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 - *Macroeconomic change drivers: Investment, demographics, regulation and technology*
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Executive Summary

Dynamic

Commentary

State of Play

- The traditional “Finco” conglomerate model is unravelling due to failed synergies and regulation; focus now is quality > quantity
- Macro indicators favour wealth management: UK is ageing, and household pension wealth is rising. Balance sheet assets drag ROE
- Phase 1 of Fintech was unbundling and improving UX; Phase 2 is creating the new processes and tools of finance (e.g., Stripe)

What Happens Now?

- Before, finco moats revolved around capital and scale; now it's about network effects: do users accrue more benefit as more use the service?
 - Two models emerge: financial ecosystem aggregators that broker (e.g., Revolut) and selling-picks-to-miners platforms (e.g., Railbsbank)
- With financial transactions flowing more naturally into processes (e.g., Apple Pay), the embedded finance notion is taking off:
 - Non-Fincos can become hypothetical providers to their users by bolting on white-label services to their offering
- Open Banking makes current account access very fluid and offers streams of knock-on benefits for other industries, including life
- With the Finco value chain becoming fragmented, traditional asset originators become less differentiated in mass-market products
 - Yet, there is mutual alignment with embedded finance protagonists: offer your service as a commodity and receive mass-distribution

Potential Life Book Strategy

- Life InsureTechs are emerging by using a 100% digital appraisal flow to offer rapid quotations and bespoke products
 - For a legacy book, exceptional predictive analytics (along with API, automation and cloud architecture) is necessary for enacting a pivot
- Wealth management presents the most organic horizontal expansion option through an advisory play like wills/probate
- A mortgage broker would offer symbiosis with wealth management through a natural lead generation tool for referring life policies to new buyers
- Embracing embedded finance is the “burn the boats” move and would position well for first-mover advantages if Open Insurance comes to pass

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UK Financial Services: Current State of Play

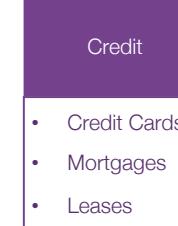
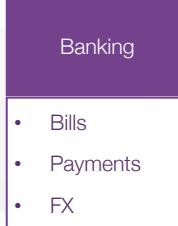
Financial services spread across four product sets and one service wrapper: banking, investments, credit, insurance and the advice ecosystem. Inside each product is the front-end B2C provider, which in turn is served by back-end B2B2C and B2B infrastructure

Consumer-End



Advice

- Tax
- Accounting
- Estate Planning



Front End



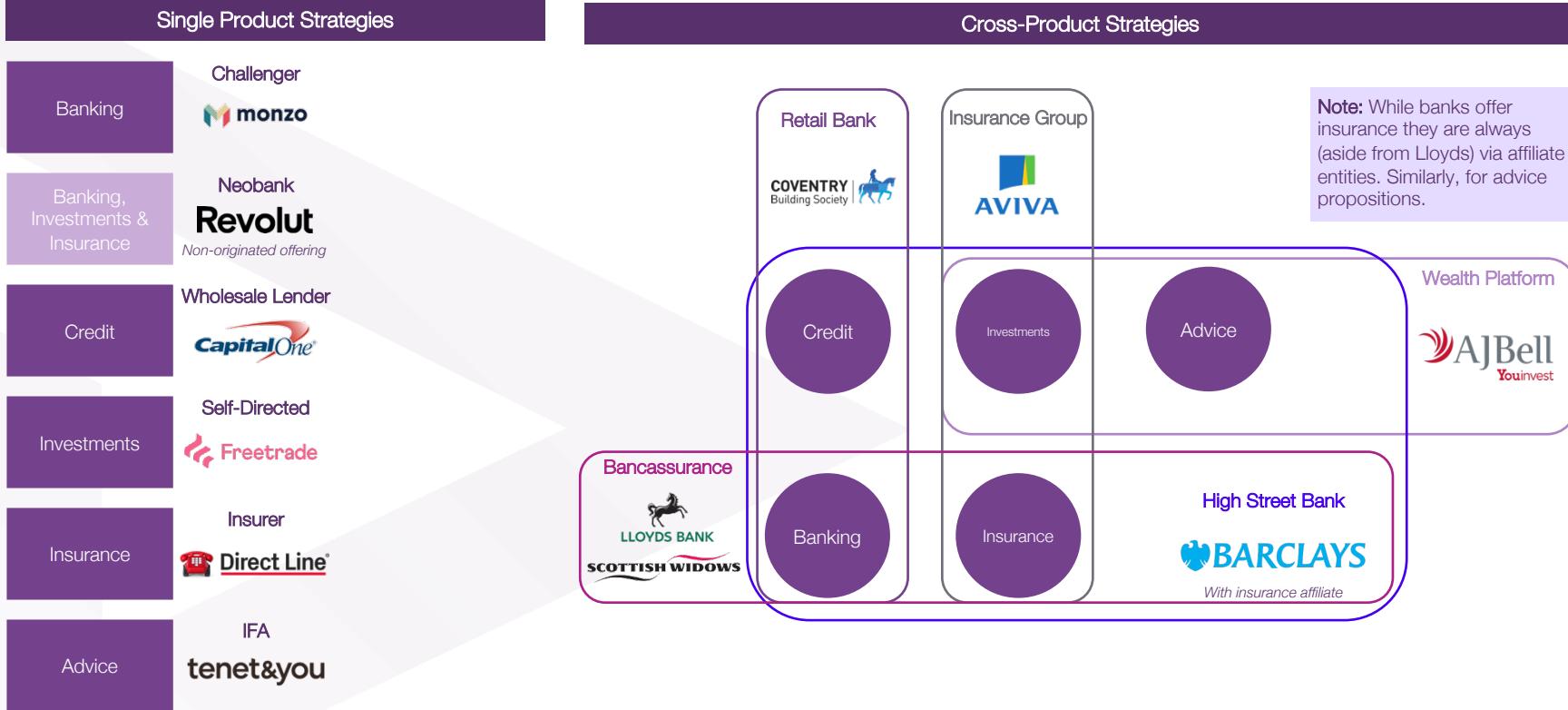
Business-End

Back End



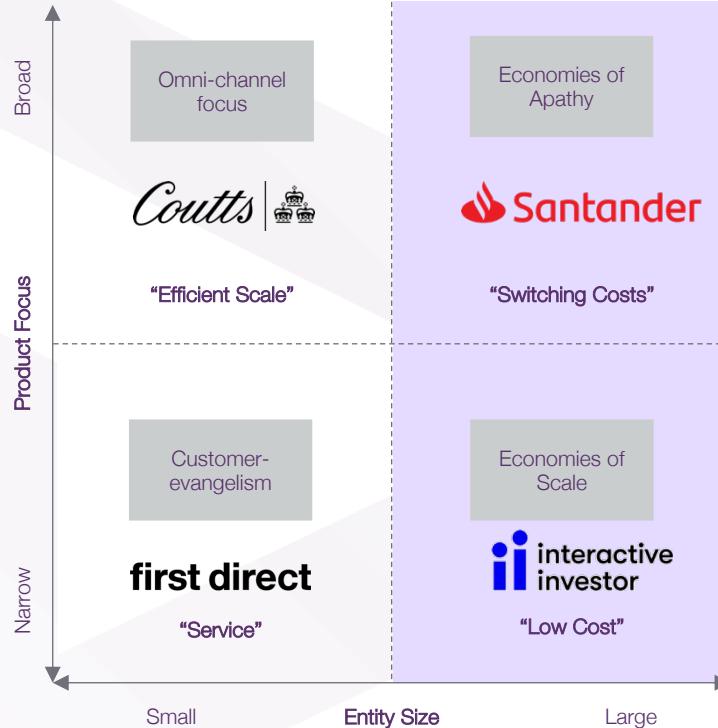
Market Infrastructure



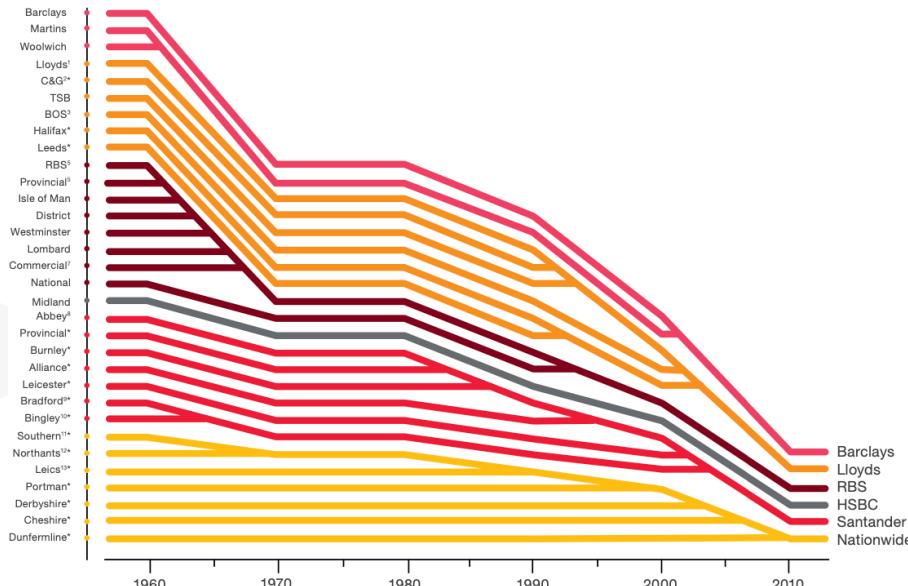


Financial services moats derive from scale: switching costs from a bear-hug conglomerate model or barriers to entry from cost-leadership. Smaller models that succeed in specific niches end up bought by larger competitors as a portfolio bolt-on

Moat Strategies in Financial Services



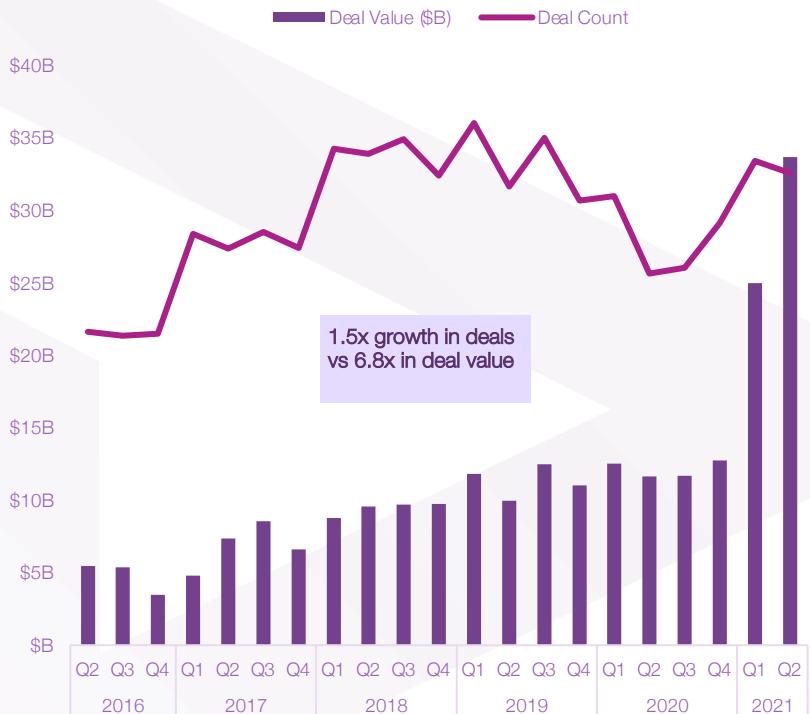
Consolidation of UK Banks and Building Societies: 1960-2016



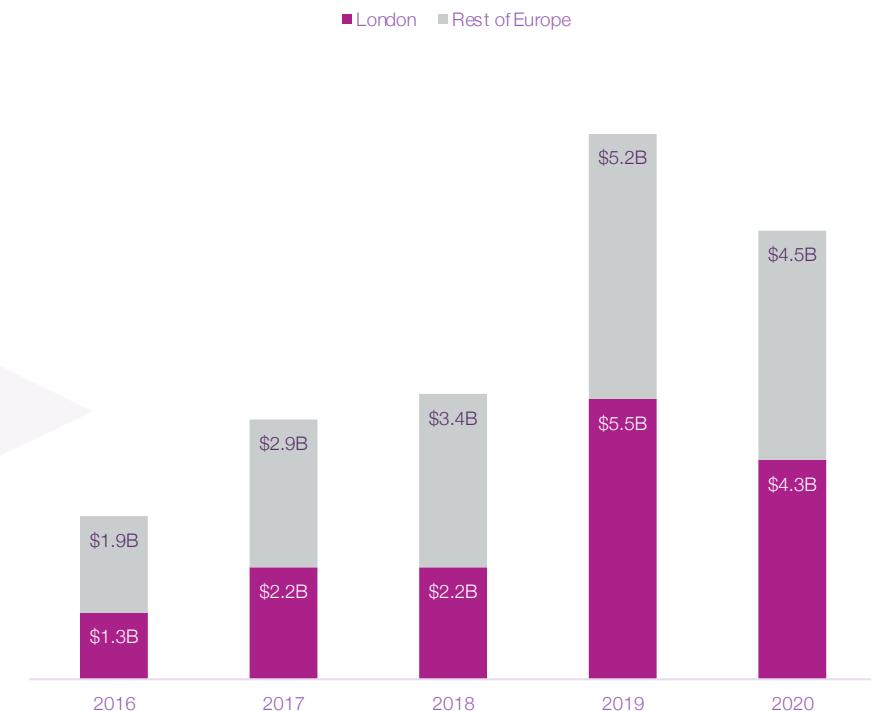
Macroeconomic Industry Change Drivers

Investment: Fintech deal volume is up almost 7x over the past five years and is increasingly becoming concentrated on smaller groups of targets in a race to the top. While the US recently overtook on growth pace, London remains the focus of activity in Europe

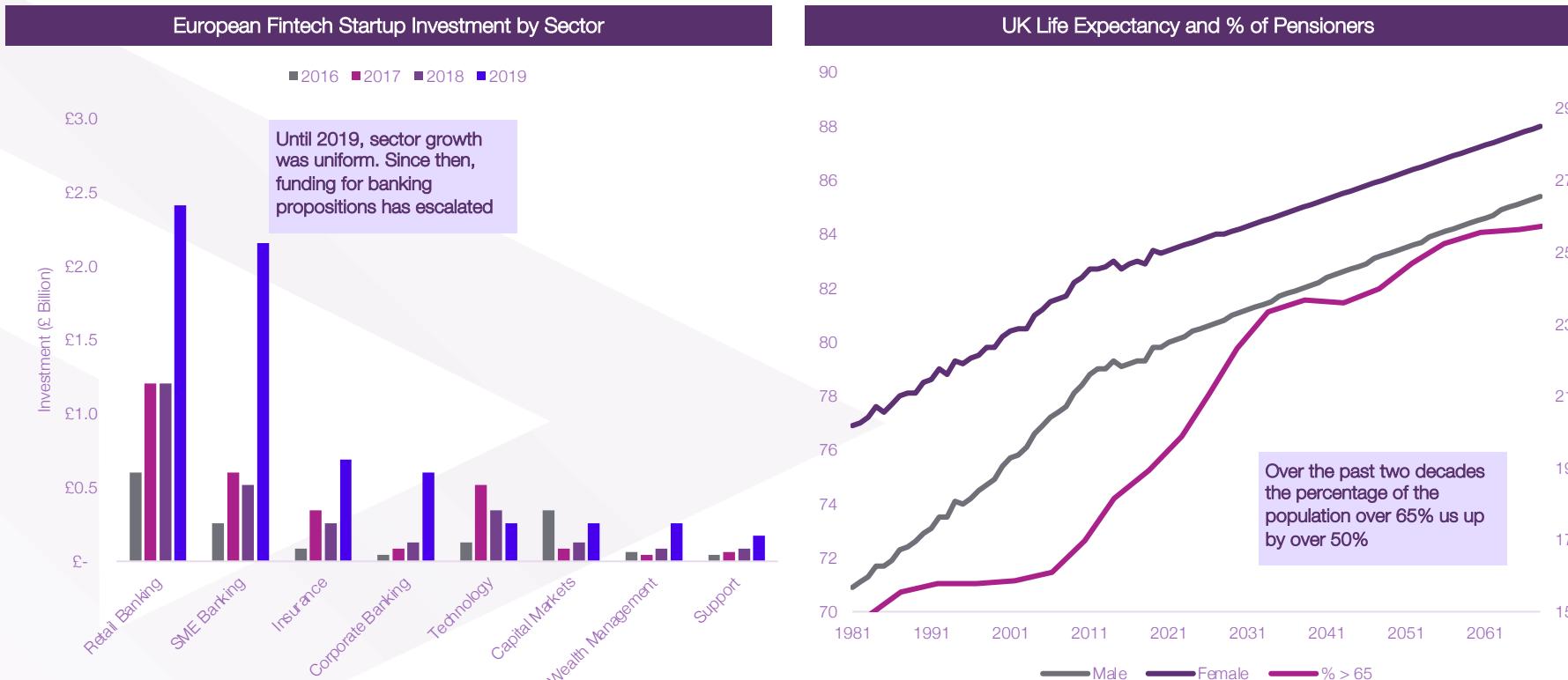
Global Fintech VC Deal Count and Value



Almost Half of European Fintech Investment is Raised in London

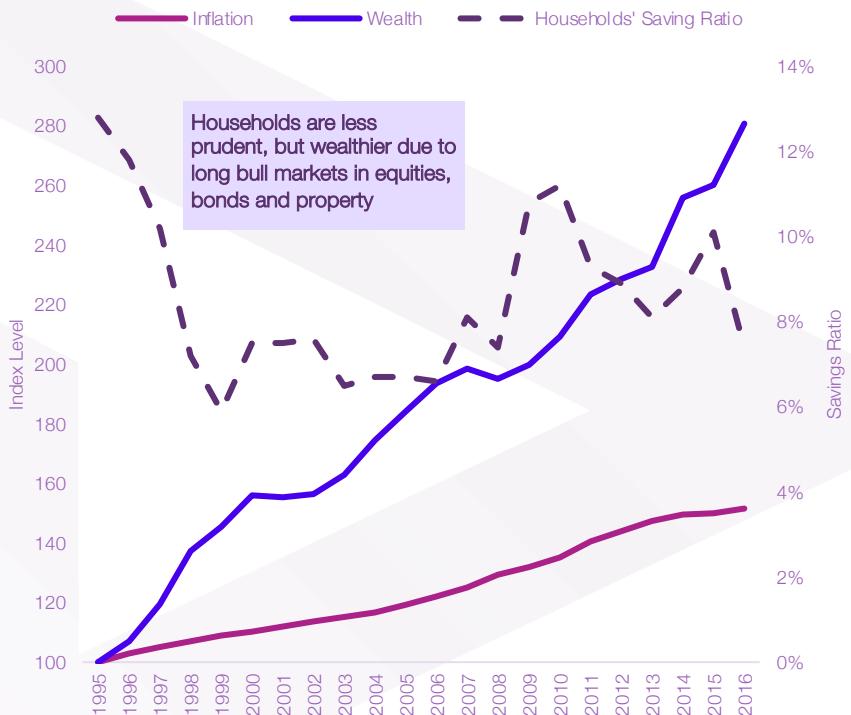


Sector Trends: Banking propositions (e.g., current accounts and payments) attract the most investment in Europe; driven by the thesis of getting to users in the places they transact. Headwinds favour of wealth technology, due to increasing life expectancy and numbers retiring

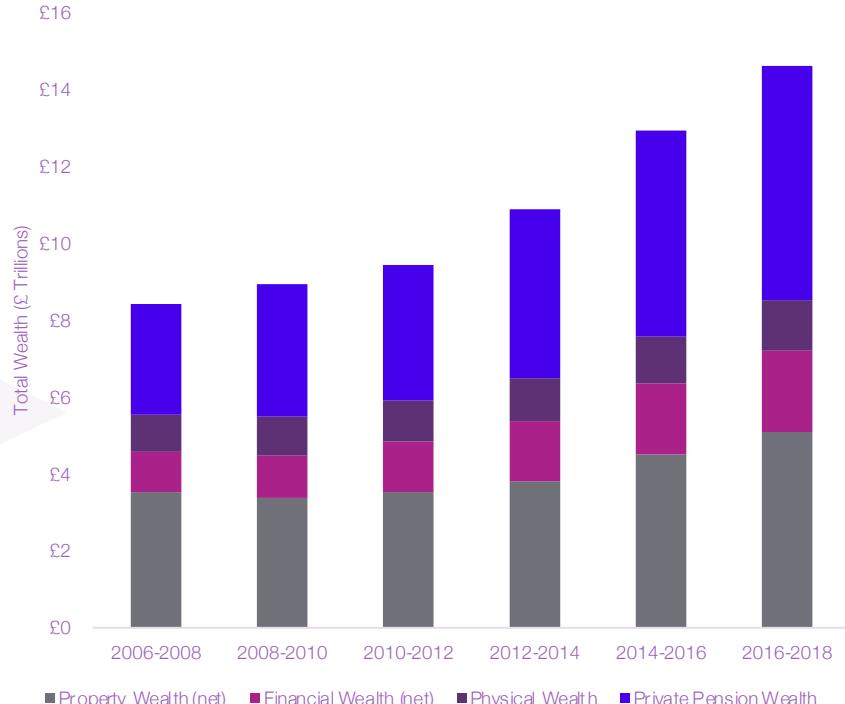


Wealth: In an ageing economy, UK households are accruing wealth faster than inflation, despite plateaued savings ratios. While net worth traditionally centred around real estate holdings, aggregate private pension pots are now the highest source of value

UK Wealth Growth Outstrips Inflation, Despite Falling Saving Ratio

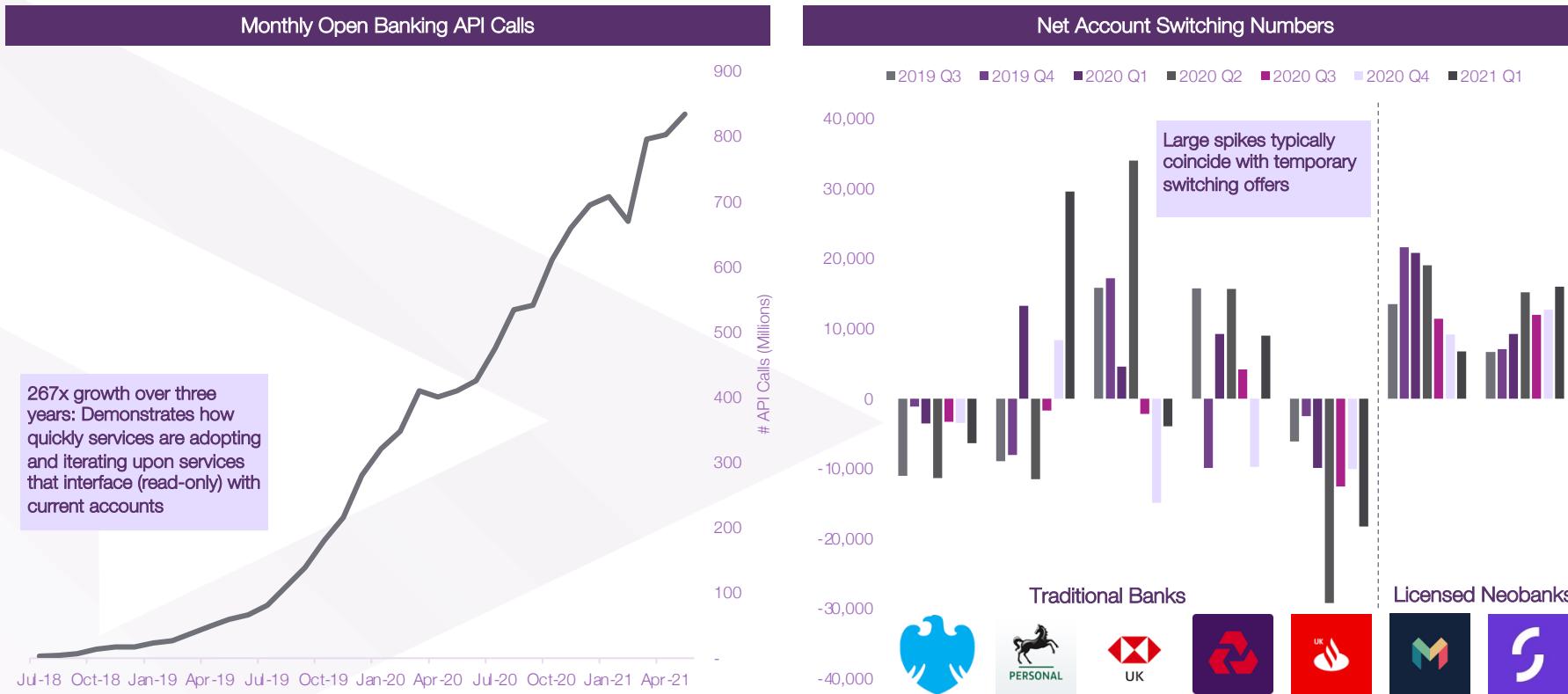


Pension Wealth Growing Faster than Property¹



¹ Physical wealth refers to treasures, heirlooms and collectables. Financial and property wealth calculated net of credit and mortgage obligations, respectively
Source: Macrotrends (inflation), ONS (wealth, savings ratio and wealth mix)

Regulation: Initiatives such as open banking and current account switching have made the UK banking market more fluid. More services can seemingly plug into financial infrastructure, and challenger banks make steady gains at the expense of incumbents



Unit Economics: In the face of interest margin compression, the profitability of financial services has eroded. Diversity of revenue is critical, either through non-capital intensive activities, advisory work or transactional fees, which has made the retail investment market strategically important



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Emergent Themes: Fintech's Effect on Distribution

The fintech era arrived with the notion of unbundling financial services into specialist propositions, delivered with fresh perspectives. Already signs emerge of the next phase: Re-bundling services via embedded finance - selling the tools, without the encumbrance of origination



Then: Conglomerate

Traditional Financial Services

- + Regulatory protection
- + Physical scale
- + Omnichannel model
- + Brand trust

- Regulatory burden
- Internet banking lowers barriers
- Handicapped by branch costs
- Crippling technology debt

Now: Focus

Fintech

- + Empowered by open banking
- + Blue-sky cloud-first technology
- + Outside perspectives on UX
- + Specialisation via unbundling
- + Customer service focus

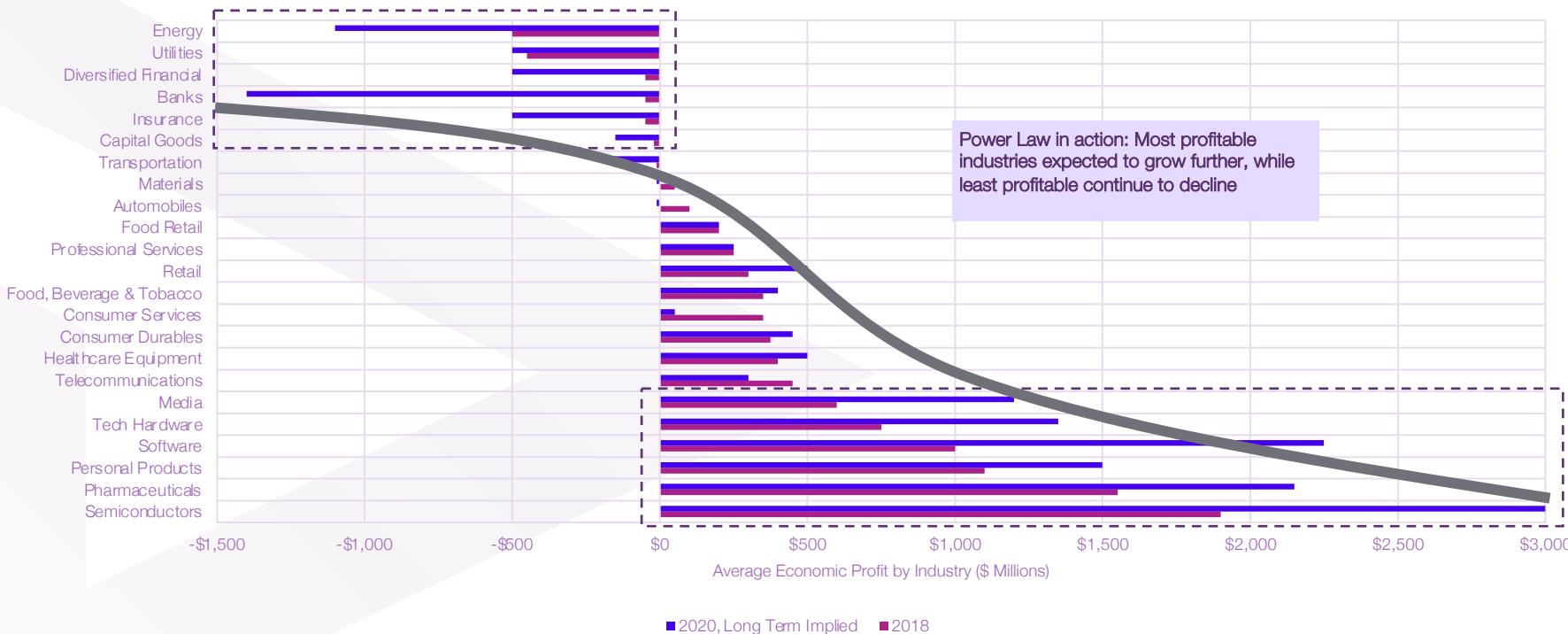
- Millennial-first attitude alienate others
- Vulnerability through lack of diversification
- High marketing spend

Next: Flexibility

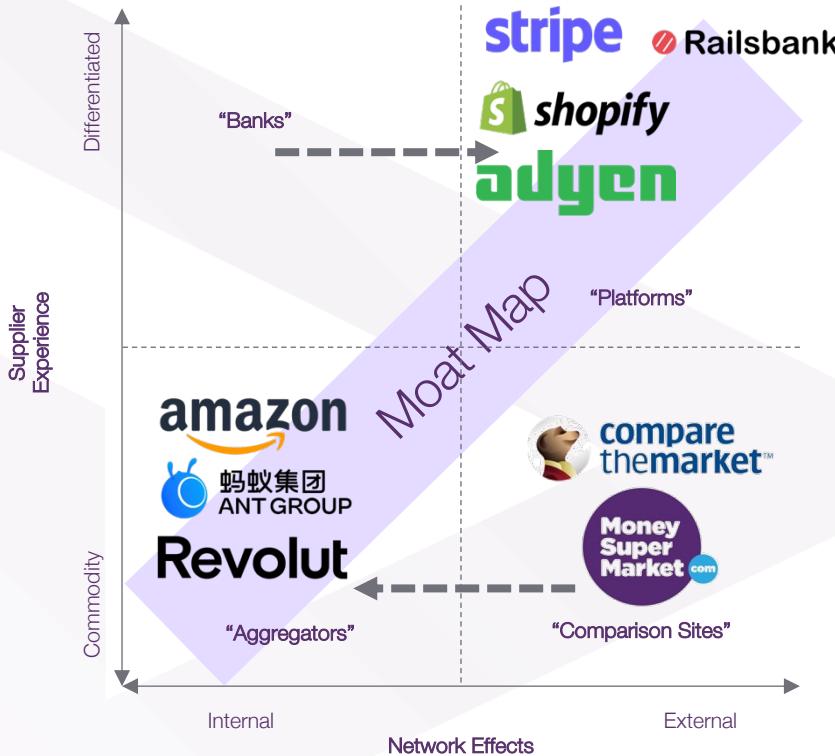
Embedded Finance

- + Customer-agnostic: Provide the tools
- + Building the rails to the system offers a wide range of services on offer
- + Less hubristic B2B marketing
- + Builds reliance and stickiness

Average Economic Profit by Industry: 2018 vs Long-Term Implied



Financial scale gives way to network effects becoming the primary source of moat power in financial services: more utility accruing as more users use the platform. The key is how results are directly realised: for the aggregator's benefit or externally for the platform's customers?



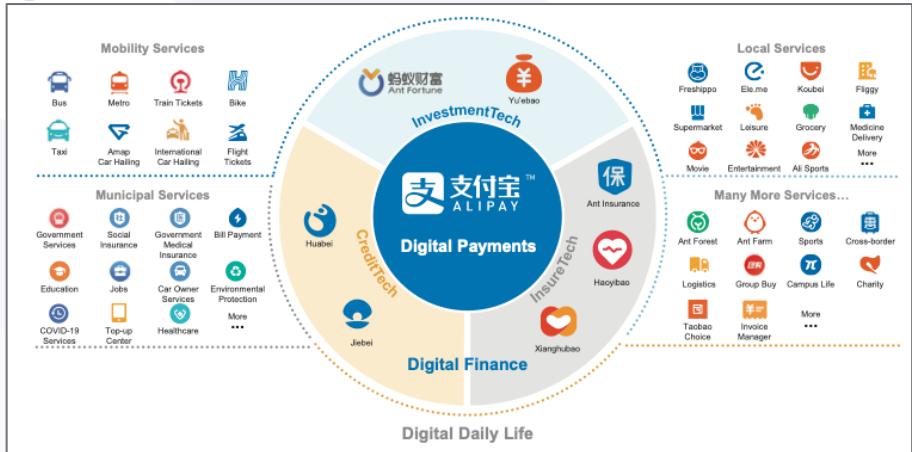
- Platforms and aggregator strategies define the new fintech playbook
- Two variables define their intent:
 - To whom does the network effect accrue?
 - **Internal:** Underlying service directly benefits from more customers
 - **External:** Customers directly benefit from more using the service
 - What is the supplier/customer experience
 - **Commodity:** White-glove, one-size-fits approach
 - **Differentiated:** Self-service, DIY approach
- **Aggregators** collect buyers and sellers and provide discovery ("Top-down")
 - E.g., Revolut offers full-suite banking services but barely uses its balance sheet, instead, taking affiliate commissions from providers
 - Comparison sites are aggregators but only capture discovery
- **Platforms** offer tools and infrastructure services to others ("Bottom-up")
 - E.g., Railsbank banking-as-a-service tools allow retailers to offer wallet-based solutions for customers, white-labelled in its brand
 - Banks were once platforms through their branch networks, allowing for greater reach and service offerings for customers via the network

Aggregators build universes allowing buyers and sellers to connect exclusively through their ecosystem. The only part of the financial value chain they fulfil is customer acquisition. Platforms inspire modular products, allowing “synthetic” banks to emerge

Aggregators: Top-Down Closed-Ecosystems

The Ant Financial universe offers users financial products via the lifestyle vertical they fit. The seamless integration captures more of the customer wallet. For example:

Air tickets: ticket brokerage fee > credit payment plan > travel insurance > car rental



Other Examples:

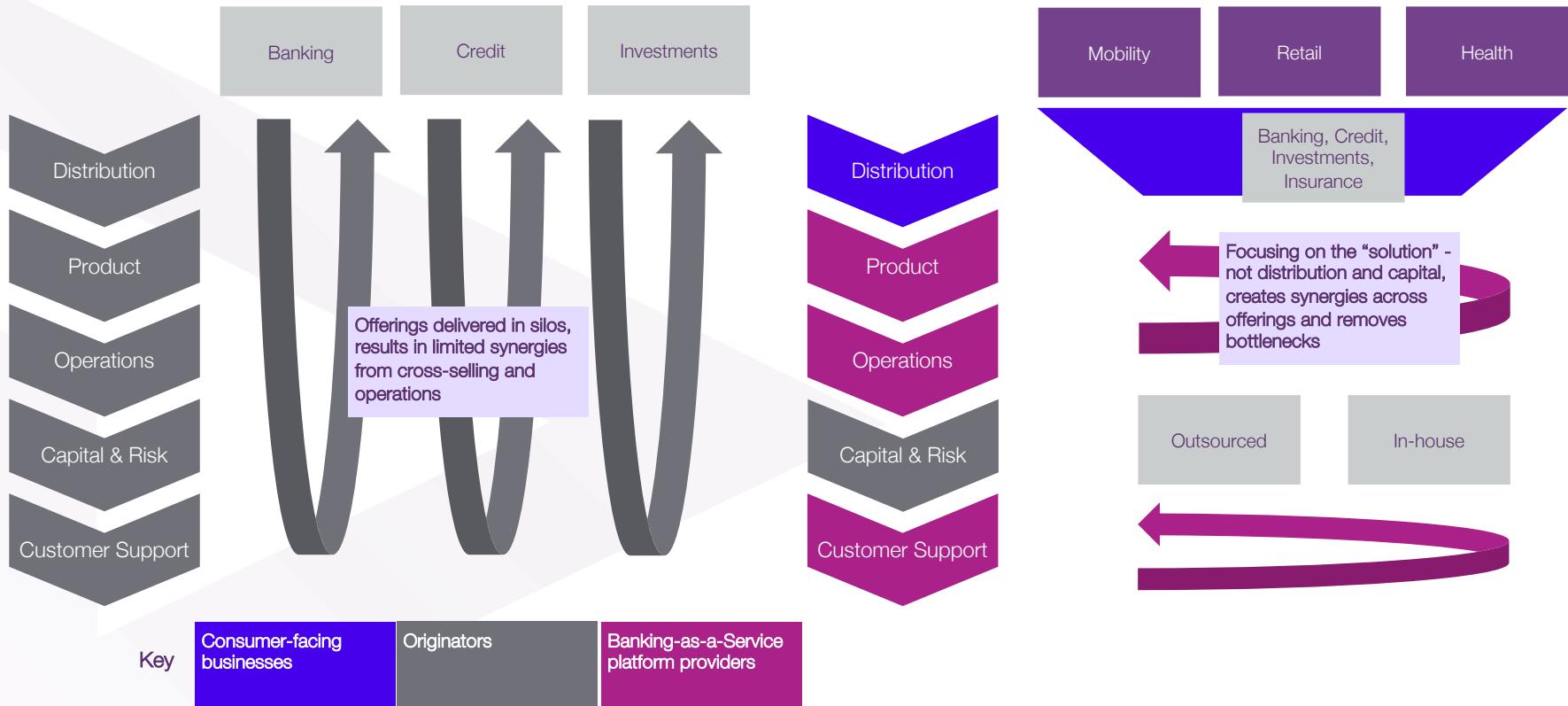


Platforms: Bottom-Up Lego Blocks

Wise built its proposition step-by-step. It has no banking license, nor market makes FX, yet offers full-service current accounts for retail and corporates. By bolting on new services and countries it can expand without large sunk costs.



Building and owning the entire financial services value chain leads to “siloisation”, which inhibits the true modern differentiator, distribution. By offering ready-made financial product suites to B2C-facing industries, banking-as-a-service providers create and benefit from scale

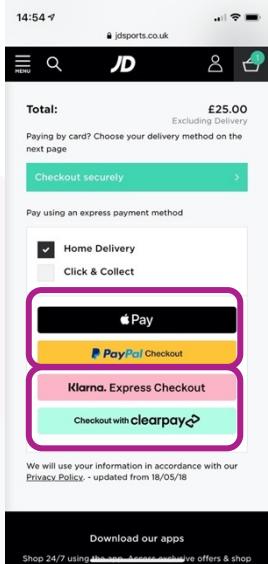


Consumer-facing services have a distribution and UX advantage for embedding external financial products into their customer flow. Open Banking allows smaller upstarts to layer services above existing infrastructure and offer products to users without needing to build integrated offerings

Embedded Finance

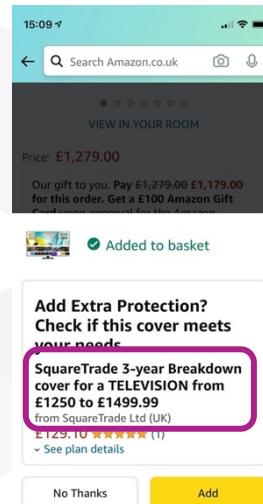
Banking and Credit

Apple Pay **Klarna.**



Insurance

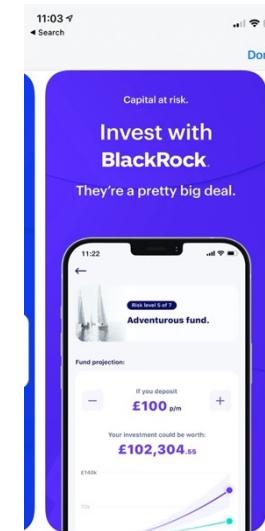
amazon
protect



Open Banking

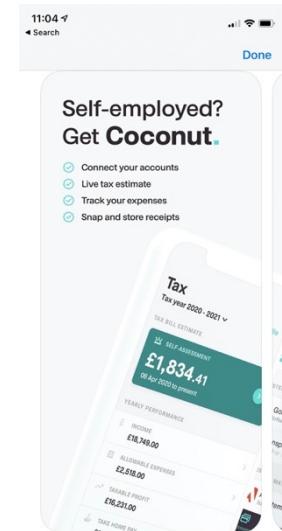
Investments

chip



Advice

Coconut.



Embedded finance productise services by specific end-solution offered, allowing for more bases to be covered, natural cross-selling and self-service client flow. Traditional finance offers services through rigid categories, which hampers discovery and causes bottlenecks

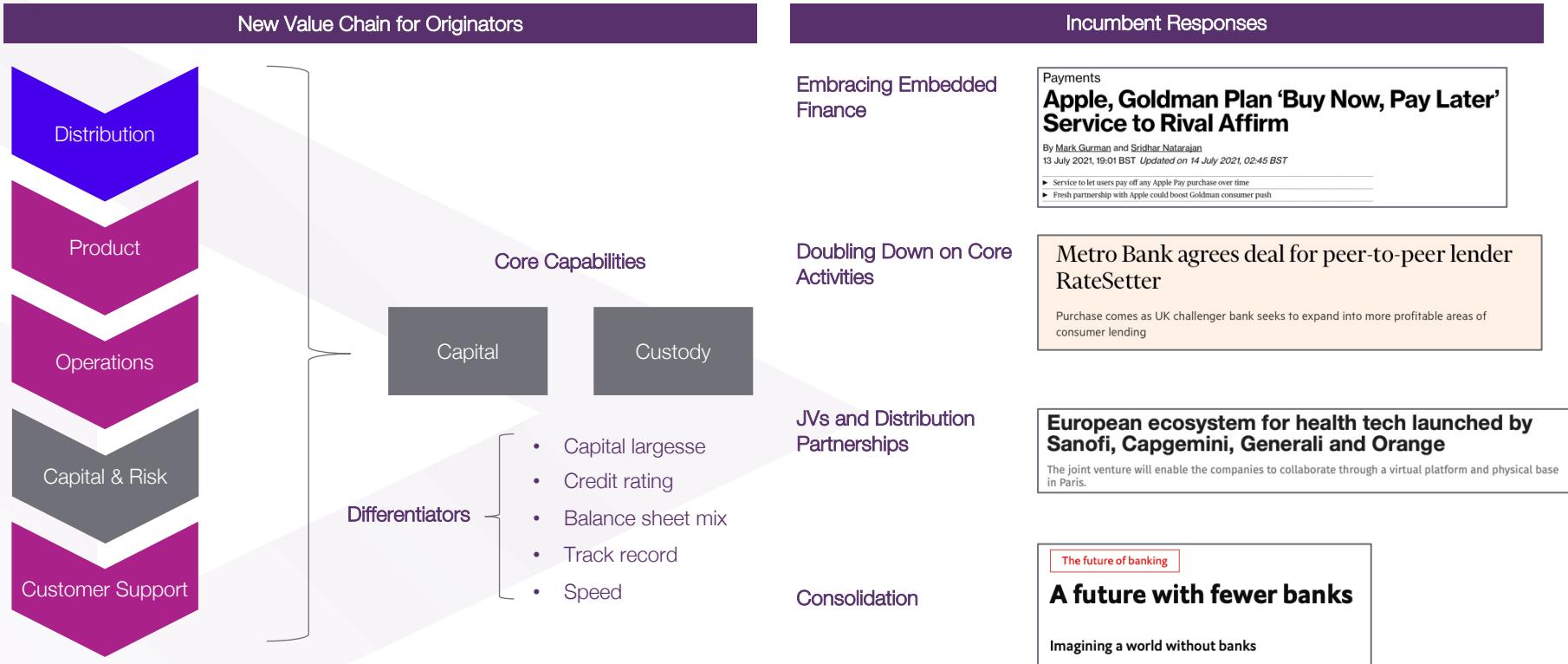
Embedded Finance: Stripe's Service Proposition

PAYMENTS	FINANCIAL SERVICES	BUSINESS OPERATIONS
 Payments Online payments	 Issuing Card creation	 Radar Fraud & risk management
 Payment Links No-code payments	 Sigma Custom reports	 Atlas Startup incorporation
 Invoicing Online invoices	 Climate Carbon removal	 Tax Sales tax & VAT automation
 Billing Subscription management	 Identity Online identity verification	
 Connect Payments for platforms		
 Terminal In-person payments		

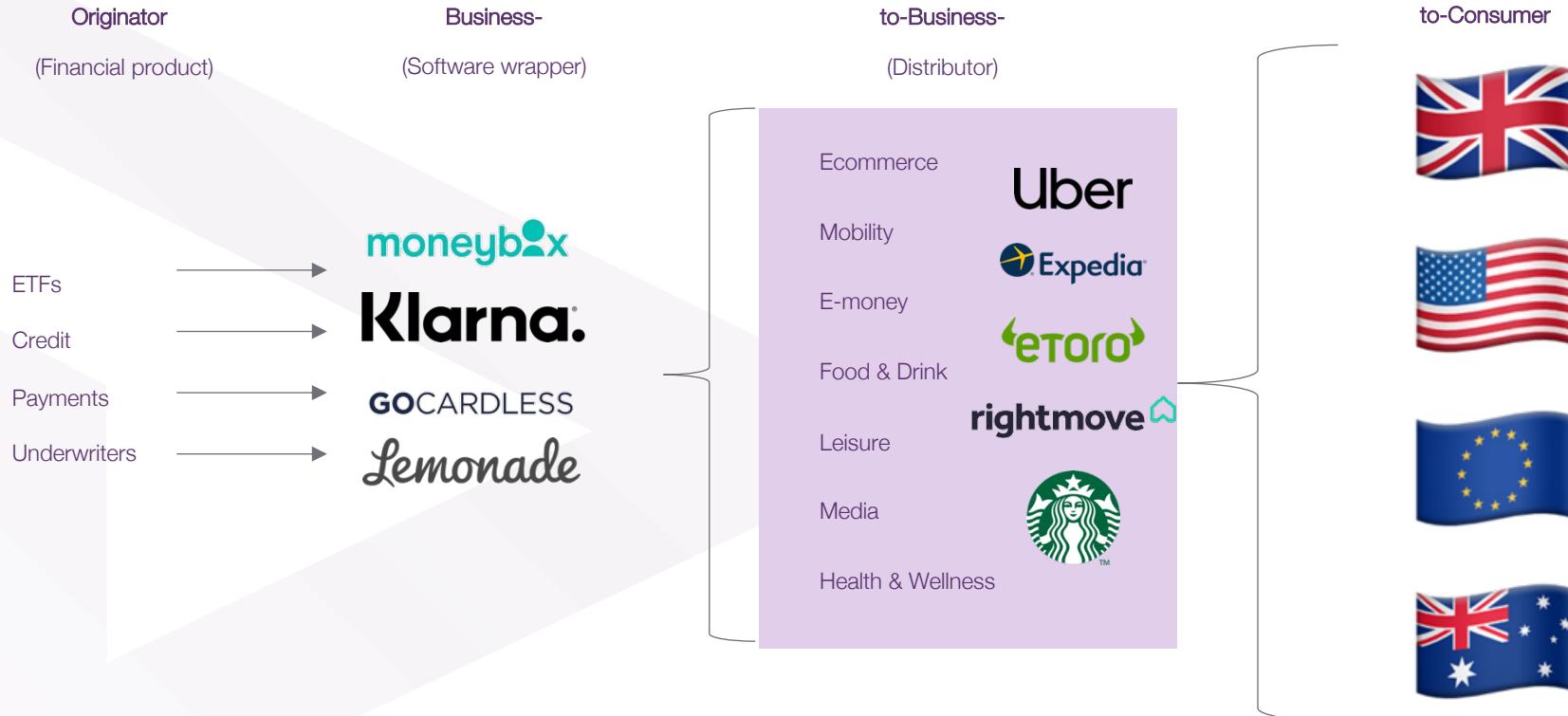
Traditional Finance: Service Proposition

 HSBC UK	Banking	Borrowing	Investing	Insurance	Wellbeing	Help
 Standard Life	Pensions & Retirement	Savings & Investments	Financial Advice	Contact & Help		
 AMERICAN EXPRESS	My Account	Cards	Travel	Insurance	Rewards	Business
 AVIVA	Insurance	Investments	Retirement	Health		
 Fidelity INTERNATIONAL	Services ▾	Guidance & tools ▾	Funds ▾	Shares ▾	Pensions & retirement ▾	Markets & insights ▾

With the value chain of financial services becoming modularised and distribution increasingly offered by end-services, the role of traditional originators shifts to capital, custody and specialisation



Originators may be reduced to mere capital providers, but for the best in class, their distribution efforts are amplified by partnering with embedded finance players. The B2B2C model creates mutual interest: consumer-facing businesses distribute and Fincos originate



Addendum for Life Sector

The UK government consolidation pension dashboard may catalyse the L&P market similarly as seen with Open Banking. While Open Insurance has no target introduction date, the insurance market benefits from the knock-on effects of more open protocols in other financial services

Give and Take: Insurance Knock-on Benefits from Open Banking

Current uses cases of Open Banking and PSD2 standards in insurance:

1. Account number name check
2. Improved debit collection process, e.g., reminder notifications
3. Increased accuracy for risk profiling, e.g., assessing transactions
4. Personalised financial advice, e.g., deriving insight from spending
5. Dynamic and bespoke quoting
6. Alternative payment methods
7. Aggregating external financial accounts
8. Retrieving updated personal details
9. Verifying identification

Pension Dashboard October 28 2020

Pensions dashboard delayed until 2023

Will the 2023 government central pension dashboard stimulate consolidation of old pension assets?

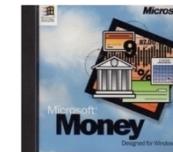
Open Banking Portal Apps: The “New” MS Money

The Consolidation of Personal Finances Over Time

< 1995



1995 - 2010



2010 - 2017



> 2017



Yolt's Cross-Product Connectivity

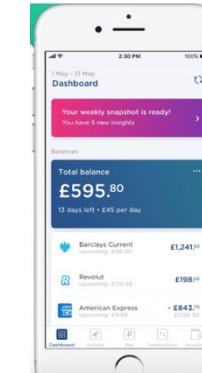
P&C



Life



Banking



Wealth



Savings



Credit

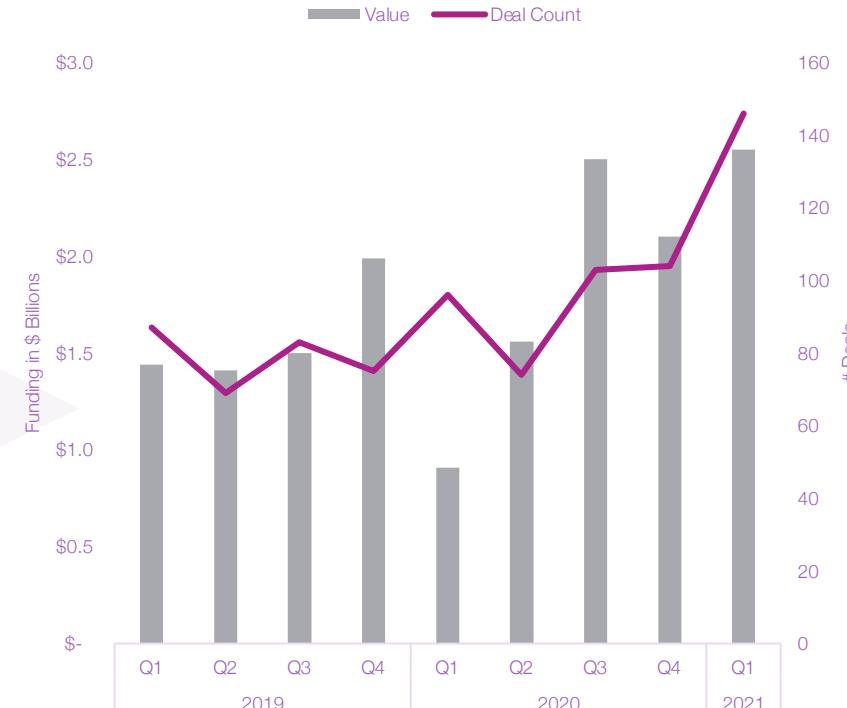


\$7bn total investment went into InsureTech startups during 2020. Within life, the most well-funded players follow a similar strategy of partnering with underwriters, improving the front-end experience and relying on data to automate the process

Quarterly Global InsureTech Funding: 2019 -2021

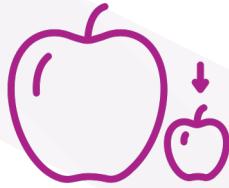
Name	Country	Stage	Funding	Notes
Ethos	🇺🇸	Series D	\$406.5m	\$2.7bn value, writes \$20bn p/a, interfaces between customer and underwriter
Bestow	🇺🇸	Series C	\$137.5m	\$490m value, offers API platform for embedded life insurance wrappers
Ladder	🇺🇸	Series C	\$94m	Backed by Allianz
YuLife	🇬🇧	Series B	\$86.6m	\$346m valuation, uses gamification elements to engage policy holders
Xempus	🇩🇪	Series C	\$57.5m	Pension and life platform for employees
Fabric	🇺🇸	Series B	\$30.5	Range of cover types across insurance
Insurify	🇺🇸	Series A	\$29.6m	Quote comparison engine
Signal Advisors	🇺🇸	Series A	\$16m	Life and annuity platform for advisors to use for working with clients
Xiaoyusan	🇨🇳	Series B	\$14.5m	Online platform backed by Sequoia
Sproutt	🇺🇸	Series A	\$12m	AI-based model of rewarding policy holders for positive health actions

Quarterly Global InsureTech Funding: 2019 -2021

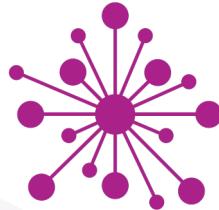


The playbook for InsureTech startups in the life space is following a similar strategy to Neobanks:
Partner with legacy originators and instead focus on improving customer experience through service and customisation

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Micro Policies



Expanded Datasets



Community Building



Gamification



ETHOS

- Fully digital, mobile-only origination and underwriting enables
- Targeted at emerging markets and younger customers
- Health bundle with telemedicine



- Faster decision making
- Utilises 300,000 digital data points
- Plug-and-play underwriter connectivity
- 40% of policy holders earn \$60k or less and under 40¹



- Social concepts for sharing goals for saving and legacy
- Digital wills maintain user interaction
- Rolling ten-year plans to allow first time users to dip their feet

"Life insurance is a \$130 billion market that has seen a 45% decline in policyholders over the last 20 years. The industry has failed to convince consumers that their product is valuable"

Sproutt press release²

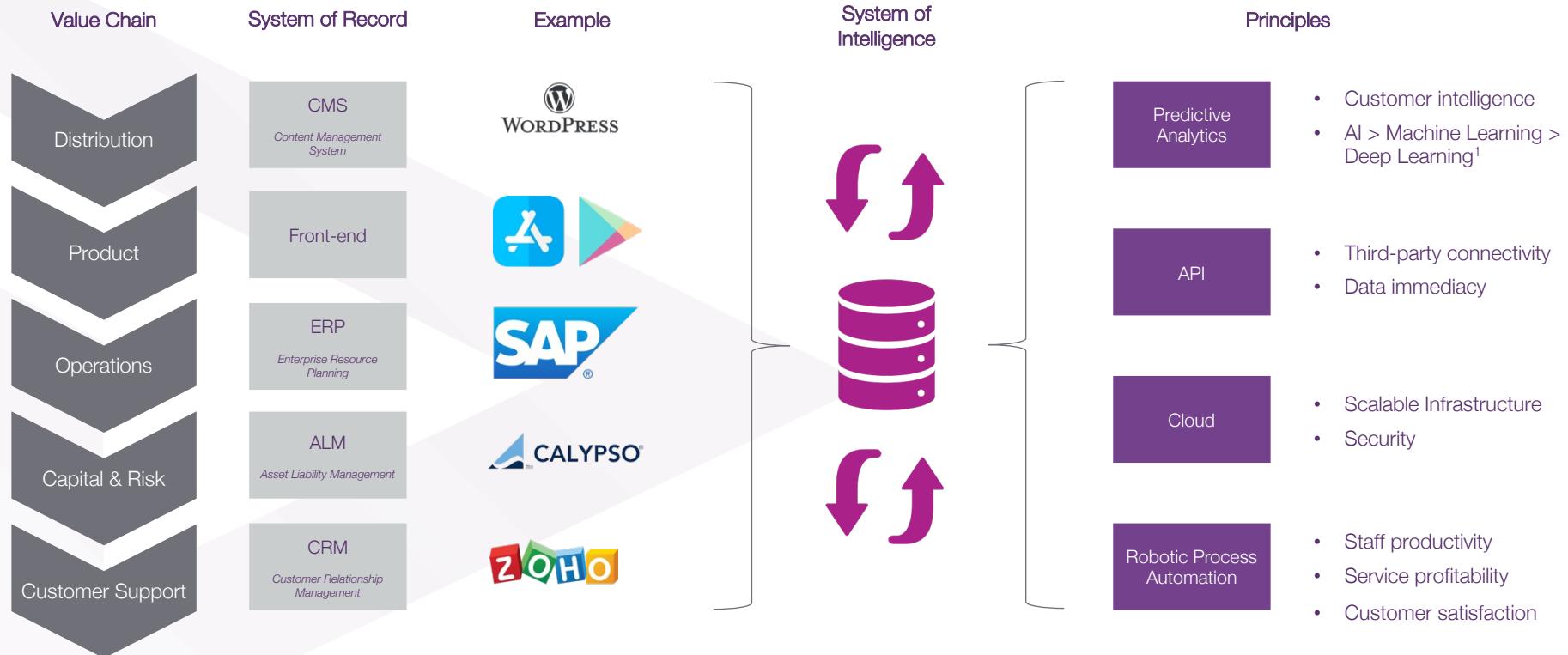
¹ TechCrunch "Ethos picks up \$100M at a \$2.7B+ valuation for a big data platform to improve life insurance accessibility"

² Sproutt press release "Sproutt Launches; Uses Data and AI to Finally Reward Life Insurance Customers Who Live Healthy"

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Buying a Book: Technology Strategies for Legacy Asset Books

Each part of the finance value chain has its system of record; competitive advantage derives from linking this data together seamlessly. Such central systems of intelligence enable insight to drive sales, innovative product offerings and churn forensics. Four key pillars drive such systems



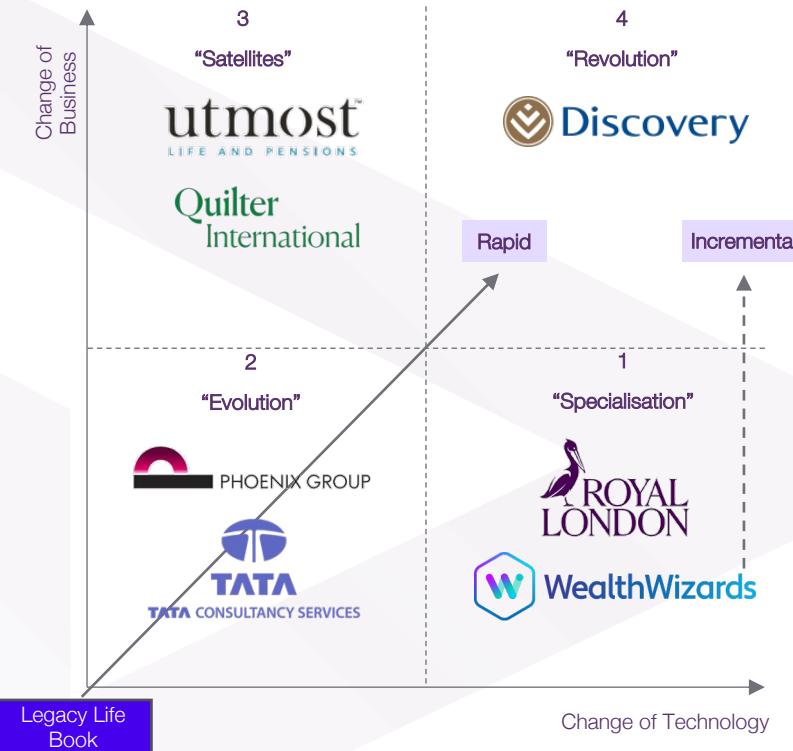
¹ Artificial Intelligence "AI" is the broad concept of making machines (and automated processes) more intelligent. Machine Learning "ML" is a continuation of the theme but applied across systems that self-learn and improve over time through statistical learning algorithms. Finally, Deep Learning "DL" is machine learning across far greater scales and data sets.

High-Level Data Checklist by Policy Type (US-centric)

Examples of Data Criteria and Purpose in Underwriting

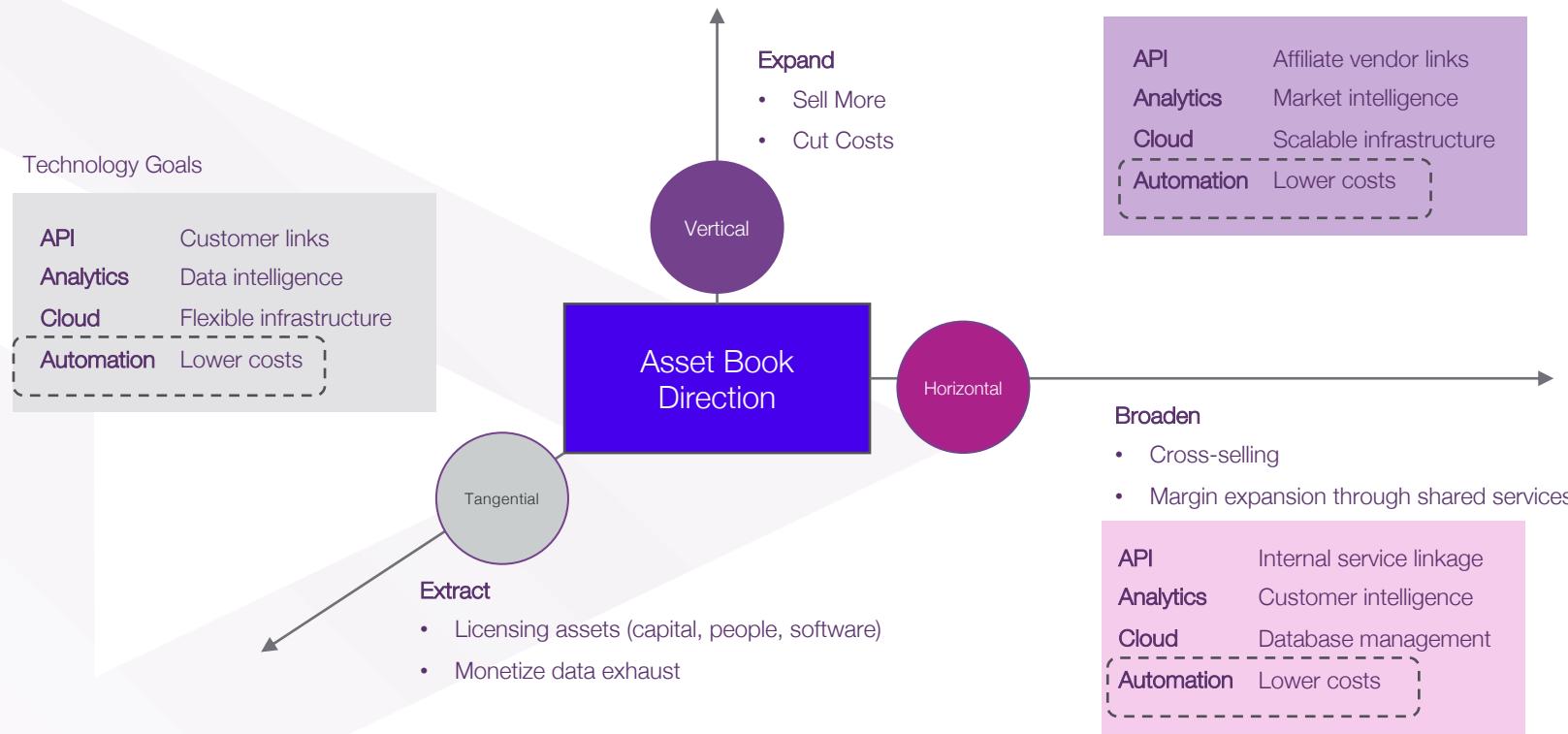
	Fully Underwritten Policies	Accelerated Underwriting	Simplified Issue
Application	✓	✓	✓
Medical Exam	✓		
Driving License Record	✓	✓	
Prescription Records	✓	✓	✓
Medical Records	✓	✓	
Public Records	✓	✓	
Social Media	✓		

- **Financial records: Mortality risk**
 - Income, employment and credit score
 - Debt levels, bankruptcies and liens
 - Utility bill patterns, gambling habits
- **Digital images: Confirm age, BMI and smoker status**
- **Social Media: Verify applicant data, personality and hedonism check**
 - Public social media footprint
 - Forum and news search
- **Postcode level data: Filling in missing profile data**
 - Crime, pollution, congestion, school quality, transport connectivity
 - Cross-referencing profile vs local mortality rates
- **Health and Wellness: Current and future mortality risks**
 - Data from wearables (e.g., steps and heart rate)
 - Lifestyle preferences from websites (e.g., food choices)
- **Geotracking: Confirming applicant data and assessing lifestyle**
 - Travel patterns: countries and locations
 - Exercise and living patterns

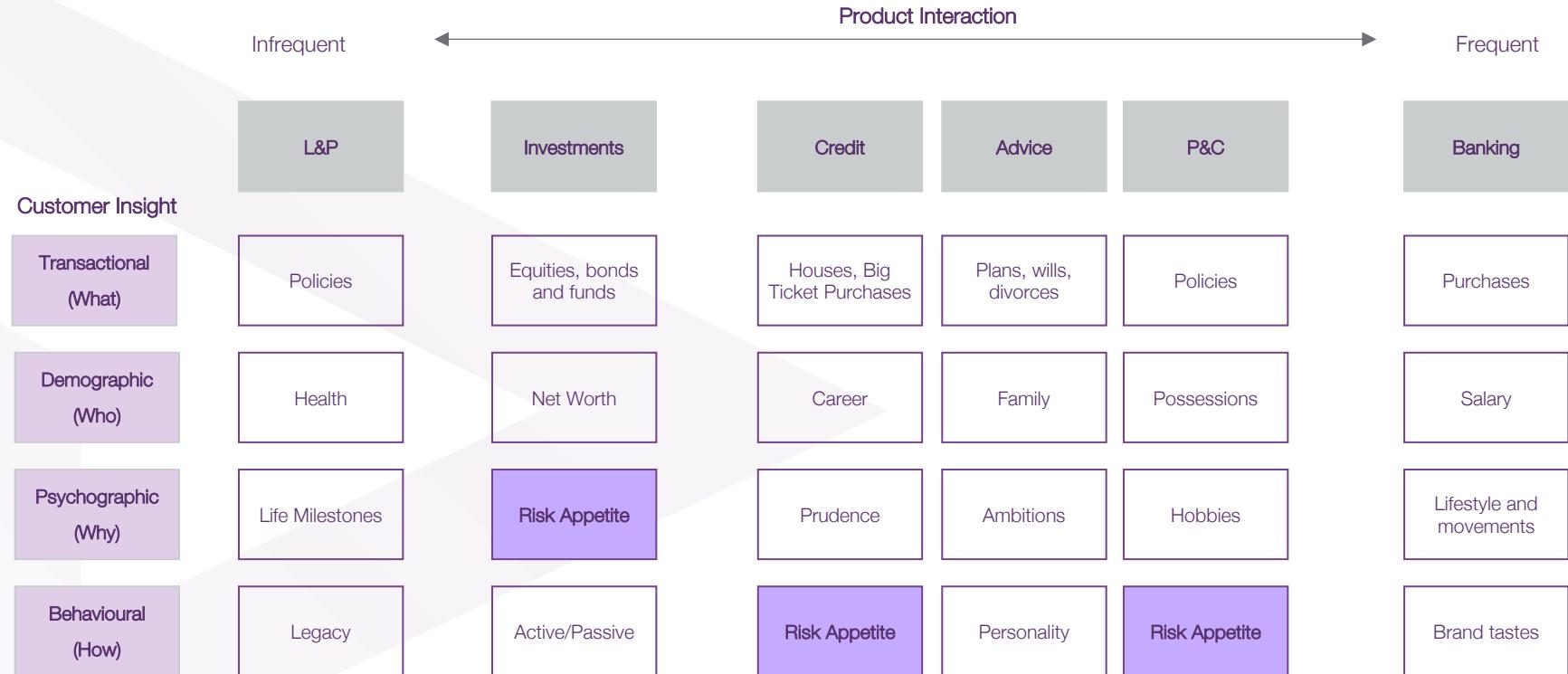


- 1. **Specialisation:** High technology change & low business change
 - Deepening impact within a vertical through adoption of new technologies
 - E.g., Royal London buying WealthWizards, offering digital financial advisory and customer service options
- 2. **Evolution:** Low technology change & low business change
 - Maintaining status quo through combination of a high volume book play and without layering much change across the book
 - E.g., Phoenix using external consultancy TCS to develop incremental solutions for individual portfolios
- 3. **Satellites:** Low technology change & high business change
 - Efforts to diversify operations, without coherent integration of technologies
 - E.g., Utmost buying Quilter International adds new capacity to offering, but built more along the lines of a distributed offering
- 4. **Revolution:** High technology change & high business change
 - Simultaneously adopting technological and business change, to both enhance existing offering and complement with new offerings
 - E.g., Discovery's adoption of technology diagnostics into brands like Vitality were innovative and changed paradigms (preventative goals), it also invests heavily in emergent propositions (Ping An Health)
 - E.g., Goldman Sachs' rapid moves into retail banking via acquisitions (Nutmeg), greenfield projects (Marcus) and partnerships (Apple)

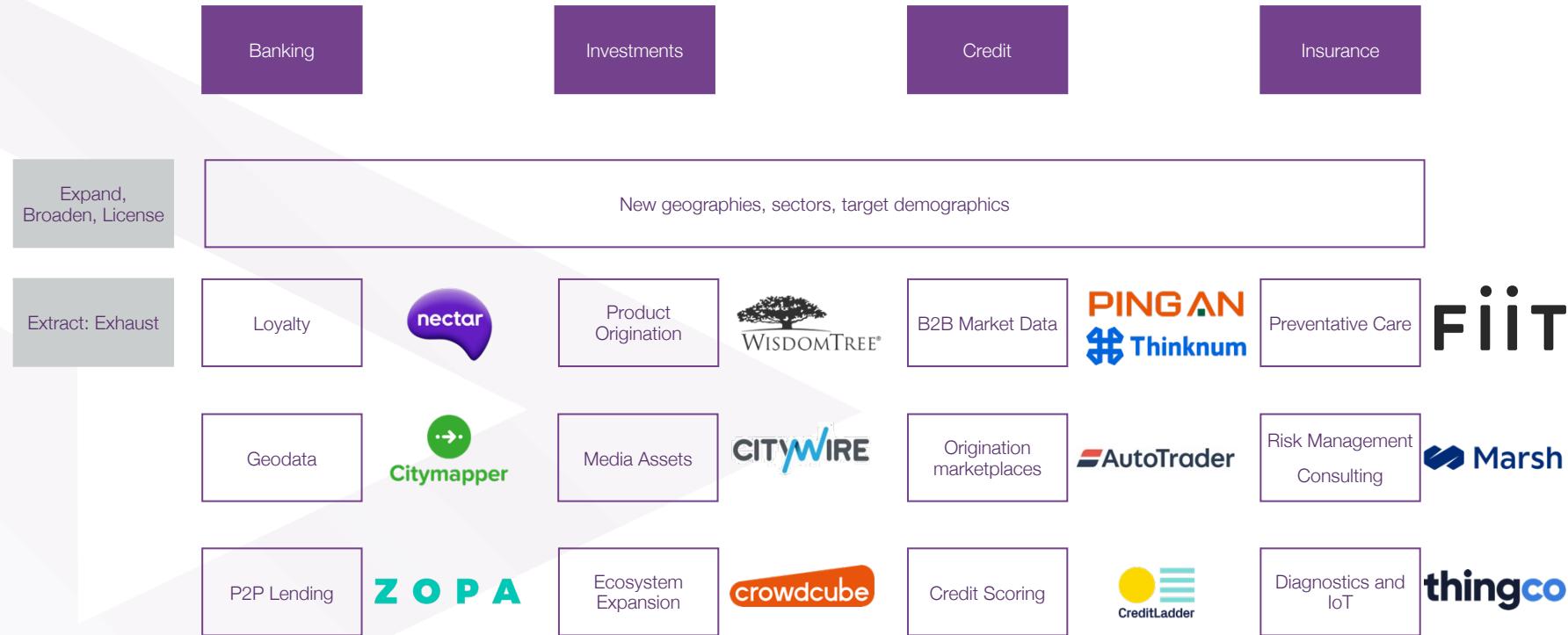
Depending on the book strategy, technology requirements will have different nuances. However, automating processes has relatively uniform results across each plan and represents the most flexible of the pillars for responding to book strategy



Framing the potential adjacencies of a book comes down to understanding a customer's personality and physical/intangible possessions. Each financial service pillar has a range of ancillaries, but what is most applicable between them is ascertaining **risk tolerance and appetite**



Build, expand and licensing comprise similar playbooks across products. In terms of ancillary opportunities from data extraction, each vertical has options for monetising behavioural traits of users. Commercialising such data needs the intent of increasing underlying sales or cutting costs



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Recent Transaction Trends & Case Studies

UK-Related Banking and Credit Deals: Trend of digital wealth/trading platforms purchasing card issuers to offer customers e-wallet solutions. In credit markets, notable Fintechs Jaja and Tandem acquired significant legacy books to migrate to their new tech platforms

Banking and Payments

	Date	Target	Acquirer	Deal	Rationale
Banking and Payments	Mar '21	ETFmatic	Aion Bank	Undisclosed	Warburg Pincus owned bank expanding into wealth/roboadvising
	Jul '20	Marq Millions	eToro	Undisclosed	Wealth/trading platform buying payment solutions to offer integrated ewallets
	Jun '20	Swipe.io	Binance	Undisclosed	Crypto platform buying payment solutions tech to integrate ewallets
	Apr '20	Ebury	Santander	£350m majority	Building up capital-lite corporate B2B service proposition
Credit	Jul '21	Mojo Mortgages	RVU	Undisclosed	Digital broker acquirers by holding company building a portfolio play
	Feb '21	MortageGym	LSL	£2.4m M&A	Advisory house buying a marketplace
	Aug '20	RateSetter	Metro Bank	£384m book sale and £12m M&A	Low credit rating bank buying a high-yielding book of assets
	Jul '19	Bank of Ireland Credit Cards	Jaja	£530m book sale	Tech buying book. KKR and Centerbridge Partners funded purchase of Royal Mail and AA credit cards
	Jan '18	Harrods Bank	Tandem	£400m book sale +M&A	Deposit-only Neobank purchasing a back book to fund its liabilities



Enhanced corporate treasury services enable:

- Cheap short-dated funding sources
- Fee income from derivatives
- Relationship on-ramps for advisory (M&A, D/ECM, etc.)



Consumer peer-to-peer lending undercuts balance sheet lending through lack of reg cap.

RateSetter is aligned with Metro Bank's existing book (riskier profile, due to high liability cost). Demonstrates a re-focus on core activities and widening distribution net through an online marketplace platform.

UK-Related Wealth and Insurance Deals: Consolidation and growing AUA is a common trend in the wealth market. Both sectors show a trend of augmenting in-person propositions with digital and automated offerings

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Wealth,
Advisory
and Life

	Date	Target	Acquirer	Deal	Rationale
Wealth, Advisory and Life	Jun '21	Nutmeg	JPMorgan	£700m M&A	Long-life robo pension book for entrance into UK retail market. Offers distribution for fund products and on-ramp to current account
	Apr '21	Dext	HG Capital	£22.7m majority	Paperless bookkeeping software, strategic asset for access to two-sided market of accountants and SMEs
	Apr '21	skew	Coinbase	Undisclosed M&A	Crypto wealth platform acquires institutional analytics business to assist drive into recurring income investment data market
	Apr '21	Wealth Wizards	Royal London	Undisclosed, sold by LV	Augmenting existing in-person advice platform with an automated service, potentially unlocking new strata of customer
	Mar '21	EQi	Interactive Investor	£50m M&A	Book purchase of SIPP/ISA-wrapped funds to augment existing proposition.
	Feb '21	Nucleus	James Hay	£145m M&A	Consolidation of IFA platforms
	Oct '18	FNZ	CDP Quebec	£1.65bn M&A	Platform-as-a-service for wealth management technology
P&C	Jul' 21	Setoo	Pattern	Undisclosed M&A	Embedded insurance play, combining UK and US operations
	Apr' 21	Marmalade	Atlanta	Undisclosed M&A	Insurance broker buys a telematics platform. Marmalade offers an integrated young driver policy and car leasing proposition
	Jul '20	Brolly	Direct Line	Undisclosed M&A	Document storage play. Brolly allows for aggregation of insurance policies, offering Direct Line data into renewal opportunities

skew. coinbase

Example of building data exhaust and diversifying revenue: turn customer's investing behaviour into monetisable data to sell to asset managers

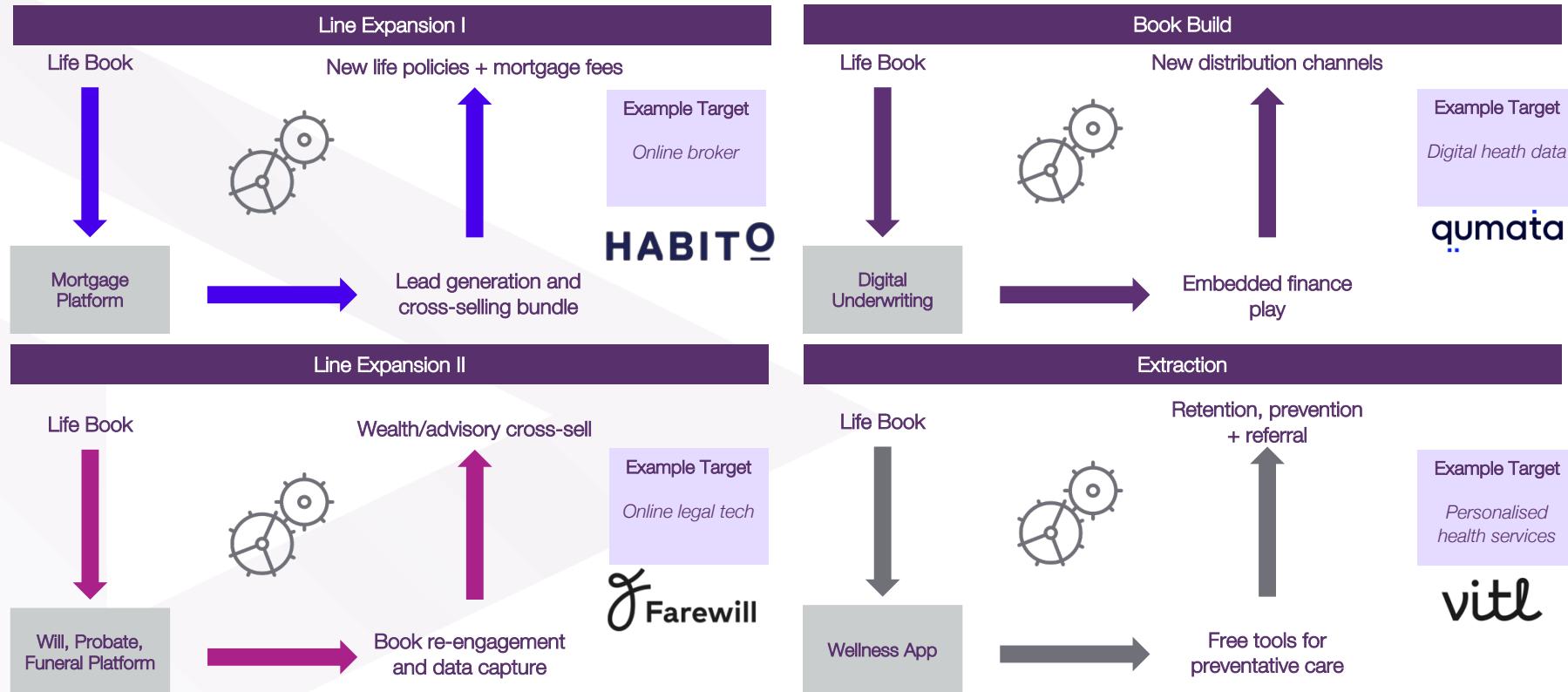


Strong example of BaaS model in wealth management space. Allows small wealth managers/IFAs to build up white label technology solution to face clients



marmalade ATLANTA

Deal highlights how niche players like Marmalade (young driver) insurance become attractive, by expanding into their vertical (offering leases to policy buyers)



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Conclusion & Recommendations

Dynamic

Commentary

Aggregators vs Platform

- Gradual retreat of conglomerate financial services crusades (i.e., HSBC and Deutsche Bank) towards refocus on core/lucrative segments
- The emergence of banking-as-a-service BaaS model: modularised, white-label financial services delivered digitally, which lower barriers to entry
- Technology advances and regulation (e.g., Open Banking) allow financial to be embedded more organically into commercial value chains:
 - E.g., credit buttons at checkout, BACS deposit services in-app and insurance options in shopping carts
- Historically, the scale of omnichannel and capital largesse allowed Fincos to “bear hug” a customer; now, new players act like “guide dogs”
 - **Aggregators:** Build lifestyle ecosystems that naturally capture customer attention and offer affiliated financial services (e.g., Revolut)
 - **Platforms:** Sell financial tools to consumer-facing businesses, which reduce friction and win more sales (e.g., Stripe)

Originators vs Distributors

- Capital and underwriting becoming commoditised, the financial services value chain is bifurcating, leaving legacy players with the rump
 - Lending, underwriting and custody: core pillar that remains, built on trust, reputation, regulation and scale
- Embedded finance is an opportunity for originators: hands-free and global distribution handled by digital specialists
- Financial services firms that embrace the change and accommodate the new paradigms will win long term by coexisting through mutual interest

Life Book Strategy?

- **Tech:** Must be a coherent predictive analytics strategy (AI/ML/DL) for mining data to improve the product, CX and margin
- **Book Direction:** Expansion towards self-directed wealth has a natural flow, especially with central Pensions Dashboard launch in 2023
- **Adjacencies:** Opportunity to become embedded in family legacy (e.g., wills, probate, financial planning and divorce) offers natural on-ramps for succession and transition to new generations of a family

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Appendices