universal Product creator product range Product & Hard-coded Smart products Product configurators Product factory pricing design Development Custom Customized packaged Packaged Extensible Parameterization Source: Celent

Figure 9: Evolution of Core Banking System Architectures

Mid-large banks (over \$20 billion in assets) will often use multiple core banking platforms, with many large banks still maintaining full legacy systems originating back in the 1970s. With these platforms, product and pricing are created

primarily through coding (based on COBOL), and both initial product setup and ongoing product management are expensive and time-consuming. Even a basic change, such as changing an interest rate, can be a complicated process requiring development and testing time. While most banks will have enhanced platforms with tools to improve usability, development of new products can take several months.

Significantly, variations in price often must be handled through the creation of individual products. For example, many banks offer an array of mortgage products, with a range of rates for various offer lengths of tracking, discount, or fixed-rate choices for different loan-to-value ratios. With older systems, each variation is often dealt with through creation of a separate product. This can mean that banks often have thousands of different products, although over time many will effectively be closed to new business. With so many products, pricing and product management is, unsurprisingly, a huge undertaking; responding to a central bank base rate change can take multiple days.

This also has implications for front office sales and servicing, with staff required to work across and understand vast product catalogues, many of which will have separate origination and administration systems.

Modern CBS platforms have advanced internal product management

In contrast, more recent core banking systems will have advanced product development and management capabilities. A key driver for moving to new platforms is their product development capabilities, which allow for development and launch of new products in days rather than month. Most "modern traditional" platforms have product factory capabilities that will facilitate fast product innovation and offer hierarchical product management. Here, similar products (e.g., all saving accounts) can be managed either as a group or different sublevels, and product management is relatively straightforward. For example, base rate changes can easily be modified across a breadth of different products.

These platforms are also able to deal with variations in pricing within an individual product. For example, customer tiering (e.g., preferential pricing for premium customers) can generally be designed within scope of the product definition. However, such flexibility does tend to be product-centric rather than customer-centric. Product pricing can be managed easily, but it is much harder to manage overall pricing strategies across a segment (such as managing premium customer pricing across a bundle of products).

Next-generation cores tend to have very advanced product development capabilities that are able to operate across products and customers with contingent or event-based pricing capabilities. These provide easy creation and management of complex contracts along with the ability to provide complex products (e.g., hybrid products that combine credit, payments, and deposit capabilities). An example here would be the ability to transform a standard payment debit transaction made on a current account into an installment loan spread over a number of months decided by the customer (subject to constraints set by back). A customer could buy a TV, for instance, and then decide to spread payments over 10 months.

However, the challenge even with a next-generation core banking platform is that unless an institution has created a standalone greenfield neobank, in most cases banks will be running such cores in a coexistence setting. New cores may be used for new products but will be run alongside multiple incumbent or third party cores for existing products (which may themselves be a combination of full legacy or traditional modern platforms). In this situation, the challenge of managing pricing across the customer segments for multiple products remains.

Product and pricing lifecycle management needs to be a separate layer of capability outside the core

To address this, pricing and product management need to be architected into separate services that sit outside the individual core banking platform. Figure 10 (which is also examined in more detail in Celent's report *Toward a New Retail Banking Architecture*) shows key components of modern banking platform architectures. In this approach, pricing and product development are enterprise services that sit across, rather than within, individual product processing engines.

Customer engagement Branch / Contact Digital Investment/ Kiosk teller center banking advisorv Open banking Customer experience Marketing Customer relationship management Origination **Enterprise services** Mortgages / Credit card Offers Pricing Billing HEC catalog Digital Consumer Ecosystem **Product** Loyalty & Customer Retail Wealth **Payments** Commercial Consumer Card Equities Card issuing Bill pay **Payments Payments** Business Mortgages , Mutual funds engine gateway lending HFC. Risk, Finance, Compliance, Business support Merchant Checking Fixed income services accounts Compliance AML / KYC Risk Credit card Structured Currency products management servicing Fraud Treasury Reporting Syndication Time deposits Insurance General Financial Collections ledger controlling Islamic Trade finance Procurement нсм Reconciliations

Figure 10: Banks Need to Make Offers, Products, and Pricing Enterprise Services

Source: Celent

For enterprise pricing, key components here include the following:

- Customer information: While many banks will have central operational customer
 information systems, this is a prerequisite for managing pricing across customers
 rather than within individual products. Customer information systems need to
 handle prospect, customer, and account information as well as relationship
 hierarchies to support household or corporate pricing.
- **Product catalog:** This should externalize marketable product information and contain standard pricelist information, acting as a central repository for use by front office and channel platforms (sales/marketing, origination, or assisted/self-service channels). This would include information on product eligibility, suitability, features, and terms and conditions, as well as pricing information.
- Offer/deal management: This should include the ability to design and tailor
 propositions for specific customer microsegments, including eligibility, conditions,
 features, and pricing relating to offer terms. Particularly for corporate customers,
 this would include support for development, creation, and approval of customer
 deals. This should also include offer tracking and fulfilment capabilities to ensure that
 agreed-upon offers are monitored and executed fully.
- Pricing engine: This should include centralized pricing control around all rates and fees, including areas such as individual product pricing, packages, relationship pricing, household pricing, regional pricing, and transaction and service pricing, as well as such incentives as promotions, rewards, rebates, or customer referral schemes.
- Product management and design: This should act as a centralized product designer, allowing products to be designed, optimized, and managed throughout the product lifecycle, including product bundling and the ability to manage customer segments as well as products.
- Benefits, loyalty, & incentives: This should include support for loyalty schemes, benefits, and incentives outside of the immediate pricing elements that form part of the value proposition, but can feed into pricing as required (e.g., customer tiering).
- Billing: Automate billing at the customer level, including the ability to detail
 calculations, with transparency to meet compliance requirements and support
 customer query self-service. This should combine close integration into product core
 systems for fee posting with enterprise billing management to allow customers to
 have full visibility of fees, charges, and interest across products—or independent
 billing if handled as a separate process outside of accounts (e.g., as a monthly bill for
 services provided for corporate customers).

These enterprise services effectively provide central bridges between front office customer engagement platforms (such as marketing, channels, or CRM) and back office record-keeping systems (such as product-specific core banking systems). Importantly, these systems need to be truly enterprise in nature. Many modern traditional core banking platforms will have pricing and product catalog architecturally separate to specific modules; however, these services need to be able to operate standalone as services that span all banking products, not just those internal to that core banking platform.

Partner management needs to become a core element of pricing and product management

In addition to these core enterprise services, there are some important capabilities needed to operationalize ecosystem-based value positions where product/services come from a combination of internal and third party providers

(ecosystem management in Figure 5). These include enhancements to enterprise services as well as new capabilities. Key considerations follow.

- Product and service catalog: The bank's enterprise product catalog needs to be able
 to support both internal and partner (external) products and services and to provide
 product information and definitions to sales/channels and product
 design/management functions.
- Partner onboarding, contracting, and party management: Banks need to be able to rapidly onboard new partners (akin to setting up a new corporate relationship) with automated process and a strong partner experience.
- Pricing model and agreement set-up: Banks need to be able to set up pricing and revenue/value share models based on multiple parameters, such as events, product usage, or sales volume.
- Commission and incentive management: Banks need to simplify and streamline commissions and incentive management to be able to operate with multiple partners, but also be able to support more complex models as banks' partnership models mature.
- Partner invoicing and settlement: Banks need to automate monitoring and calculation processes (such as commitments) to provide transparent reporting for invoicing of payments, which may flow in both directions.
- **Resolution management:** Automated processes for dealing with exceptions, such as the ability to roll back pricing, recalculate, or implement corrections on a go-forward basis.

As this ecosystem approach has emerged in recent years, many banks have started to develop such capabilities organically, gradually maturing as they get more experience. For example, API monetization arrangements often start with flat-fee approaches (a one-off or fixed recurring fee for access to the API) before progressing toward API usage-based models, and then finally revenue share—type arrangements based on value created. However, banks should look to incorporate such capabilities deliberately into their enterprise architecture and business models so that such partnerships can become an integral part of product management and innovation functions. Importantly, banks need to be able to co-innovate with partners, with the ability to adapt product catalog and pricing as propositions from either bank or partners develop.

Disclosure and customer communications management needed to complete compliance cycle

While products, offers, and pricing need to be enterprise services, effectively able to act without dependency on other services (such as specific core banking platforms) so they can operate across the enterprise (and wider ecosystem), this should not mean they operate in isolation from broader business processes or specific to a specific function (such as product management). For example, while product catalogs need to contain information on eligibility and suitability, this is to enable appropriate decision-making around which products are presented to customer (through automated or assisted channels) as part of the offer lifecycle. Enterprise services need to enable functions (be it product management, marketing, compliance, or operations) throughout the product and offer lifecycle from strategy design to execution and fulfilment (as shown in Figure 11).

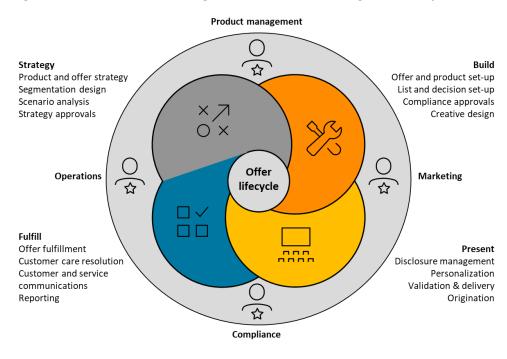


Figure 11: Banks Need to Manage Full Product and Pricing Offer Lifecycle

Source: Celent

A key part of this is that specifics around pricing, terms, conditions, and offer stipulations need to be fully disclosed to customers throughout the offer lifecycle so they can make informed decisions about whether it meets their needs, both at offer presentment stage and in servicing stages throughout the lifecycle of the product and/or offer.

Most regulators will have relatively strict demands around the disclosures that have to be provided in customer communications as part of the offer presentment, origination, and billing processes. However, as discussed in the previous chapter, regulators are shifting objectives here from having compliance requirements that customers be provided this information at key moments (e.g., as part of the sales process or warning communications that fees are about to be taken from an account) to a proactive onus to drive best outcomes for the customer. For example, if a customer has selected a product based on a particular offer that is subject to certain conditions (e.g., minimum monthly average balances) which the customer has not yet fulfilled, banks should provide information during the offer period to alert customers that this is the case. Similarly, customers should be notified if an offer period (e.g., preferential savings interest rate for a year) has come to an end.

This means the ability to incorporate such disclosure information (whether strictly required by regulators or discretionary in the best interest of customers) needs to be tightly integrated into customer communication, product management, and customer servicing strategies. Effectively, disclosure management needs to be considered as a key capability along with pricing engine, product catalogs, and offer management themselves.

UNDERSTANDING THE ENTERPRISE PRICING VENDOR LANDSCAPE

Enterprise pricing and product management that can operate across multiple internal and external systems is relatively complex. As a result, there is a relatively small pool of vendors that provide specialist platforms to enable next-generation pricing. However, the market is changing, with established vendors shifting to cloud-based models and a number of new entrants for banking.

For banks looking to the external market, there are vendors that have developed pricing platforms for banking that are enterprise grade—that is, able to operate across multiple core banking systems to allow banks to create and manage customer-centric pricing. While there are several, the overall pool of key vendors is relatively small, certainly when compared to number of core banking platforms available on the market. Key vendors are shown in Figure 12.

Indeed, while many of the modern and next-gen core banking vendors do now have advanced product and pricing capabilities, many core banking platform providers will partner with these main pricing vendors to provide relationship pricing capabilities.

ZAFIN
Vancouver, Canada

Palo Alto, CA

ORACLE
Redwood City, CA

Source: Celent

Chesterfield, MO

Thiruvananthapuram, India

Figure 12: Key Enterprise Pricing Vendors

Within this pool of enterprise pricing vendors for banking, there are three well-established providers: SunTec Group, Zafin (previously known as Zafin Labs), and Oracle Revenue Management and Billing (ORMB). These are directly or

effectively pure-play providers (while ORMB is part of the much larger Oracle Corporation, it has a dedicated focus to this area and can and does deploy in banks outside of its banking platform base).

The other providers are newer players, either to enterprise pricing or the banking sector. Temenos is a leading banking platform provider (core banking and channels) and has recently created enterprise pricing capabilities (Temenos Enterprise Pricing—TEP) that can manage third party products. Amdocs does have established presence in enterprise pricing and billing, although it has moved in more recent years into banking from being a major provider particularly in the telecommunication sector. Naehas is a relatively modern provider (founded in the 2010s) covering disclosure management and customer communications around the offer lifecycle, in addition to enterprise product and pricing.

Enterprise pricing vendors cover core pricing and product management, with varying focus on billing

A view of the functionality coverage of these platforms is shown in Figure 13. Most have strong capabilities in the core product and pricing areas (product catalog, enterprise product management, and pricing management themselves), but there are variations depending on focus of vendor outside this, particularly in whether a vendor covers back office billing as well as pricing.

		Amdocs	Naehas	ORMB	SunTec	TEP	Zafin
	Product catalog	~	~	~	~	~	~
	Enterprise product management	~	~	~	~	~	~
	Relationship pricing	~	~	~	~	~	~
	Fee & rate management	~	~	~	~	~	~
	Offer management	~	~	~	~	×	~
	Deal management	×	~	~	~	×	~
	Loyalty/benefits management	×	×	~	~	~	~
	Enterprise billing	~	×	~	~	×	~
	Ecosystem management	~	×	~	~	×	×
)	Disclosure management	×	~	×	×	×	×
1	Profitability & analytics	~	×	~	~	×	

Note that functionality is shown for main enterprise services on selected key pricing and product management services and for the vendor's main platform targeted to address enterprise pricing and product management, rather than the

breadth of a vendor's overall portfolio. This therefore does not necessarily represent the full functionality available within each platform or within the vendor's wider portfolio. Oracle and Temenos in particular have significant breadth of functionality across their wider banking platforms, such as in analytics or customer communications, as well as in core banking and digital channels. SunTec also has capability in complementary areas such as indirect tax management, as does ORMB in billing payments and collections management as well as in customer management. Naehas, as mentioned, also covers customer communications and offers campaign strategy/management.

Vendors are moving quickly to cloud-led deployment models

From a client base perspective, SunTec, Zafin, and ORMB are all global, with enterprise pricing banking clients across all regions. Temenos as a company is a global banking technology provider as well, although the client base for TEP specifically is relatively nascent, given it was launched in 2021. Naehas is currently US-focused, although it has achieved a strong top-tier client base in this market. Amdocs's client base for its catalog platform is currently stronger in Europe, although it is pushing into the North American market. While all vendors target retail banking, Amdocs and ORMB also target non-financial sectors such as the healthcare and telecommunication sectors, which also have multi-product pricing and billing requirements. SunTec and ORMB, similarly, also target the wider financial services field, such as asset management, securities/custody services, and payments. Most vendors have also developed capabilities for corporate banking and retail.

While many of the established providers do have on-premises clients, all vendors are now strongly pushing cloud-only or cloud-first SaaS/managed service deployment models. All have shifted (or are shifting) to cloud-native microservices architecture, given the advantage this has in supporting continuous integration/continuous deployment models, where vendors can maintain and develop a single platform while configurability is used to address institution-specific needs. Given the complexities of enterprise pricing, this is desirable to prevent development of bespoke solutions, which can become challenging and costly to maintain.

PATH FORWARD

Enterprise pricing lies at the heart of the banking business model. As such, enterprise pricing and product management platforms need to enable business users and processes across marketing/sales, product development, compliance, and operations to enable innovation, compliance, and efficiency. Success in this requires business as well as technology transformation.

Enterprise pricing platforms are a key piece of the jigsaw puzzle in effective management of the product and offer lifecycle. However, while shifting pricing and product management out of individual core banking platforms is important for enabling custom-centric strategies, the fundamental challenge is one of organizational structure and decision-making. Marketing and sales often operate quite separately from products and operations, with compliance and risk often acting as additional disparate functions. Pricing sits at the intersection of these different functions; the ability to personalize the offer is key for marketing and sales, while the ability to design and execute is critical for product management and operations.

From a deployment perspective, there are key questions around who "owns" (and pays for) the platform, and who drives and is responsible for implementation. Ideally, the move to enterprise pricing should be driven at the executive level, bringing respective functions together, rather being driven by an individual function. Similarly, banks should look to platforms that can support business users across product, marketing, and operations (as well as compliance).

From a platform selection perspective, there are three main categories of capabilities that need to be considered:

- **Functional capabilities:** the ability of the platform to support the business requirements around outlined areas (such those as highlighted in Figure 11).
- **Non-functional capabilities:** the underlying capacity of the platform to deliver effective performance.
- **Execution capabilities:** the ability of vendor and platform to support successful project delivery (time, cost, and completeness).

While functional capabilities are, of course, important—given they drive the desired business impact—non-functional and execution capabilities are critical here. Enterprise pricing is a relatively complex undertaking, particularly given its intersection across business functions, as well as its need to integrate into an array of systems such as core banking, marketing, sales, origination, payments, and channel systems. Platforms also need to be able to deal with ongoing change, both in the platforms with which they integrate, and in the pricing and products themselves. Consequently, non-functional capabilities—such as the

capacity to support integration, scalability, and ongoing change—is critical, as is the vendor's track record of successful implementation experience. Key qualities for Enterprise Pricing and Product Platforms are highlighted in Figure 14.

Figure 14: Key Qualities for an Enterprise Pricing and Product Platform

1 🗘	Cloud native Ability to harness full elasticity, agility, and automated provisioning of cloud	6	Extensive automation End-to-end process orchestration with high levels of STP
2	API-first / integration strength Ability to work with latest and legacy source platforms	7	Continuous product innovation High speed-to-market for product development and billing
3 [††]	Low-code configuration Ease of business users to control, manage offers, pricing and product configuration	8 🖔	DevOps pipeline Ability to roll out and iterate innovations with speed
4 7	Scalability Ability to scale effortlessly to meet pricing and billing volume growth	9 💭	Full offer and product lifecycle Ability to manage lifecycle from deal / offer to pricing and billing
5 💿	In-depth insights Ability to incorporate insights to drive decision-making and use Al	10 →) (←	Resilience and implementation expertise Track record in implementation and ongoing delivery

Source: Celent,

Key considerations around the vendor here include:

- Is there a professional services workforce available that's trained and experienced with the enterprise pricing platform (both directly with the vendor and in the broadly professional services / systems integrator community)?
- What is the vendor's experience in doing implementations of similar complexity to the institution's own requirements (institution size, line of business/product mix, geographic footprint, number of cores being integrated, age and complexity of existing cores)?
- What project management, migration methodologies, value realization, and project accelerators does the vendor provide?
- Post-implementation support—how does the vendor provide ongoing maintenance, deliver innovation, training, and servicing?
- What is the cultural fit of the institution with the vendor? While a "soft" factor, it is one that is often undervalued in execution success.

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