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Embedded Finance

Strategic regulatory considerations for financial services firms

October 2022

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REGULATORY STRATEGY
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Contents

Executive Summary

This report

This report explores the key regulatory considerations financial services firms should address when developing their embedded finance strategies. We specifically focus on embedded finance partnerships with non-financial services firms (business brands).

We identify four thematic regulatory areas that EU and UK authorities are likely to concentrate on when assessing the risks and benefits of embedded finance business models:

- Consumers
- Resilience
- Data
- Governance and accountability.

For each area, we highlight the primary regulatory elements and the most significant implications for financial services firms' embedded finance approaches. We use an illustrative embedded banking case study to highlight how these considerations would work in practice.

We conclude by drawing out how the existing and emerging regulatory landscape will shape financial services firms' embedded finance strategic choices.

Who is this report for?

This report is intended primarily for boards, senior management, and heads of innovation and strategic partnerships of regulated financial services firms that are responsible for shaping embedded finance strategies.

It will also be of interest to heads of risk, compliance, and regulatory affairs of financial services firms that are considering or adopting embedded finance.

Overview

- Embedded finance integrates financial services into any digital customer journey at the point of need. BNPL and embedded payments are well-known examples. Broader use cases are emerging quickly, driven by consumers' demand for integrated, seamless experiences and enabled by digital and technological innovation.
- Some of the most promising opportunities for financial services firms lie in partnerships with non-financial retail business brands, including digital platforms. As more financial services firms explore these partnerships, EU and UK financial services and cross-sector regulatory authorities are also taking an increasingly active interest in the risks and opportunities they present for markets and consumers.

Embedded finance, regulation and strategic choices

- **Navigating regulatory requirements** – the regulatory and supervisory requirements that financial services firms will need to comply with will correlate to the business complexity and scale of adoption of specific use cases. However, embedded finance's unique characteristics will likely make effective risk management and regulatory compliance more challenging than in traditional business models. In most cases, firms will need to review and enhance their risk appetite, governance, and risk management frameworks.
- **Managing the complexities of the shared responsibility model –** financial services firms will need to understand and manage with business brands and other Third Party Providers the shared responsibilities around the customer journey, technology, and personal data. This includes agreeing with business brands their exact regulatory responsibilities, if any, for each use case (e.g. as distributors or joint data controllers). FS Firms will have to carefully handle possible tensions between prioritising commercial objectives, achieving the right regulatory outcomes, delivering a seamless customer journey, and ensuring risk levels remain within their risk appetite.
- **Regulatory considerations as a critical factor in strategic business choices –** current and future policy pressures and enablers (e.g. Open Finance) should inform a firm's strategic choice around who to partner with, which products to offer, and when to enter the market. Regulation will also influence how the operating model and capabilities need to be enhanced in areas such as governance, risk management, and regulatory horizon scanning and engagement. Considering regulation from the outset will be critical to embedded finance strategies' success and long-term viability.

Key terminology

Application Programming Interface	A type of software interface that allows two or more computer programmes to communicate with each other. APIs are a critical enabler of embedded finance, as they enable the data connection and transfer between different entities in the value chain.
Artificial Intelligence	An umbrella term for a range of algorithm-based techniques that mimic human thinking to solve complex tasks. Key techniques relevant for financial services include machine learning, deep learning, natural language processing, and visual recognition.
"As-a-service" provider	A vendor of products, tools, technology and other specialised capabilities (e.g. regulatory licence and compliance capabilities) delivered through a subscription model to financial and non-financial companies. Banking-as-a-Service is a typical example in financial services.
Buy-Now-Pay-Later	Unsecured and typically interest-free short-term credit agreements used by consumers to spread the cost of purchases. BNPL products are often embedded into online retailers' customer journeys at the point of payment.
Business brands	Non-financial companies wishing to embed financial services into their customer journey. Examples include retailers, travel companies, car manufactures, telecommunication companies and digital platforms.
Open Banking	EU and UK regulatory initiatives that gives consumers and SMEs the right to authorise TPPs to access their payment account data and initiate payments transactions on their behalf.
Open Finance	A planned expansion of Open Banking. While Open Banking only applies to payments account and data, Open Finance will likely apply to all - or most - financial services accounts, e.g., savings, insurances, mortgages, and investments.
Privacy Enhancing Technologies	Umbrella term for a broad range of technologies designed to facilitate data sharing and analysis, while protecting privacy and supporting data protection compliance. Key techniques include homomorphic encryption, trusted execution environments, secure multi-party computation, differential privacy, and systems for federated data processing.

Please see the Glossary for explanation of abbreviations used in this report.

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Section 1

Understanding embedded finance

What is embedded finance?

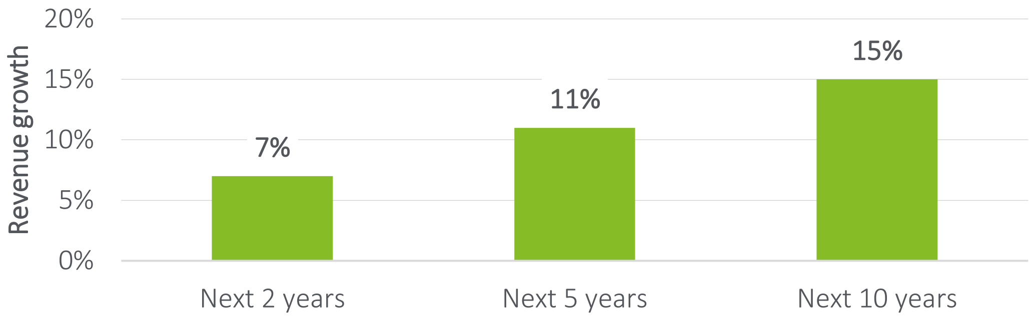
Embedded finance allows any business to partner with an FS firm to seamlessly integrate financial services into their own customer journey at the point of need.

Embedded finance partnerships can occur between two FS providers, e.g. a bank and an insurer. However, we believe its most significant potential lies in partnerships between FS firms and non-FS business brands.

For example, an online retailer can partner with a BNPL firm to allow its customers to apply for consumer credit directly at the point of sale on their app or website.

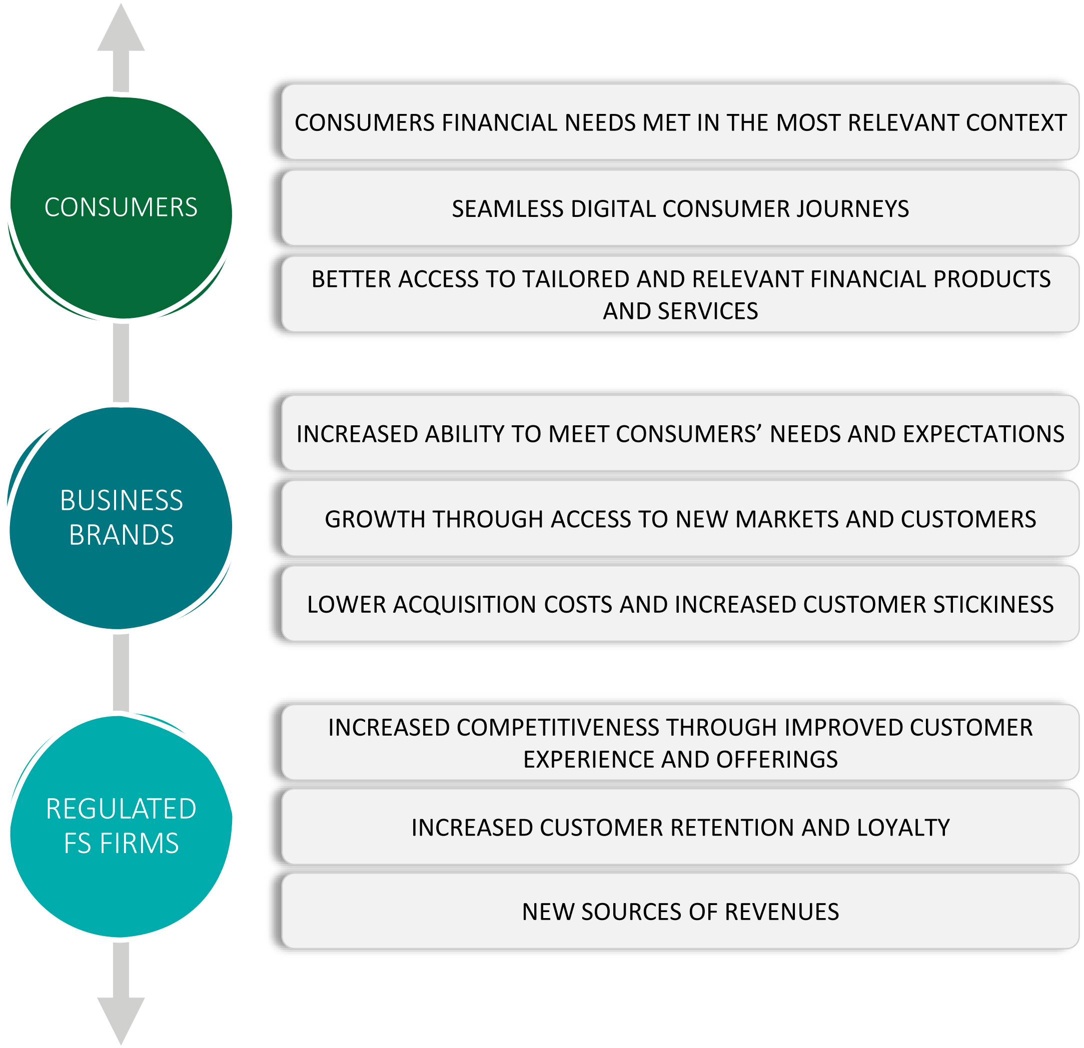
By integrating FS in everyday transactions, embedded finance removes friction in the consumer experience, while creating growth opportunities, competitive advantage, and operational efficiencies for both regulated FS firms and business brands.

Chart 1
European business brands expected revenue growth from embedded finance adoption



Source: OpenPayd, Embedded Finance Research Report, September 2021. Survey of 150 decision makers from brands across Europe with responsibility for the identification and implementation of new products and services. Link

Figure 1
Embedded finance can align the interests of consumers, business brands, and FS firms



How does embedded finance work in practice?

Key concepts and an illustrative case study

Embedded finance leverages technology to create a digital ecosystem where customers no longer have to be redirected to a separate user journey to access financial products or services relevant to their non-FS business transactions.

An FS firm connects with the non-FS firm through APIs. APIs facilitate the transfer of data and payment details between parties.

An “as-a-service” provider offers the functionality – through products, operations and technological capabilities, including the API layer – to allow the FS product to be seamlessly embedded in third party customer journeys.

As shown in Figure 2, an alternative model is a FinTech firm using an “as-a-service” provider with a FS regulatory licence to provide financial products through a third party. For example, depending on their licence, a Banking-as-a-Service (BaaS) provider could open accounts, hold funds, issue debit cards and make payments on behalf of a FinTech firm without an FS regulatory authorisation.

Figure 2

SIMPLIFIED EMBEDDED FINANCE CONCEPTUALISATION

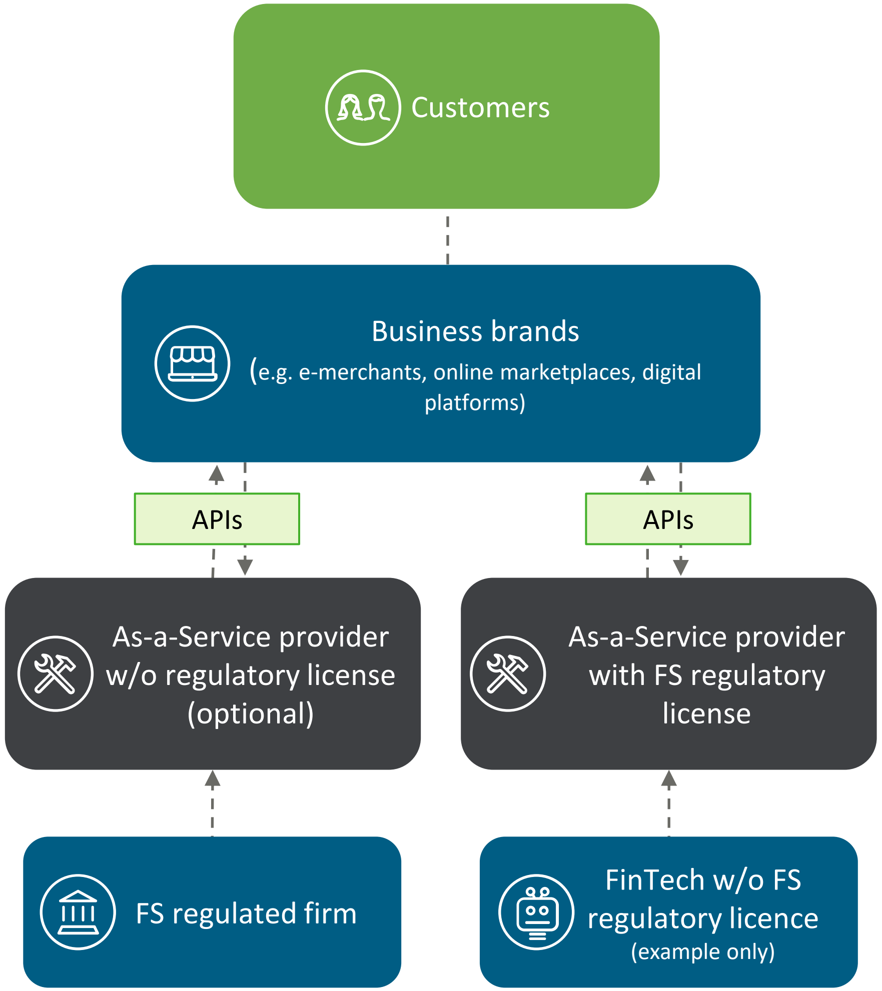
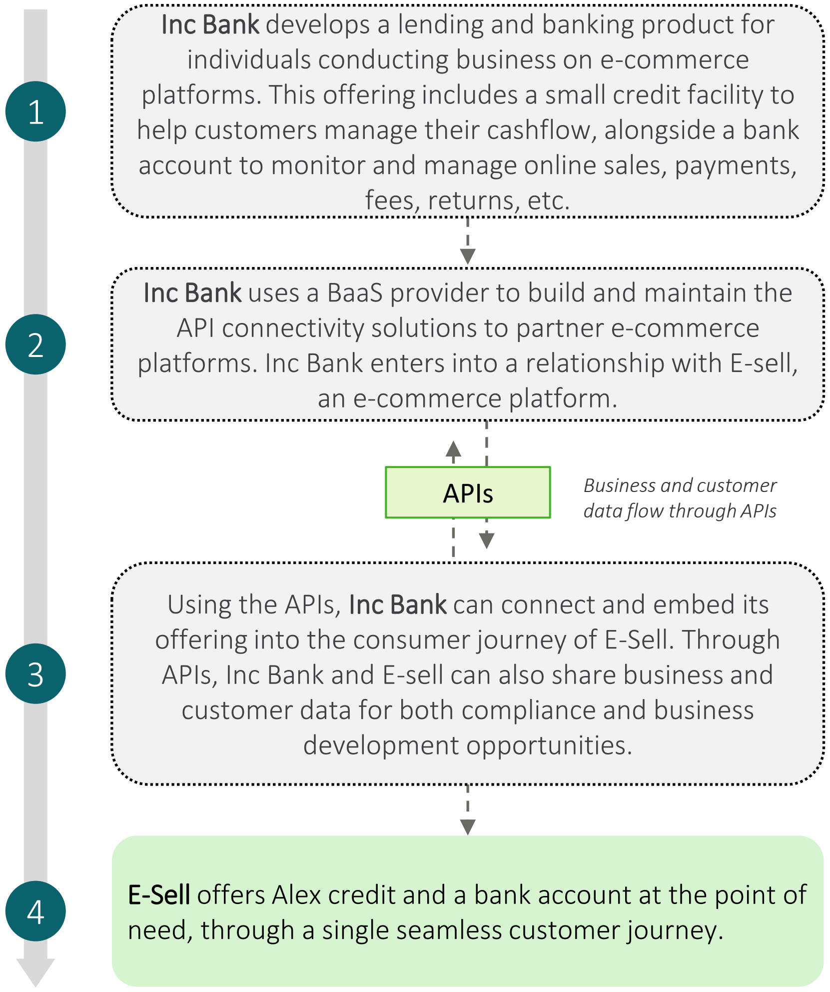


Figure 3

ILLUSTRATIVE CASE STUDY: EMBEDDED BANKING



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Section 2

New drivers of risk and regulatory focus areas

Embedded finance vs traditional business models

Understanding new drivers of risk

Embedded finance does not pose completely new types of risks per se. But its unique characteristics will likely exacerbate known risks or make them harder to identify, assess, manage, and monitor effectively.

As regulated FS firms consider their embedded finance strategies, they must determine the amount of risk they are willing to accept to achieve their business objectives.

To set their risk appetite meaningfully, firms must understand how embedded finance differs from their traditional business models and how new or enhanced drivers of risks may manifest.

To help firms in this analysis, we identified four overarching characteristics differentiating embedded finance from more traditional FS business models.

First among them is the critical role that business brands will play in the embedded finance value chain.

Figure 4

Unique characteristics of embedded finance relative to traditional financial services business models

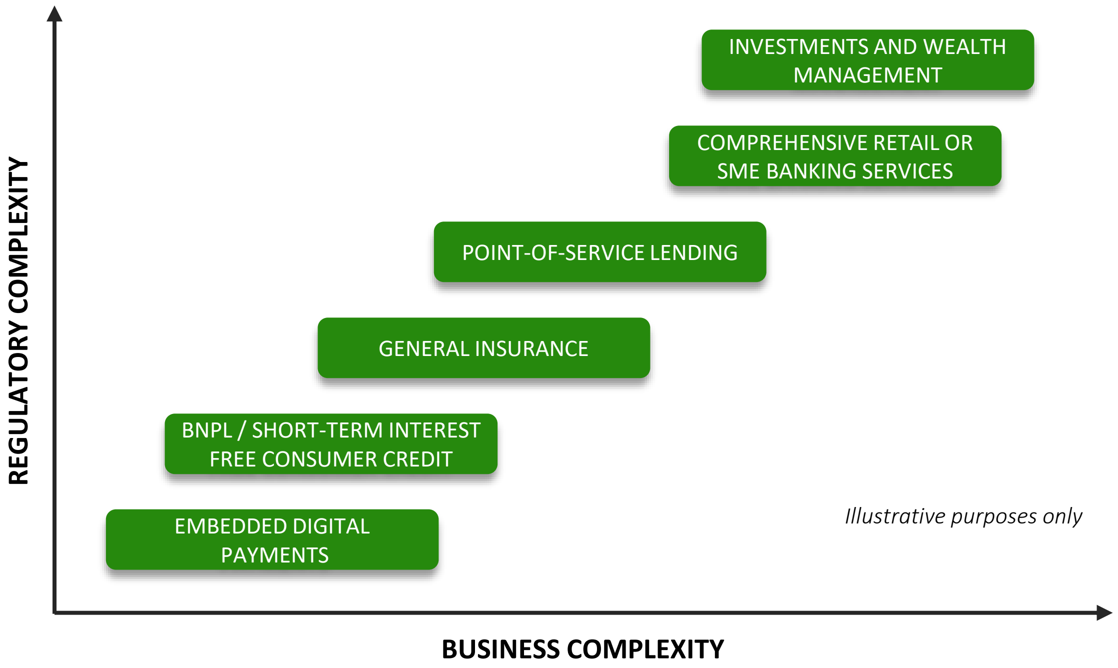
1	CRITICAL ROLE OF BUSINESS BRANDS	▪ Business brands will have significant control over the customer digital journey and relationship, and critical components of the overall technology stack (e.g. front-end). ▪ Yet, they will typically be entities without an FS regulatory authorisation and may be unfamiliar with FS regulatory requirements. As such, they may not have the culture, governance, and risk management capabilities to support FS firms in fulfilling their compliance obligations. ▪ Friction in the partnership between business brands and FS firms may arise in case of challenges in reconciling customer experience, commercial priorities, and compliance. ▪ Business brands may also be wary of amending their digital journeys if there is a risk they may become de facto financial intermediaries and fall within the FS regulatory perimeter.
2	CUSTOMER FOCUS AND PRIORITIES	▪ A customer accessing or purchasing the non-FS services or products offered by the business brand (e.g. e-commerce marketplace) will primarily be focussed on that product or service. ▪ This may reduce their focus on engaging with and understanding the risks and benefits of any embedded FS offering, especially if it is an unfamiliar or complex product/service.
3	DIGITAL-ONLY CHANNEL	▪ Customers may have sufficient digital skills to engage with non-FS services/products the business brand offers. However, they may not have the digital maturity, capabilities or product knowledge to make financial decisions in a digital-only environment. ▪ This could make identifying or supporting vulnerable customers especially challenging.
4	COMPLEX FLOW OF DATA	▪ FS firms and business brands may want to (or have to) share consumer data to develop more comprehensive views of customers' profiles for risk assessments and compliance, but also to tailor offerings and pursue further sales opportunities. Additional TPPs (e.g. AI or cloud providers) may be involved in interrogating and deriving value from this data. ▪ This will likely create some complex data governance challenges and shared responsibilities related to data protection regulatory requirements.

The regulatory landscape for embedded finance

Embedded finance use cases sit within a spectrum of business complexity. Increasing business complexity is typically accompanied by a more complex regulatory environment.

As use cases become more complex from a business perspective or achieve large-scale adoption, the types of regulatory focus areas to consider and associated supervisory focus will increase in line with their potential for harm to consumers and market integrity. The developing regulatory and supervisory response to the growth of BNPL and non-bank digital payments is evidence of this.

Figure 5
Business vs regulatory complexity of embedded finance use cases

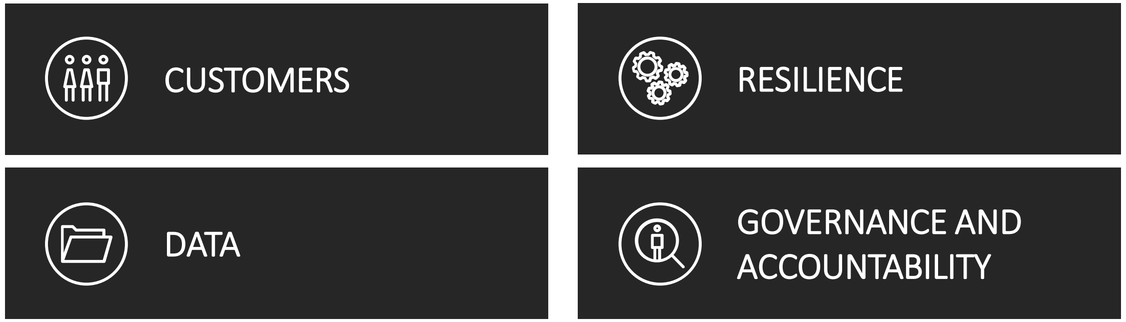


Firms should take a holistic view of regulation and understand how it could affect their strategic choices and the long-term viability of their embedded finance approaches.

There is no specific embedded finance regulatory framework – the exact regulatory requirements depend on the products and services provided through specific use cases.

However, we have identified four thematic regulatory considerations that we expect FS and cross-sector authorities to focus on when engaging with firms around the risks and opportunities associated with their embedded finance business models.

Figure 6
Embedded finance: four thematic areas of regulatory focus



The following pages will explore the regulatory pressures across these four thematic areas and the strategic implications for FS firms.

> *"The digitalisation of financial services is changing the way consumers make decisions and markets operate. [...] We will proactively shape the digitalisation of financial services through developing our regulatory approaches to digital markets."*
>
> UK Financial Conduct Authority, 2022-25 Strategy, April 2022

CUSTOMERS

Regulatory focus

While consumer protection requirements will vary by jurisdiction and use case, three universally applicable outcomes[(a)] that regulators are likely to focus on are:

1. **Customers' understanding.** The influence that business brands have on customer communications and their digital journey should not negatively affect consumers' engagement and understanding of embedded financial offerings, including the use of their personal data.
2. **Fair price and value**. FS firms must understand how the embedded finance value chain affects the distribution of products/services to the target market and their price and value. Amongst other things, firms should consider any remuneration for TPPs and non-financial costs, e.g. consumers "paying" with personal data.
3. **Effective customer support.** FS firms and business brands may share responsibility for customer support, given that embedded digital journeys will include both FS and non-FS offerings. However, FS firms remain fully accountable for ensuring that such support meets customers' needs throughout the product lifecycle – with a particular focus on the identification and treatment of vulnerable customers.

Key strategic considerations for FS firms

- **Managing conflicting interests** – Consider whether embedded finance business models and strategies support good customer outcomes. This includes minimising conflict of interests between developing profitable embedded finance partnerships and fulfilling the needs of end customers. For example, business brands' focus on a seamless UX should not prevent FS firms from including positive friction in the digital journeys, if necessary, to allow customers to engage fully with product information, benefits, and risks.
- **Collaboration** – While assessing potential embedded finance partnerships consider business brands' ability and willingness to work with FS firms. This includes mapping and amending customer journeys to support risk management and good customer outcomes across key touch points and higher-risk activities.
- **Clear roles and responsibilities –** Understand and clearly agree shared roles and responsibilities towards consumers across the product's value chain. As explained in Box 1 (right panel), this will involve determining precisely the role business brands will play.

Box 1

Determining roles and responsibilities in the value chain

In embedded finance, a non-FS business brand inserts itself between an FS firm and its customers. The success of embedded finance partnerships will depend greatly on FS firms' ability to agree the exact roles and regulatory responsibilities that each party will have in this new value chain.

Inc Bank must understand to what degree E-Sell will intermediate its relationship with its end customers and manage any customer risks arising from this intermediation.

As a starting point, Inc Bank and E-sell must determine and agree on their respective roles and regulatory responsibilities.

For example, E-sell could be a material TPP for Inc Bank due to its role in providing the front-end technology component.

But, depending on the exact consumer journey and data flows, E-sell could also perform other regulated roles, e.g. as a distributor or joint data controller (see Data).

Establishing E-Sell's role and responsibilities will have important implications for the FS firm's governance, risk and compliance.

(a) Based on the FCA's new Consumer Duty

DATA

Regulatory focus

Personal data will play a crucial role in embedded finance, from compliance to customers' risk profiling and personalised offerings. We expect FS and data protection regulators to focus on:

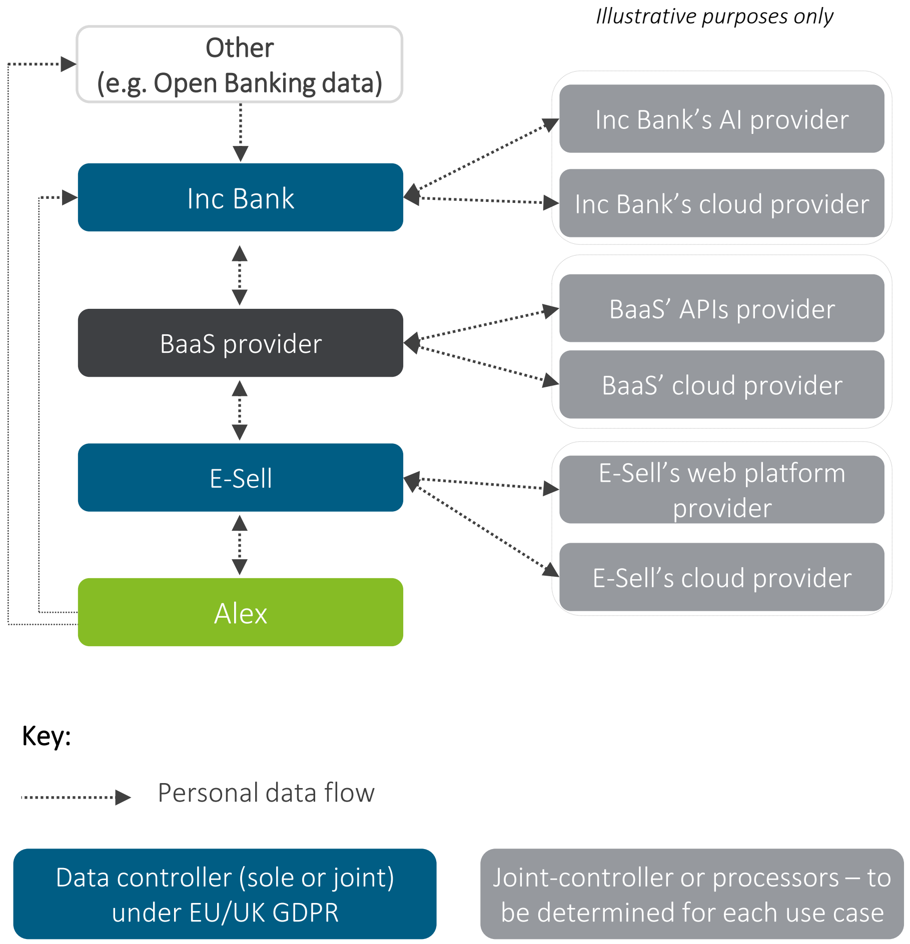
1. **Governance of complex data flows.** A key focus of data protection authorities will be the governance of the complex data flows across the embedded finance value chain. In Figure 7, Inc Bank and E-sell will likely share data protection responsibilities as joint controllers, including potentially overseeing the role and responsibilities of other TPPs (e.g. E-sells' cloud provider).
2. **Transparency and value for data.** Regulators will expect firms to be transparent about their use of personal data and to articulate how it affects the overall value proposition for their customers, including whether data is shared with other TPPs or being monetised (see Customers).
3. **AI.** If FS firms use AI systems as part of embedded finance, regulators will expect them to have the capabilities to ensure their use is lawful, fair, transparent, and (increasingly) ethical from both a data protection and conduct perspective.

Key strategic considerations for FS firms

- **Conduct and data protection by design –** Consider the use of personal data from the design phase of each embedded finance use case, including enhanced risks arising from the use of AI (if applicable). Adopt an integrated approach to data protection and conduct regulation, as regulatory requirements concerning data will often interact. Consider different technical and design choices to minimise data risks, such as PETs and UX design.
- **Mapping data flows and responsibilities –** Map all personal data flows for each use case and purpose (e.g. compliance vs marketing). Define roles and responsibilities of all entities across the value chain involved in processing or using personal data, especially concerning joint controllership and the risk controls and governance they must implement.
- **Value assessments –** Consider whether the embedded finance strategy relies on consumers knowingly or unknowingly 'paying' with their data or privacy and how it affects the fair value assessment of embedded offerings from a regulatory perspective.

Figure 7

Embedded finance will create complex personal data flows



RESILIENCE

Regulatory focus

Operational resilience is a top priority for EU and UK regulators. Adoption of embedded finance business models will attract supervisory scrutiny, particularly in two areas:

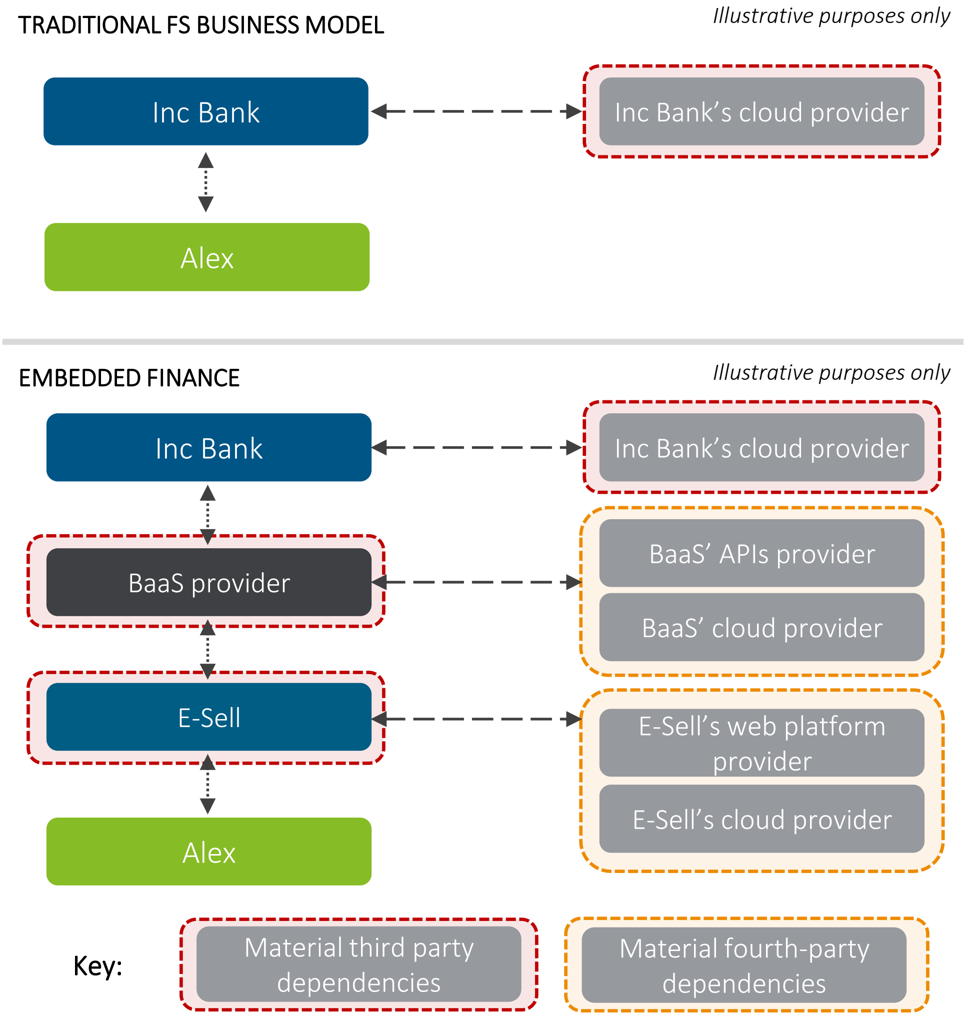
1. **Technological transformation programmes.** As firms replace their legacy technology and data infrastructure to adopt embedded finance, supervisors will scrutinise the governance of such transformation programmes and their impact on firms' operational resilience.
2. **Third Party Risk Management.** As embedded finance operating models typically rely more heavily on a complex ecosystem of TPPs. In Figure 8, supervisors will probe Inc Bank's ability to identify and address vulnerabilities arising from material third- and fourth-party dependencies, e.g. those arising from the BaaS provider and its APIs provider. They will expect Inc Bank to map all its critical business services across the value chain and assess its exposure to severe disruptions.

Key strategic considerations for FS firms

- **Resilience by design –** Embedded products and services could be considered critical business services from a regulatory perspective, depending on their scale and specific use cases. If this is the case, ensure resilience is built in right from the design stage. Consider strategic investments in real-time TPRM capabilities to ensure effective oversight of third-party risk across the value chain.[b]
- **Business brands' resilience frameworks –** Ensure business brands have a resilience framework fully aligned to FS firms' requirements and can meet minimum resilience standards in case of disruption.
- **Business continuity plans –** Consider what substitute capabilities (e.g. customer support) should be put in place to maintain the service if any of the TPPs in the value chain - including business brands - experience operational disruptions. This will vary for each use case, but will need to be considered in any cost-benefit analysis of different embedded finance partnerships.
- **Pre-contractual TPPs due diligence –** Before entering into contractual arrangements, seek a high level of assurance from all material TPPs on their operational resilience, including concerning data security, cyber security and the oversight/risk management of material sub-contracting.

(b) For additional insights on TPRM, please see Deloitte's latest Global third-party risk management survey 2022

Figure 8
Embedded finance complex ecosystem of material external dependencies



GOVERNANCE AND ACCOUNTABILITY

Regulatory focus

Regulators will scrutinise the firm's ability to implement an effective RMF. In particular:

1. **Governance and risk management in a shared responsibility model.** FS firms' ability to manage risk in a complex shared responsibility model with an unregulated business brand and whether their governance and RMF can mitigate risks in line with a clear risk appetite.
2. **Governance and risk management capabilities.** FS firms' capability to address new/increased risk drivers arising from embedded finance business models. These capabilities include organisational design, skills and resources, data and technology infrastructure, and effective contractual arrangements with business brands.
3. **Decision-making and oversight.** Senior managers and boards' experience and tools (e.g. MI) to review and challenge the firm's embedded finance strategy, related risks and ongoing monitoring of issues and performance.

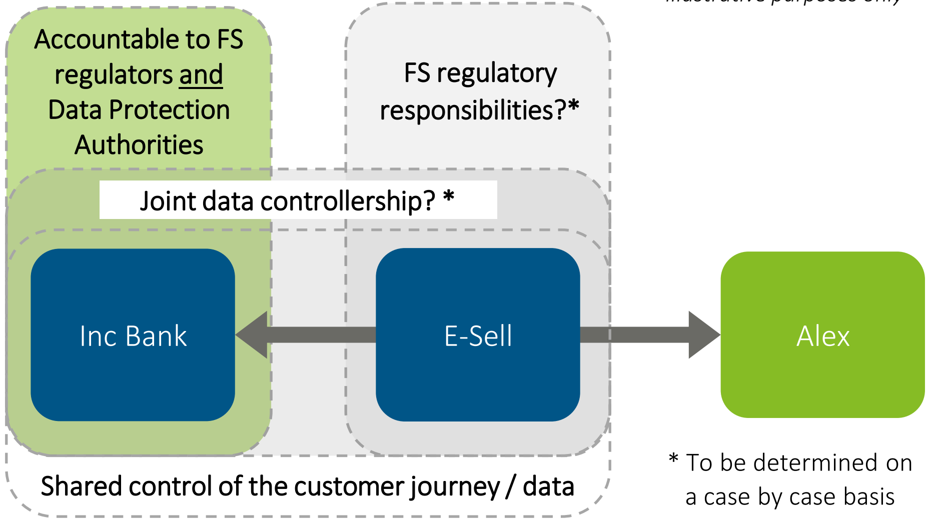
Key strategic considerations for FS firms

- **Risk governance in a shared responsibility model –** Understand areas of shared responsibility with the business brand and other TPPs. Enhance governance and RMFs, as well as contractual arrangements, to address the increased risks arising from embedded finance's shared responsibility model and support the fulfilment of FS and data protection regulatory responsibilities.
- **Operating model and communications –** Design a robust product approval process working effectively with business brands. Customer communications should be clear, compliant, and compatible with the non-financial elements of the consumer journey.
- **Suitability and performance of products –** Conduct regular reviews of business originated through business brands and whether the product/service remains suitable and performs as expected.
- **Reputational considerations –** Consider the reputational impact of evolutions in the business brand's profile, the nature of its customers, and peer products offered on the platform.

Box 2

Embedded Finance shared-ownership of the customer journey vs accountability to regulators

Illustrative purposes only



* To be determined on a case by case basis

- Inc Bank always remains fully accountable to both FS and data protection regulators, but shares control of the customer journey and data with E-sell.
- However, E-sell's role and responsibilities from a data protection and FS regulation perspective will vary depending on the exact data flows and user journey design.
- Inc Bank's governance operating model should address these unique challenges arising from embedded finance. For example, Inc Bank needs effective contractual arrangements and the infrastructure to establish a robust RMF and receive the necessary risk management MI from E-Sell.

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Section 3

Strategic choices for financial services firms

FS firms’ strategic choices

High level decisions

When to play

- Entry into embedded finance – a choice between an early stage pioneer or late(r) entrant.
- Significant regulatory changes could substantially affect market structures, opportunities and risks and embedded finance business model viability.
- Some emerging policies could open up opportunities. For example, Open Finance will enable the opening up of a richer dataset that will allow more tailored and potentially more sophisticated embedded finance offerings.
- Macroeconomic environment and competition may influence timing of entry or scaling.

With whom to play

- Selecting the right embedded finance partners and material TPPs is paramount for FS firms.
- FS firms may need to choose whether to opt for more mature partners offering a more standard product/services vs a relatively new FinTech offering more tailored - but possibly less proven - solutions.
- These relationships will come under significant supervisory scrutiny due to their impact on FS firms' ability to fulfil their regulatory responsibilities. Therefore, a key selection criterion should be business brands and TPPs' willingness and capabilities to support FS firms on regulatory and risk management matters on an ongoing basis.

Where to play

- Embedded finance use cases sit on a spectrum of business complexity depending on their target customers, channels, and offerings. However, as we explored, business complexity can translate to a more complex regulatory environment.
- The regulatory environment will likely affect the risk-reward balance and, therefore, the strategic choice between simpler or more established embedded finance products (e.g. embedded payments) vs more novel and complex ones (e.g. embedded investments).
- Regulatory focus will be proportionate to embedded finance strategies’ potential to cause harm to consumers and affect firms’ viability or market integrity.

Conclusion and final considerations

For a regulated FS firm, the long-term success of an embedded finance strategy will depend on its ability to carefully navigate tensions between commercial priorities, achieving the right regulatory outcomes, and delivering a seamless customer journey.

FS firms must ensure they have the right corporate culture and firm-wide capabilities to balance these – often conflicting – demands. Our report explored some of the critical capabilities FS firms must have, including:

- **A clearly defined and effective risk appetite framework** that fully considers how the unique characteristics of embedded finance - especially the role of business brands - will alter the firm's risk profile across all key risk domains, such as conduct, data, and operational risks.
- **Enhanced risk governance and RMFs** that capture specific embedded finance risk drivers and address any gaps – e.g. shared data protection responsibilities, complex and material TPP relationships, and conduct risks from data monetisation. RMFs should ensure business leads and 3LOD teams work together effectively to identify and manage tensions between business and regulatory objectives.
- **An effective TOM** that delivers a compliant, commercially profitable strategy within the firm's risk appetite. Some key focus areas should include technology infrastructure enhancements (including buy vs build choices), business brands and TPP selection, and digital and data skills across business and 3LOD functions.

Regulatory horizon scanning and regulatory engagement

Taking a longer-term strategic view of regulations will help FS firms ensure their embedded finance strategy delivers over time.

The ability to spot, assess, and respond to the impact of upcoming regulatory changes on the products features and TOM will ensure that the strategy remains relevant and can exploit opportunities early. Examples include the regulation of large digital platforms, data protection reforms, digital ID policy frameworks, and cross-sector and FS AI regulation.

Where regulatory uncertainty emerges, early and constructive engagement with FS and cross-sector regulators will be critical, especially if FS firms plan for embedded finance to become a core component of their overall business in the long term.

Depending on the regulatory complexity associated with their use cases, firms and business brands could consider using regulators' innovation hubs or regulatory sandboxes. This would allow them to "kick the tyres" on the risks relating to their innovative business model early on before committing significant investment and resources.

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Glossary

AI	Artificial intelligence	**PETs**	Privacy Enhancing Technologies
API	Application Programming Interface	**RMF**	Risk Management Framework
BNPL	Buy-Now-Pay-Later	**SME**	Small and Medium-Sized Enterprises
BaaS	Banking-as-a-Service	**TOM**	Target Operating Model
FS	Financial Services	**TPRM**	Third Party Risk Management
GDPR	General Data Protection Regulation	**TPP**	Third Party Provider
GI	General Insurance	**UX**	User Experience
ICT	Information and communications technology	**3LOD**	Three Lines of Defence
MI	Management Information		

CENTRE *for*
REGULATORY STRATEGY
EMEA

The Deloitte EMEA Centre for Regulatory Strategy (ECRS) leads Deloitte's thought leadership in relation to regulatory change, which continues to pose a complex set of challenges for the financial services industry.

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- Provide insights and challenging perspectives to the market and our clients.
- Maintain regular dialogue with regulators, industry experts and clients.

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- Horizon scanning.
- Global collaboration.