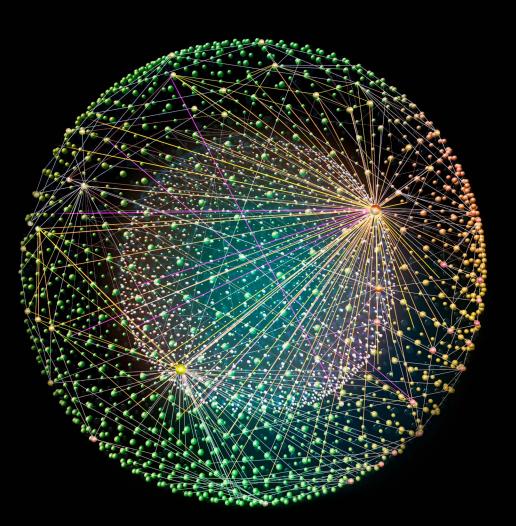
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Flexibility is the key to future success A Deloitte view of the asset

finance software industry





Contents

| 1. Introduction | 3 | |
|--|----|--|
| 2. The asset finance & leasing market | 4 | |
| 3. Industry trends | 16 | |
| 4. Buyer preferences | 26 | |
| 5. How the software market is responding | 31 | |
| 6. How propositions will evolve | 47 | |
| 7. Closing remarks | 55 | |
| Endnotes | | |



1. Introduction

Asset finance, the broad category of funding assets over an agreed period in return for regular payments, has been experiencing an increase in momentum.

"Business models for core asset purchases are evolving quickly as part of an ecosystem of services." Alongside traditional buying preferences, business models for core asset purchases are evolving quickly as part of an ecosystem of services. The methods needed to finance them are fast adapting too, which has led to an expansion in the art of the possible in financing and an increase in demand for specialist asset finance software.

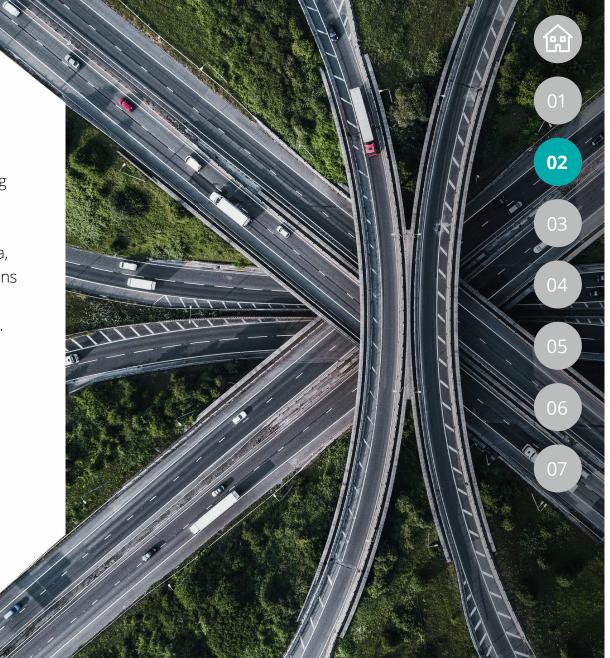
This report examines the factors predicted to influence the asset finance market and specialist software providers' response. 01

3 Asset finance software industry | A Deloitte view



This study will focus on the software market purposed I for the asset finance industry; the broad category that refers to funding assets or equipment, over an agreed period, in return for regular payments.

The asset finance market is expanding and steadily recovering after the pandemic. The US and Europe are the biggest markets, while Africa and Asia, led by China, are the fastest growing. Regulations are adding further complexity to financing across different regions.





2.1 Market size b geography

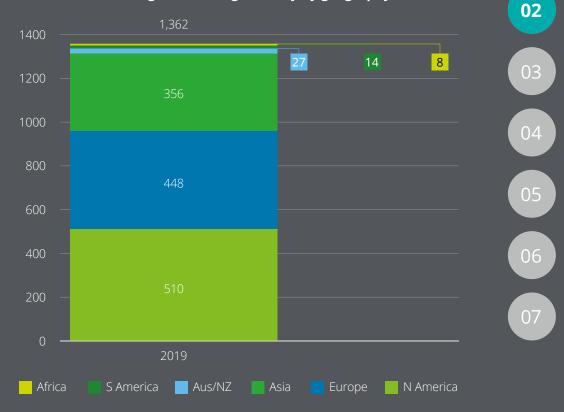
The market sizing in this report will specifically focus on the global leasing market for financing automotive (including private and commercial vehicles), equipment (including heavy machinery, IT and medical equipment) and wholesale (including floor planning and wholesale of automotive vehicles).

Overall, the leasing market has grown 129% in the past decade, with the latest figures indicating a global market size of \$1.36tn in 2019¹ and annual growth of 6.6%². Leasing is particularly popular in the US, as the world's biggest market accounts for \$473.4bn of new business volumes and 36% of the global market share³. Europe accounts for 33% of total world volume in leasing at \$448bn, with the UK, Germany, France, Italy, and Russia making up 2/3 of the total⁴. Asia accounts for 27% of the world market (\$355.9bn).

'Europe accounts for 33% of

total world volume in leasing at \$448bn, with the UK, Germany, France, Italy, and Russia making up 2/3 of the total."

Market size for the global leasing industry by geography 2019, \$ bn



Sources: World Leasing Yearbook 2021; COVID-19 has had an impact on the growth of the market into 2020 and out of 2021 and for this reason 2019 has been used

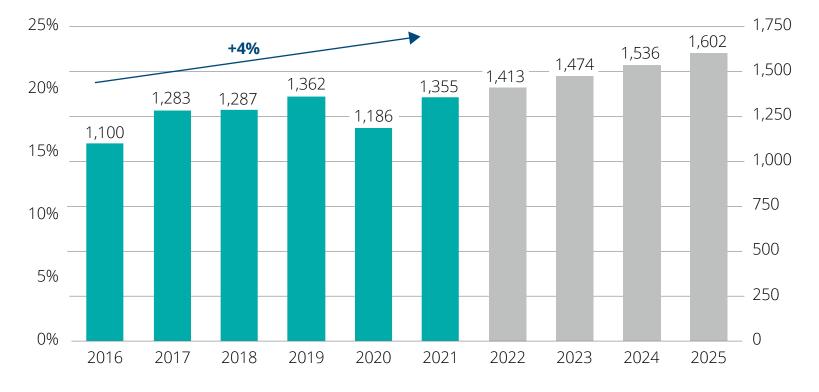
After the US, China makes up the second-largest leasing market globally (\$251.5bn). The rest of the world (ROW) makes up less than 4% of world volumes, with Australia and New Zealand taking the lion's share.

Overall, the leasing market could grow at a CAGR of 8% by 2025, reaching just below \$2tn⁵. Though Africa is one of the smallest markets (\$7.5bn), it is the fastest-growing at 21.8% CAGR per year. The US equipment finance industry expanded by 10.5% in 2019⁶ at a faster pace than the rise in US GDP (2.3%)⁷. The European asset finance market grew by 4.5% YOY in 2021, which is expected to continue as the region recovers from the pandemic. China exhibited flat growth in new business in 2019 despite the 6.1% GDP growth in the same year. Similar trends were evident in India, where the slowdown in automotive sales has had a particular impact on auto-loan growth, which is likely to continue⁸.



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"The European asset finance market grew by 4.5% YOY in 2021, which is expected to continue as the region recovers from the pandemic."



Market size for the global leasing industry, Forecasted, \$bn % CAGR 2016 - 2021 (index at 2016)

Global Leasing Industry Historic (\$bn) Global Leasing Industry Forecasted (\$bn) Sources: World Leasing Yearbook 2021; The Business Research Company

8 Asset finance software industry | A Deloitte view

02

2.2 Market size by product Automotive

Overall, funding activity in the auto and mobility sector has exhibited a downward trend in 2019 and 2020 (20%, 21% YOY, respectively), reaching \$248bn⁵⁴. However, forecasts expect the automotive leasing industry to swiftly recover in the post-pandemic world, achieving a YOY growth between 8-18% until 2028¹¹, as mobility draws the attention of investors and the sector rebounds. Asia and Europe are likely to drive the growth based on the maturity of consumer demand, demographic composition, and favourable regulatory frameworks

in the regions. Currently, China is the largest automobile market worldwide in terms of both demand and supply. In Europe, automotive assets, i.e., passenger cars and commercial vehicles, accounted for 69% of total new volumes granted during 2019, remaining the most significant individual asset segment of the European leasing market.

Equipment

The machinery and industrial equipment leasing segment is expected to grow in the next five years at 9% CAGR, reaching \$794bn by 2025 (~\$535bn, 2020¹²). Financing equipment is particularly popular in the US, where it is estimated 79%

of US companies use some form of financing when acquiring new equipment, making the US one of the largest markets (28.8%)^{13,14}. Demand is also growing significantly in Asia, predicted to drive three-quarters of the expected growth¹⁵. The pandemic impacted the industry, as factory and manufacturing plant shutdowns and supply chain reductions resulted in delayed and cancelled orders. Manufacturing demand will remain strong, while recent developments in supply chain backlogs and input shortages are likely to directly impact prices and lead to output constraints in the short term.



2.3. Asset finance software market size The software market

serving the asset finance industry is estimated to be \$3.4bn and is expected to exhibit positive growth until at least 2026⁹. The current market size takes into account the amount spent by finance providers for software and services to support their financing products, particularly for automotive, equipment and wholesale⁵⁵. Future positive performance is expected to be in line with the overall strength of the underlying asset finance and the software-as-a-service market, which are growing at 8% and 18% CAGR¹⁰, respectively.



2.4 Economic environment

contracted by 3.3% in 2020 and is expected to bounce back at 6.0% in 2021 as the world emerges from the pandemic¹⁶.

Growing economies across the world will positively affect demand for investment. A recovery for the US economy is forecasted, though performance will be sector dependent¹⁷. There is an upward trend already with 6.6% real GDP growth in Q2 2021. Similarly, in Europe, driven by recovering consumer confidence, availability of accumulated savings, and the

recovery fund, we expect a 4% growth rate for 2021 for the Eurozone¹⁸. Asia experienced a solid economic rebound from COVID-19, with the region's GDP forecast at 6.2% for 2021, driven by China at 8.3%¹⁹. The regions' ability to manage new waves of infection, widespread vaccination efforts, and the resulting rebound in global trade will contribute to the availability of capital in the region²⁰.

injection of a €750bn European

Asset financing has remained a comparatively consistent source of profit throughout the pandemic. The annuity-style income stream has proven reliable; despite many

providers showing increased forbearance and allowing for payment deferrals, the overarching outcomes have remained positive. Deloitte research conducted during the pandemic suggests that for major automotive OEM's, 100% of Group profit was contributed by their auto finance subsidiary in Q2 2020²¹, contrasting with a prepandemic, normalised contribution of c.17-30%.

The manufacturing industry recovery is likely to take longer to reach pre-pandemic levels in the US and Europe. Continued supply chain disruptions and input shortages, including semiconductors,

are directly holding back production in the products underlying asset finance, such as car and machinery manufacturing²²; Deloitte projections anticipate a 3.5% annual manufacturing GDP growth level for 2021²³. The picture is slightly more optimistic in China, as the manufacturing sector is supported by the reopening of economies in Europe and the UK. At the same time, current supply constraints and higher shipping costs hinder progress. Globally, hampered growth in manufacturing leads to higher markups in available assets and pressure on demand in the short term.

Similarly, supply chain limitations are impacting volumes manufactured, adding further stress on the growing demand. In turn, this has an inadvertent positive effect on asset financing through the impact on residual values. A constriction on the supply chain, partly caused by the semiconductor shortage²⁴ and a lack of global shipping and transportation, has led to residual asset values that are appreciably higher than initially anticipated. For example, at the pandemic's start, a base reduction in Automotive residual values was forecasted of anywhere between 2-6%, with 10% being a worst-case scenario²⁵.

However, this expectation has reversed because the supply shortage of new vehicles and equipment has led to significant demand for used second and third cycle assets, extended contract terms, and an increase in the anticipated end-of-contract values, with a buoyant secondary market.

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2.5 Regulations

The introduction of the new lease accounting standards from IASB through IFRS 16 affects how leasing is structured, requiring all lease items to be recognised on the balance sheet²⁶. The new standard may lead to an increase in leased assets and financial liabilities on the lessee's balance sheet or push them to change their commercial models as they shift away from capital balance sheet items to improve their financial ratios. In the US, the Trump administration led a push to roll back financial regulations in the US²⁷, creating more room for financing in the region. Announcements by the Chairman of the Federal Reserve Board in 2018²⁸ on the legality of lending guidance led to a renewed willingness across the market to issue loans at higher rates. However, in the aftermath of the pandemic and economic uncertainty, we expect the current administration and legislators may pursue more binding regulations and potentially impact the current level of freedom in lending.

In Europe, the European Union's Sustainable Finance Disclosure Regulation ("SFDR"), which came into force in March 2021, requires asset managers and financial advisors to make environmental, social, and governance (ESG) disclosures to investors. Buyer expectations for ESG standards, and higher visibility into sustainability levels of lessees, push financiers to create preferential interest rates for more sustainable asset portfolios and re-direct investment away from those with lower ESG performance.

"The new standard may lead to an increase in leased assets and financial liabilities on the lessee's balance sheet or push them to change their commercial models as they shift away from capital balance sheet items to improve their financial ratios."

The regulatory landscape in the UK asset finance market has seen a focus on Consumer Credit and the potential for consumer harm within the auto sector. It manifests itself as a directive for finance lenders to provide "strong support and service to customers"²⁹ during the pandemic, which required a focus on proactive customer resolution and payment holidays where requested.

This focus on conduct has continued, with Directive PS 20/8 published in July 2020 that banned discretionary commission models and introduced new commission disclosure rules across the entire credit market, effective January 2021. We expect this to continue with monitoring commencing in September 2021 before a more formal review in 2023. This is likely to lead to customer journey innovation to evidence the achieved level of compliance. In turn, improved customer experience will build further customer loyalty.

Asian financial regulators have been trying to keep up with their Western counterparts, as local authorities adopt different parts of global best practices (including data reporting and scrutiny on funding sources). The regional variability in regulatory frameworks leads to market fragmentation and cross-border discrepancies, overlaps and desynchronisation, which can have unintended consequences for financial stability.

"The regulatory landscape in the UK asset finance market has seen a focus on Consumer Credit and the potential for consumer harm within the auto sector."

| | | Europe | N. America | Asia | ROW |
|----------|----------------------|--|--|---|---|
| Ro | Annual volume (\$bn) | 448 | 509.8 | 355.9 | 48.7 |
| | Growth (pa) | 4.9% | 10.8% | 1.5% | 16% |
| ₩ | Economic outlook | Deloitte expects a positive outlook with 4% growth rate in 2021 for the Eurozone driven by €750bn European recovery stimulus and recovering consumer confidence | US economy expected to grow above pre-pandemic levels based on 6.6% real GDP growth in Q2 2021; performance will be sector dependent; growth in Canada expected to be slower due to modest consumer spending | Asia experienced strong economic rebound after the pandemic with the region's GDP growth forecast at 6.2% for 2021 boosted by 8.3% expected growth rate in China | The ROW was heavily impacted by the pandemic , with the majority of economies forecast to rebound by 2022 |
| Q | Asset finance | Europe accounts for 32.9% of total world volume in leasing at \$448bn, with 5 countries contributing to 67% of the total (UK, DE, RUS, FR, IT) | Asset finance for auto, equipment and wholesale is particularly popular in the US, as the world's biggest leasing market, with new business volume of \$473.4bn, representing 36% of the total global market share | Even though China makes up the second largest leasing country in the world (\$251.5bn), growth was slower in the region with new business volume in Asia increased by 1.5% in 2019 | ROW makes up 4% of the total leasing market with Australia/ New Zealand accounting for 2%, Africa 0.6% and S. America 1% |
| ⊗ | Regulation | The EU's Sustainable Finance Disclosure Regulation ("SFDR"), which came into force in March 2021, may affect lease agreements and financing decisions moving forward | We expect stricter legislations to come in the future as a response to increasing market uncertainty following the effects of the pandemic | The region has a number of different regulatory frameworks and is vulnerable to market fragmentation ; reforms are often implemented with cross-border discrepancies, overlaps and desynchronisation | There is high regulatory fragmentation across regions as different countries, diverse set of rules and varying regulatory issues |

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14 Asset finance software industry | A Deloitte view



2.6. COVID-19 Impact on the asset finance market

At a global level, national lockdowns, government restrictions and stagnated consumer spending led to reduced demand for business and consumer finance. At a European level, total new business volumes declined by 13.4% compared to 2019, while vehicles (private and commercial) fell by 14.2% and equipment by 10.4%³⁰. About twothirds of countries recorded doubledigit declines in 2020 compared to the previous year. In the UK, for example, Q2 2020 was down by 49% compared with the same quarter in 2019, and the quarterly penetration

rate in automotive shrank to 30.4%, its lowest level in eight years³¹. In Asia, the impact is still prominent as risk aversion leads to further divergence in funding access.

However, the underlying strength of the asset finance market was demonstrated after the second half of 2020 when new business gradually started to return to normal levels. In H1 2021 in Europe, volumes were 15% higher than in the same period in 2020 as European lessors continued providing much-needed asset financing to facilitate business recovery in the region. In the US, despite decelerating investment in 2019 and early 2020, the equipment and finance industry saw new business volume growth accelerate by 4.7% into 2021; in part due to the rising propensity to finance equipment, supported by the Federal Reserve lowering interest rates in the second half of 2020.

"The underlying strength of the asset finance market was demonstrated after the second half of 2020 when new business gradually started to return to normal levels." The asset finance market in construction, manufacturing, and agriculture are more resilient overall than the hardest-hit consumerfacing sector. In the UK, new finance for agricultural equipment and new light commercial vehicles grew by 13% and 1% respectively between Oct-Dec 2020 relative to the same period in 2019. New finance for construction equipment fell by only 4% over the same period, and in total, plant and machinery finance decreased by only 7%³².

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The asset finance market is at a tipping point as lessors are rethinking their business models while staying ahead of the curve in the marketplace. Finance software providers facilitating machinery and equipment financing are enabling this commercial flexibility through configurable product offerings.





3.1.2. Demand for more flexible commercial models is increasing in asset finance and leasing

Across industries and markets, asset finance is being used to power a growing use of subscription-based sales models. In automotive, technology advances, environmental considerations, and shifting consumption patterns are moving away from individually owned vehicles towards a shared and autonomous mobility model. Flexibility is becoming imperative as propensity for leasing and flexible ownership grows, either in the form of paying for transport on demand, bundled services in corporate fleets, or for functionality powered by new

vehicle technologies. New entrants are directly targeting the flexible mobility opportunity, capitalising on the availability of new technologies such as EVs.

For example, Onto, a UK based EV all-inclusive subscription start-up, offers a variety of commitment level options and types of services for mobility, ranging from car-hire to servicing.⁶² Other examples include Zeti⁶³, a digital platform that supports the transition to EVs through a pay per mile usage model; and Wagonex⁶⁴, a flexible car subscription service that recently partnered with PSA Group. Similar offerings have arisen in the US. Porsche partnered with Clutch Technologies and introduced the Porsche Passport and Porsche Drive subscription plans to offer on-demand access to cars and a-lacarte mobility services³³; while Audi provides a rental car plan through their Silvercar proposition.⁶⁵

As mobility, construction, industrial and machinery companies are looking for ways to increase their ROI, they are moving away from buying machinery outright as ownership makes less commercial sense. Since value is no longer tied to ownership, OpEx models are adopted to unlock money formerly reserved for CapEx purchases. There is a greater propensity to choose leasing, machine subscriptions, pay-per-outcome, and equipment-as-a-service, such as batteries-as-a-service models. We expect models like the "Powerby-the-hour" model that Rolls-Royce pioneered for aerospace engines to receive a lot more traction in the next decade.

"Service agreements, bundles, and add-ons, such as insurance and connected services, and other forms of OpEx-based commercial models, will increasingly be deployed to capture value."

3.1.3. Capturing value through asset finance will evolve as commercial models change Captives, the OEM-related auto, and wholesale finance companies continue to capture a larger share of the broader organisation's profitability³⁴. Through their indirect sales and operating model, captives drive recurring revenue on the underlying assets. Thus, some of the reasons for their increasing contribution include their ability to capitalise on customer relationships, increased customer loyalty, a more comprehensive range of product offerings, including insurance and mobility, and increased use of attractive

finance offers. However, as demand for more flexible models increases, captives, like others, will adjust their usage models and develop more service-based operating models. Service agreements, bundles, add-ons, such as insurance and connected services, and other forms of OpEx-based commercial models, will increasingly be deployed to capture value.

One prominent example of changing operating models in the auto finance industry is the increasing adoption of the agency model. The model entails replacing the traditional indirect dealer-OEM sales structure by building a more direct relationship between the OEM and the customer, with the dealer representing a touchpoint that the customer can activate on demand. Notwithstanding the inherent challenges that come with dealers acting on behalf of the OEM (such as incentivisation), the agency model provides manufacturers with more control over their distribution networks, pricing and ideal customer experience, while being an opportunity to grow customer lifetime value overall. 03

3.2. Digital economy 3.2.1. Banks and

financial institutions are accelerating spending on digital transformation and modernisation to respond to market changes

On the front-end, customer expectations for faster, cheaper, and more streamlined delivery are putting pressure on asset finance providers – who very often operate on legacy systems and lack the pace to keep up with digital innovation on their own. Replacing manual processes and clunky interfaces with a seamless customer experience requires a novel approach to finance – automated, intelligent,

continued resilience client base."

and collaborative. At the same time, the ability to integrate and deliver through omni-channel is increasingly more prevalent to support changing sales models (e.g. Agency models).

Similarly, back-end operations need modernising to enable regulatory tracking and monitoring requirements and capture potentially improved cost-revenue ratios. Financial institutions are devoting resources to augment internal systems with disruptive technologies that will automate and improve internal processes, such as the execution and validation of transactions.

The pandemic has expedited the level of investment in digitisation and modernisation as institutions are moving to a more remote, hybrid model. For example, providers such as Ally, using modern API-driven systems were able to quickly build a digital self-serve payment capability as a customer-focused response to the pandemic⁵⁶. This digital transition period urges the asset finance software industry to deliver continued resilience and innovation for its client base.

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3.2.2. Cyber security is a growing software trend as financial institutions adopt products that are secure by design and specialist in nature

Posed as a strategic oxymoron for financial institutions, the imperative to expedite digital transformation subsequently entails the increased need to secure their systems. With increased digitisation, cybercrime's proliferation, and tightening regulatory requirements come with increased investment in cyber security. The evolution of digital technologies and regulatory frameworks, such as open banking, have enabled many possibilities and vulnerabilities for the financial sector. Financial services are the second most compromised industry through cyber-attack incidents³⁵, with an average cost of \$5.7m per data breach for each institution. Institutions are increasingly seeking protection through best-in-class functionality. The challenge of cyber security empowers software providers to innovate for meaningful risk management and security assurance, providing an opportunity to bolster their product offering with encryption, authentication factors and other privacy mechanisms.

3.2.3. Financial institutions are prioritising the intelligent implementation of flexible IT architectures through small, independent services

Expedited by the new demand for pace and agility, organisations are re-designing and re-building their IT estates. There is a recent trend amongst financial institutions (and more widely) to pivot their IT strategies towards MACH (microservices, API-first, cloud-native, headless) architecture principles migrating from monolithic, single-source to component-based architectures, with functionality and services exposed through application program interfaces (APIs).

Monolithic versions tend to be more rigid, less flexible, and slower to integrate with a wider ecosystem of services. Lending systems need to respond to front-end and backend innovations at the speed and efficiency required by business and consumer needs, irrespective of the channel (e.g., web, mobile, distributor portal). Finance software should seamlessly integrate in this modular way of designing and delivering a robust performance throughout. Asset finance software solution providers are being called on to offer the level of flexibility, multi-purpose applicability and high functionality that will match different customers' commercial

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requirements and technology strategies. Enabling richer functionality through specialised and customised components reduces implementation time, increases speed to market and improves experiential advantage to the organisation.

This trend toward seamless integration and agility stems from an increasing desire from organisations to 'assemble' a leading experience of 'best of breed' components for their customers and employees and consequently have the flexibility to integrate into a range of everevolving and ever-innovating new services such as advances in KYC/ AML, CRM, contract management, identity verification (ID&V), credit decisioning, payment, pricing and residual values (non-exhaustive). We believe that increasingly the Bank of the Future will be assembled, not built, utilising market-leading components and open APIs to integrate to third parties.

Based on Deloitte experience, we have noted organisations prioritising flexible platforms – enabled by partnerships and integrations with small independent services. We have seen organisations often building new service offerings on new platforms adjacent to their existing legacy systems and product base. Creating a new architecture from scratch grants them access to more relevant, scalable tech. It enables them to develop solutions more agilely without needing to layer them into a legacy solution and operating model.

This duality avoids the pitfalls of recreating legacy complexity, and a pathway to grow the new business and associated operating model incrementally from a clean start is created.

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This trend toward seamless integration and agility stems from an increasing desire from organisations to 'assemble' a leading experience of 'best of breed' components for their customers and employees and consequently have the flexibility to integrate into a range of ever-evolving and ever-innovating new services

3.3.Competitive landscape

3.3.1. Lower barriers to entry in the finance and mobility spaces are creating a new growth market led by new entrants in asset finance

Buyers looking for new propositions, favourable investment regulations and alternative commercial models shifting away from significant capital expenses are creating an opportunity for new types of financial services providers, such as Zeti in auto finance and EzBob in SME lending⁶⁶. Other challenger players in the banking ecosystem, such as 10x⁶⁷ and Mambu⁶⁸, may potentially utilise their digital-native agile 'DNA' to expand their offering and enter the asset finance space. Indeed, in May 2021, UK start-up bank Recognise announced plans to introduce an SME asset finance product powered by Mambu's cloud banking platform³⁶.

Relevant infrastructure available at scale, funding availability for more sustainable vehicles and machinery, and improved and safer battery technologies mean growth of electric vehicles (EVs) and mobility services providers (e.g., Enel X⁶⁹). New entrants are setting new precedents for service delivery in the industry through digital. Digital enables providers to bypass traditional retailers and sales networks and approach customers directly. For example, Cazoo, the online car marketplace, expands into the mobility service subscription market by offering a car subscription service⁷⁰. The same is true for asset financed classes. Traditional providers require innovative partners and vendors that enable them to respond to shifting market dynamics and increasingly require them to separate asset classes.

"New entrants are setting new precedents for service delivery in the industry through digital."

With the rise of electric powertrains powering both automotive and industrial equipment, a multi-asset structure within a single asset provider that could be linked to the same contract needs to be considered. Particularly prevalent in industrial equipment, where a battery, for example, has different financial characteristics than a large piece of industrial machinery, requiring a different residualisation and depreciation curve.

3.3.2. Transitional change in the asset finance market is leading to consolidation and partnering for software providers

The new-found need in the market for faster and more flexible product offerings is pushing incumbent financiers to innovate at scale through partnerships and joint ventures. For example, MINI partnered with NetSol technologies in the US to deliver an end-to-end platform for auto retail, including purchase process through to finance⁵⁷. Others are setting up a direct-to-consumer strategy by partnering with digital players, for example, initiatives such as the collaboration between Onto and Audi to expand Onto's⁵⁸ UK fleet by 300 Audi e-Tron. Another potential method of partnering with software providers is deploying their resources to fully support backend processes through Business process outsourcing (BPO) functions, as shown by the NetSol and Tesla partnership in 2015.

Often further specialisation, increased relevance and market share are achieved through mergers and acquisitions. Consolidation between providers gives access to the client base, geographical footprint and broadens the range of market-tested products and technologies. "Seamless integration internally is instrumental in achieving post merger synergies. The combined organisations need to bring functional and technical expertise together while laying out a uniform IT strategy and architecture to ensure operational functionality."

Incorporating different product strategies entails various commercial and cultural complexities. Successful delivery to the market demands a strategic goto-market and customer retention approach and consistent product offering. The changing product landscape will need to have minimal impact on existing loyalty and customer confidence in the future roadmap. Similarly, merging two software offerings and organisations with distinct architectures comes with unique challenges. Seamless integration internally is instrumental in achieving post-merger synergies.



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The combined organisations need to bring functional and technical expertise together while laying out a uniform IT strategy and architecture to ensure operational functionality.

In 2021, IDS acquired White Clarke Group, creating an increased geographic footprint offering multiasset class finance technology for various financiers. The joint organisation will operate under a new brand name, Solifi, and deliver products to the asset finance market. The future product and go-to-market strategy are yet to be seen; at the time of writing the joint organisation continues to

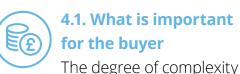
take both CALMS and Infol ease solutions to market. In 2019, Tieto and EVRY merged to expand their product offerings, entering new sectors beyond financial services and their breadth of capabilities to include digital services. Sopra Banking has continued to expand its digital banking offering through the acquisitions of Fidor Solutions, the finance software subsidiary and digital banking specialist of nextgeneration bank Fidor Bank (2020), the well-regarded commercial finance platform Sword APAK (2018), and the loan financing and leasing software Cassiopae (2017).

Sopra now complements the strengths of the different solutions into a more integrated software through the Sopra Financing Platform. Similar acquisitions are also completed by captives and OEMs. For example, Volkswagen Financial Services acquired 90% of VTXRM, a Portuguese contract management system for financial services, to incorporate their solution, Accipiens, into their global implementation capabilities.



4. Buyer preferences

To respond to these dynamics, asset finance providers are looking for specialist solutions that will unlock the flexibility and agility they require.



and current market dynamics mean buyers are increasingly demanding agile products built for change, combined with market-leading experience and functionality. Their ability to effectively respond to these demands, keep up with the market forces, provide a digitally enabled and secure service while still innovating, is dependent on the system(s) they adopt and their associated set of services. Before selecting a software solution and partner, it is imperative for each organisation to understand their future digitalised business model and the respective business

requirements upfront. While each organisation will then outline their unique expectations, we have identified a set of common characteristics that buyers expect.

Solutions need to exhibit a depth and breadth of functionality, robustly managing and capturing value throughout the asset finance lifecycle while deployed across diverse geographical regions and different types of end-users (multi-currency, multi-lingual, multi-country). The more versatile a product is, the more likely it will be suited to providers with a global presence and multi-faceted customer base.

4. Buyer preferences

Providers with publicly available product specifications, future product plans, and published roadmaps can more effectively exhibit their relevant functionality.

New finance software implementation and system migration can become a complex initiative when ensuring regulatory compliance and technical alignment. For this reason, vendors need to win buyer confidence by executing plans and demonstrating product capability. A consistent track record and plenty of high calibre in-house resources can build a relevant reputation. Similarly, vendors with a strong partner network with SI-type³⁷ organisations and alliances are most often suited to provide the necessary expertise.

Beyond the vendors' capability to execute migrations successfully, the product should offer a modern technology architecture. Flexible, scalable, and easily customisable solutions are needed to equip users with the required optionality to meet their business needs. Solutions need to be created for change and enable organisations to roll out new systems, functionality and offerings as and when needed. This level of flexibility is often achieved through the ability to integrate across multiple ecosystems of software and services seamlessly. The overall ability to configure and integrate the solution as needed is vital. Solutions should place importance on security-by-design in the wake of the continuously evolving cyber threat landscape. In addition to standard out-of-the-box features, datadriven reporting and dashboarding capabilities can become a salient differentiator for customers. Buyers expect configurable products to come with equally flexible commercial models that enable them to better define their usage model and cost of ownership. Commercial flexibility can be delivered through options in pricing (e.g., usage-based) and various service level alternatives, including hosting and SaaS offerings.

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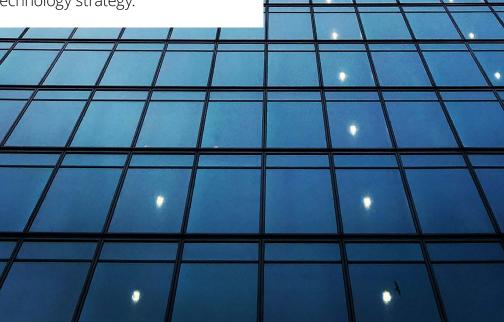
"Solutions need to be created for change and enable organisations to roll out new systems, functionality and offerings as and when needed."

4. Buyer preferences

Additional supporting features that enable customers to reduce their overall costs, such as customer support and discount pricing depending on commitment, contribute positively to the overall solution performance. In many cases, commercial fit and flexibility are cited by clients as one of the principal factors driving or hindering a vendor relationship. We have distilled these buyer considerations into a framework for evaluating the offering of individual solutions in the market.

The framework includes a selection of the essential qualities a buyer would be looking for in a vendor, followed by an assessment based on publicly available information of a number of leading key vendors and their solutions that would allow a buyer to reasonably perceive whether each factor has been met. Where relevant and possible, previous Deloitte expertise and data have been utilised through existing research and/or SME interviews. Assessment is relative and not indicative of each vendor's performance.

The evaluation conducted is broad and based upon information available in the public domain. For this reason, we recommend that organisations perform an independent assessment for the solution and vendor fit against their specific context, requirements, and technology strategy.



| | \checkmark | | |
|-------------------------|---|---|--|
| | Functional fit | Technical fit | |
| Functional capability | Does the product advertise the range of functions offered, including front, middle, back-office capabilities? | Flexibility | Does the product features highlight a flexible architecture such as usage of MACH (Microservices, API first, Cloud-native and Headless) design principles? |
| Product range | Does the product have use cases across the automotive, equipment and wholesale assets? | Scalability Does the product evidence flexible deployment and hosting options (including public cloud and on-premise)? Are scalability features sufficiently highlighted? | |
| Future roadmap | Is there a published product roadmap with planned improvements/upgrades to be released? | Resilience Is there a published product roadmap with planned improvements/upgrades to be released? | |
| Global footprint | Does the product vendor showcase a range of options such as regions served, regulatory compliance capabilities, currencies supported? | Security | Are security features of the product highlighted as part of product features? |
| | | Integration | Does the product advertise ease of integrating with the wider systems (internal and external)? |
| | | Analytics | Does the product offer add-on capabilities such as Mobile-App, Chatbot etc.? Does the product advertise in-built data-dashboarding/visualisation/reporting capabilities? |
| | \checkmark | | |
| | Delivery | Commercial fit | |
| Experience | Is there evidence/client-credentials to demonstrate vendor's delivery capability in a similar market segment? | Licensing model | Does the product/vendor offer flexible pricing and commercial models? |
| Ecosystem and alliances | Are there in-house capabilities and/or range of partnerships and delivery networks substantiating vendor's delivery experience? | Commercial support model | Does the vendor provide customer enablement support? |
| Delivery support model | Does the vendor support functionalities that enable delivery? | Innovation spend | Does the vendor invest in existing product improvements and new product developments? |

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4. Buyer preferences



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Rising need for service-andsubscription-based models with more flexibility from buyers, coupled with the growing intricacy of IT systems and technologies available, create a complex set of requirements for which more traditional solutions may fail to meet expectations. Making the investment worthwhile is imperative, as they are going through "a big change; and any product needs to adapt quickly to deliver for the key markets", as one customer noted³⁸. For this reason, specialist solutions are becoming increasingly popular.



Asset finance providers have three core options for deploying software to support their financing procedures. Enterprise Resource Planning (ERP) applications that have been developed for broad business coverage, often expanded over time by the providers' developers. In the past, ERP solutions have frequently been enhanced by customers to provide additional functionality, often leading to complexity and upgrade challenges. This trend is changing, with more emphasis on a 'clean core' in new implementations.

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In general, ERPs do not currently offer the richness of functionality to handle asset financing and leasing contracts as effectively as more specialist solutions. In practice, customisation can also be costly due to the level of adaptation required to meet specific asset financing requirements.

 In-house applications developed internally and uniquely customised by the in-house team or their development partners. In-house solutions can be effective as they are fit-for-purpose, designed with the organisation's proposition and business needs in mind. Likewise, they may offer a seamless and more integrated customer experience. However, such solutions require extensive resources and technical capability to develop, maintain and update. In many cases, while servicing systems are purchased externally, organisations that offer captive financing and have a uniquely distinct brand might prefer to create and assemble inhouse supporting applications.

 Specialist purpose-built solutions offer specific functionalities for the asset finance lifecycle deployed for

multiple asset classes and types of customers. They are wellsuited to complex requirements as generally they provide a high degree of specialisation and modularity. Specialist solutions can be the most attractive option to implement and integrate, depending on the vendors' fit for a given customer. Based on their complex needs, we expect asset finance providers to drive toward a 'clean core' in the future with minimal customisation integrating with a wider set of services that enables them to build further functionality based on their customer-specific

needs. Currently, based on how configurable they are, specialist solutions are well suited to the complex requirements of today's buyers and are offered by a variety of providers across the world. While we see this trend in the market, our analysis is broad and based upon publicly available information. We recommend that each organisation performs an independent assessment relative to the suitability of each type of solution based on their specific context, requirements, and technology strategy.

| Type of solution | ERP | In-house | Specialist solutions |
|------------------|---|---|--|
| Description | Developed for a broad business coverage | Uniquely customised by the in- house team | Built for the asset finance industry for various asset classes and types of customer |
| Benefits | Broad applicabilityFamiliar software | Fit-for-purpose Designed in line with the business' proposition More integrated customer experience | Well suited to complex requirements Enables greater configuration Flexibility on commercial through various licensing models |
| Limitations | Frequently complex to implement for specific use-cases Generally does not offer full functionality required to meet specific asset financing needs | Require internal capital allocation and expertise Limited scope of applicability beyond in-house | Contracting with external vendors Require seamless integration Different branding and user interface |
| More suited to | Less specialist financing organisations | Business offering captive financing | Broad applicabilityAsset finance providers for specific asset classes |



Solutions in the future are likely to evolve and incorporate further specialisation. Similarly, as the banking industry is being disrupted by challenger banks and FinTechs, we expect asset finance to see a new wave of participants. Digital native, 'born in the cloud' banking and lending platforms have the potential and capabilities to transform the market. Commercially, organisations such as Mambu and Funding Circle can capitalise on their existing customer and thirdparty relationships to develop an ecosystem that extends beyond traditional lending into asset financing.

Their major differentiator is likely to be their technology setup and disruptive mindset. The ability to flex their existing offerings through a scalable model, coupled with an insight-driven "test and iterate" approach, will allow them to respond reactively and rapidly to market and customer needs. In turn, disruptors might take to market more relevant products and at a faster pace.

While many traditional providers may start to fall behind, vendors offering specialist solutions may be more equipped to compete in the current and the future marketplace. "The ability to flex their existing offerings through a scalable model, coupled with an insight-driven "test and iterate" approach, will allow them to respond reactively and rapidly to market and customer needs."

We examine the existing vendor landscape below by laying out a selection of the leading software companies that provide asset finance software for automotive, equipment and wholesale³⁹. Based on the scope, purpose and objectives of this report, providers have been selected based on their performance to-date, depth and breadth of functionality, perceived popularity in their target markets and relevance to the asset finance industry. The selected list of vendors presented is not exhaustive but is intended to give a view of the different finance software providers serving the industry. Information used to prioritise the organisations has been drawn solely from publicly available information.

Players based in mature asset financing markets, including Europe and the US, are dominating the industry. Many of those headquartered in Europe are expanding their presence and pursuing global implementations (e.g., Alfa, White Clarke/IDS). The US is served by vendors headquartered in the region (Defi, Odessa) and others with a more global presence (e.g., Alfa, FIS, IDS). Some vendors are doubling down on their presence in Asia to respond to the increasing demand in the region (e.g., NetSol)⁴⁰. The major vendors cover most asset classes, namely automotive, equipment and wholesale across the financing value chain (front, middle, back office), with Alfa, White Clarke, Sopra Banking and Linedata highlighting an extensive functionality offering.



| Provider | | Core solution | НQ | Revenues 2020 ¹ \$m | No. of employees ² | Asset segment coverage | | | Functionalities (Office) | | | Regional presence (Office locations) | | | |
|---------------------------------|---|-----------------------------|----------|-----------------------------------|----------------------------------|------------------------|-----------|-----------|--------------------------|--------|------|--------------------------------------|------------|------|-----|
| | | | | | | Automotive | Equipment | Wholesale | Front | Middle | Back | Europe | N. America | APAC | ROW |
| Alfa | Alfa | Alfa Systems | UK | 109.2 | 360 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| defi solutions | defi | LOS and Analytics | USA | 35.2 | 271 | 1 | | | 1 | 1 | 1 | | 1 | | |
| Fis | Fidelity National Information Services (FIS) ⁽⁵⁾ | Ambit Asset Finance | USA | 12,550 | 62,000 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| IDS Asset Finance Technology | IDS ⁽³⁾ | InfoLease | USA | 73 | 350 | | 1 | | 1 | 1 | 1 | 1 | 1 | | |
| Linedata (\$\$ | Linedata Services | Linedata Ekip360 | France | 190.7 | 550 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| LTTI Istinetery Solutions | LTi Technology Solutions | LeasePlus | USA | 11.82 | 80 | | 1 | | 1 | ✓ | 1 | 1 | 1 | | |
| NETSOL | Netsol | NFS Ascent | USA | 56.4 | 1,360 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| odessa | Odessa | Core | USA | NA | 850 | | 1 | 1 | 1 | 1 | 1 | | 1 | | |
| SOFICO | SOFICO | Miles | Belgium | 39.6* | 5,000 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | Sopra Steria ⁽⁵⁾ (Sopra Banking Software) | Sopra Financing Platform | France | 5048.7 | 150 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| tieto <i>Evry</i> | TietoEvry ⁽⁵⁾ | ProFinance | Finland | 3,300 | 2,100 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | VTXRM | Accipiens | Portugal | NA | 280 | 1 | 1 | | 1 | 1 | 1 | 1 | | | |
| White Clarke Group | White Clarke Group ⁽⁴⁾ | CALMS | UK | 42.6 | 340 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Notes: (1) Revenues are based on information available in annual reports, company websites and Dun & Bradstreet. *Revenues for SOFICO based on latest available data (2018) from Globalfleet. Note exchange rates used are 1 USD = €0.8768, 1 USD = £0.7794. (2) Approximate (3) Rebranded as Solifi in 2021. Asset and geographical coverage to change following the acquisition of White Clarke in 2021 (4) Acquired by IDS in 2021. Revenues for SOFICO based on latest available data (2018) from Globalfleet. Note exchange rates used are 1 USD = €0.8768, 1 USD = £0.7794. (2) Approximate (3) Rebranded as Solifi in 2021. Asset and geographical coverage to change following the acquisition of White Clarke in 2021 (4) Acquired by IDS in 2021. Revenues for FIS, Sopra Stera and Tieto Evry are for the wider organization, not only the asset finance arm.

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5.2. Vendor overview 5.2.1. Assessment relative to buyer

requirements

Suitability to customer preferences drives market acceptance. Below we set out how the vendors and their solutions perform relative to the buyer consideration set. For this report, we used publicly available information, including vendor statements, documentation, and case studies. For this reason, the assessment conducted is broad. relative, and not indicative of each vendor's performance.

We recommend that any organisation performs an independent evaluation for the solution and vendor fit against their specific context, requirements, and technology strategy.

Based on the criteria buyers adopt during their selection process, we have reflected on available information for each vendor. The lack of publicly available examples against each measure does not exhibit lacking competence in the area by the vendor but more in the declaration in the public domain.

We expect vendors offering the most options from the buyer



Functional fit

Functional capability Solutions that enable end-users to deploy them for different uses are usually favoured—usually achieved through a varied, end-to-end capability that allows customers to select the right combination of functionality that best suits their needs. Offering the option to select which functionality users can incorporate into their products gives buyers the best optionality. Linedata Ekip360, for example, highlights coverage of the entire value chain of automotive finance, including origination, underwriting, and servicing. Similarly, the FIS platform,

Ambit Asset Finance, includes functionalities for supporting asset management ranging from lease to stakeholder to document management. Others report to offer different functionalities through separate solutions. Defi's auto finance solution provides loan and lease origination and management at its core functional offering with an option to choose other business process outsourcing capabilities, such as accounting.

Product range

While most vendors cover asset finance in automotive, equipment and wholesale products as part of

a more comprehensive portfolio, some specialise in asset finance. Specialist asset finance software solutions are sought after in the market as they often incorporate good industry practices and particular standards unique to the underlying asset class. For example, IDS specialised in the equipment finance industry, offering targeted products. Following their acquisition of White Clarke Group, and re-brand to Solifi, it will expand its portfolio across auto and equipment. Similarly, Alfa highlight their support for the full range of lease and loan variants for automotive and equipment.

"Solutions that enable end-users to deploy them for different uses are usually favoured—usually achieved through a varied, end-to-end capability that allows customers to select the right combination of functionality that best suits their needs."

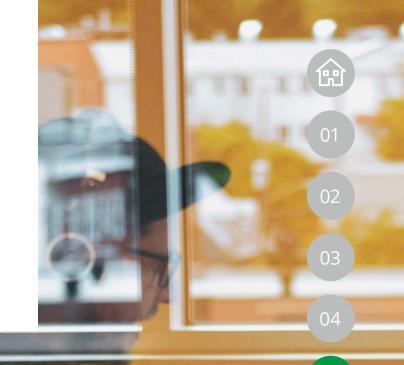
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Future roadmap

Where the functional capability is not currently available, vendors can improve their relevance by planning product upgrades and extensions and adopting a future-looking approach to product development. A well-defined product roadmap enables vendors to respond to client needs and feedback as they arise and innovate based on market expectations and technology trends. For instance, Alfa recently announced the development of v6 of their cloud-native platform that is intended to deliver against client priorities and market drivers.

Global footprint

Due to the nature of business requirements, some country deployments often involve local variations. The adaptability required to meet local needs often hinders the ability of vendors to standardise their solutions. For this reason, products will offer multi-currency and regulatory compliance features to enable diversity in user journeys and the variability between technical requirements (e.g., data capture, compliance). Alfa, FIS and Linedata advertise their product's applicability across regions through product specifications and past implementations worldwide. Similarly, NetSol highlights multilingual and multi-currency support.



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Delivery

Experience

Buyers are likely to look to past credentials, the volume of pre-existing customers and successful implementations to gain the necessary confidence in the vendor's ability to execute successfully. For example, Linedata highlights deployments with more than 100 clients, Sopra Banking over 200 implementations, and Sofico over 50. Alfa reports that it currently serves some of the largest auto and equipment financiers in key markets, including the US and Europe.

Ecosystem and alliances

Vendors' internal capabilities can be further supported through partner and alliance ecosystems. Alfa, FIS, Sopra and White Clarke Group advertise a well-established network of commercial and technical partners relative to others. At the same time, Sopra Banking expanded the breadth of its offering through the launch of a marketplace for partner FinTechs.

Delivery support models Enabling customers to build and launch operations independently creates an advantage for vendors, as their clients can continue to use the platform seamlessly without lengthy implementation disruptions. Often this is supported through pre-configured products and well documented good practices. As one instance. Alfa advertises Alfa Start, a pre-configured version of the Alfa Systems solution designed to accelerate and reduce system change costs using best-practice configuration and processes. Similarly, buyers will need to have a clear process definition that will

support vendors in their software implementation. Alternatively, clients can build a foundation of parameters and supplement it with additional workflow software, frequently offered by asset finance software providers. Lastly, vendors can offer their asset finance software solutions through managed services by empowering the buyer at the technical level. For example, FIS offers outsourced infrastructure and managed operations, intended to enable the customer to scale their platform as needed while maintaining optimal usage and up-time.

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Flexibility

An increasing trend towards adopting MACH (Microservices, API first, Cloud-native, and Headless) architecture principles has led to highly configurable and flexible systems tailored to different business strategies. Case in point, Odessa and Alfa advertise an extensible, single platform solution that can adjust for new applications.

Scalability

New solutions are likely to follow a cloud-based model that enables rapid scaling. Digital native systems allow organisations to easily cater to scalability requirements on the go without impacting performance. For instance, Alfa Systems highlight a system built and developed on the cloud whilst offering the option to use Alfa Hosting to assist with integration, configuration, and testing. NetSol highlight their ability to facilitate rapid deployments by scaling on demand.

Resilience

The business criticality of these services has led to 'resilience' becoming a key concern for many buyers. Resilience is achieved through multiple hosting options and direct mechanisms to ensure up-time. For example, Ambit Asset Finance by FIS advertises a hosted and fully managed environment and a delivery team with expertise in disaster recovery. The requirements for system availability and business continuity are critical to providing the necessary resilience assurance to the buyer. "The business criticality of these services has led to 'resilience' becoming a key concern for many buyers." E

Security

Recognising the importance of security, finance software providers develop solutions based on security-by-design principles to assure buyers that their data is safe by providing them with the option to activate the security and privacy mechanisms they prefer. For instance, the Sopra Banking software offers users to choose from various tools, such as the Zero-trust model, anomalies detection, bug bounty program, and Al leverage.

Integration

Modular IT architecture creates the required configurability while increasing ease of integration across a more expansive systems landscape, including internal and external systems. Further options are added by solutions that can integrate with third-party ecosystems and other configurations through APIs. Alfa adopts an API-first approach to allow integration by design rather than bespoke requirements. Similarly, IDS InfoLease has an open and extensible business logic to connect with open APIs. Sofico offers the Miles Microservices Platform that features RESTful APIs to connect to domain-driven services.

Data analytics

Business intelligence or a datadriven insights capability is almost a mandatory feature in most systems nowadays. Miles by SOFICO highlights its advanced decision support features extensively, including departmental dashboards, self-service personalised reporting features and using predictive and prescriptive analytics capability.

Commercial fit

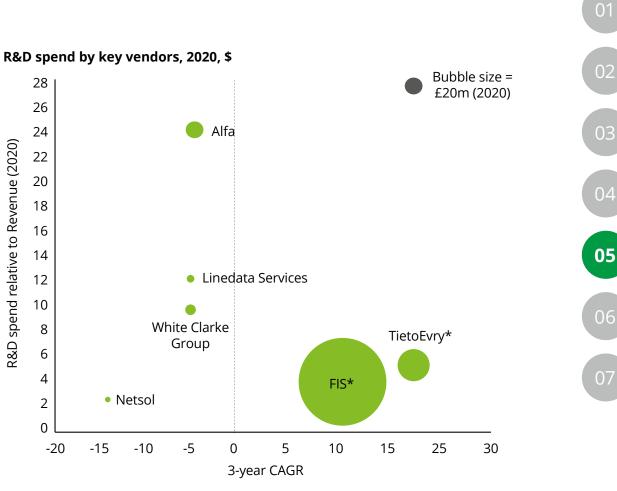
Licensing model Pricing options and total cost of ownership should be sufficiently flexible to entice buyers. For example, TietoEvry can accommodate different charging models, including fixed, repeating and variable, enabling the buyer to account for software costs on their P&L in a manner that works for them. Similarly, Odessa offers usage-based pricing and NetSol offer subscription-based pricing.

Commercial support models Additionally, vendors should offer ongoing support that enables the continuous resolution of issues, reducing buyer's overheads. For example, Defi highlights their customer care, including a dedicated client success manager to support the full customer journey.

R&D spend

While R&D spending is not a direct indicator of a business's profitability or performance, the investment in R&D is a sign of responsiveness to end-user expectations and future success. R&D spend is likely to be calculated differently across organisations, with product

development accounting for under different cost items and innovation across business units. In the asset finance software industry, available data indicate an average spend on R&D of 11% of total revenues per company. Alfa reports 24% of total revenues spent on R&D. Linedata (11.6%, 2017) also has healthy R&D spend compared to others in the industry, ahead of White Clarke Group (9%, 2020), TietoEvry (4-5%) and FIS (4%)⁴¹. In terms of workforce, Linedata devoted 35% of its resources to R&D development. R&D data for IDS, Sopra Banking Software, Sofico, LTi, Odessa and Defi were not disclosed.



Notes: *FIS and TietoEvry spend includes R&D spend for the wider organisation, not only the asset finance arm.

5.2.2. Market performance

Overall, the average level of growth of the top seven providers, for which data was available⁴², over the last three years (2018-2020) in terms of revenue has remained nearly flat (1%)⁴⁹. Compared to previous periods, reduced organic activity in 2020 due to COVID-19 implications and the material impact of paused or delayed implementations had a negative impact on growth. High customer concentration and long project lifecycles often create fluctuations in the revenue streams of these types of organisations, as paused or delayed implementations have an immediate effect on the annual figures.

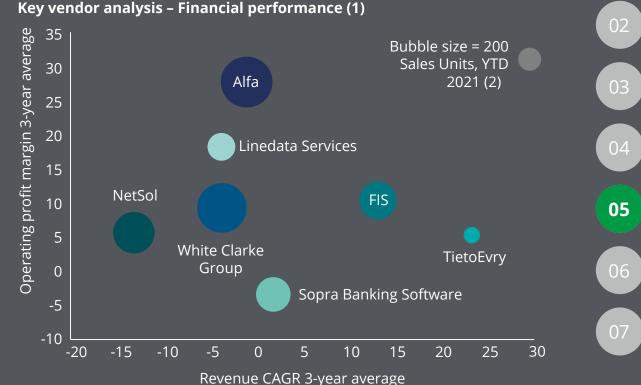
TietoEvry, FIS and Sopra Banking have exhibited an increase in revenues in the last three years, with an average of 22%, 13% and 2% CAGR, respectively. Growth has been primarily the result of inorganic activity and an outcome of the fact that all three provide asset finance as part of a more extensive portfolio of operations and offerings. TietoEvry achieved 60% growth between 2019-2020 post-merger⁶⁰. Similarly, FIS managed a 21% YOY growth in 2019 primarily due to the acquisition of Worldpay and the resulting crossselling opportunities. The purchase of SAB and other banking software⁴⁵ boosted growth for Sopra Banking and helped the business reach

critical mass. At the same time, licence revenue remained resilient, albeit a -9.1% negative organic growth rate⁴⁶.

Alfa recorded an upwards leap in 2020 (+22% YOY) through organic growth. Pipeline resiliency with pre-implementation customers in key markets such as US Auto and Equipment and Europe, coupled with extended post-go-live support and an expanded customer base, managed to mitigate the effects of the pandemic. An increase was welcome following a post-IPO dive in growth (-4% CAGR, 2018-2020), caused by paused implementations and reduced discretionary spending by customers in 2019.

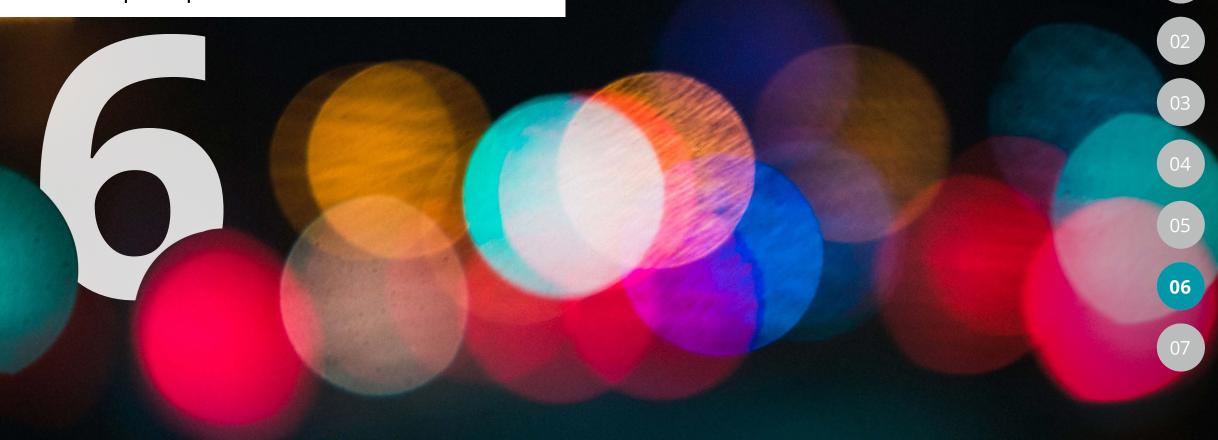
NetSol Technologies recorded a -14% CAGR in the three years, mainly driven by fluctuations in licence revenue from client exits. Linedata and White Clarke revenues contracted by -5% CAGR for both, driven by a top-line drop in 2020 of -5% and -15%, respectively. The pandemic impacted Linedata's non-recurring activities (21% of revenue), including consulting⁴⁷. Implementation discontinuation impacted White Clarke results^{48,49}.

Alfa and Linedata appear to have the highest operating profit margins with 28% and 19%, respectively. Both have improved their margins over the three years, indicative of their efforts to scale the business while maintaining cost base increases at a lower scale. For instance, in 2020, Alfa recorded a 22% increase in R&D expenses and headcount, partially offset by a 9% reduction in travel and marketing costs due to the pandemic. Similarly, Linedata reduced its overarching costs, adapting to the lower revenues while keeping R&D investments in place. Other vendors' operating profit margins are similar and range between 5-10%. Sopra mainly focused on product development plans (for both Sopra Banking Platform and Sopra Financing Platform) and exhibited early signs of margin improvement. White Clarke YOY R&D investment grew 71% as it accelerated its production strategy and enhanced its SaaS offering.



Notes: (1) Unless otherwise indicated, data for the asset finance business unit has been used. (2) Unit is a software package which is sold to client (3) Data for TietoEvry in terms of Sales Units were not available.

Sources: Annual reports, company websites, press releases. In case data was not available for com pany financial statements, third party sources including market analyses have been used. Organisations for which data was not available were not included



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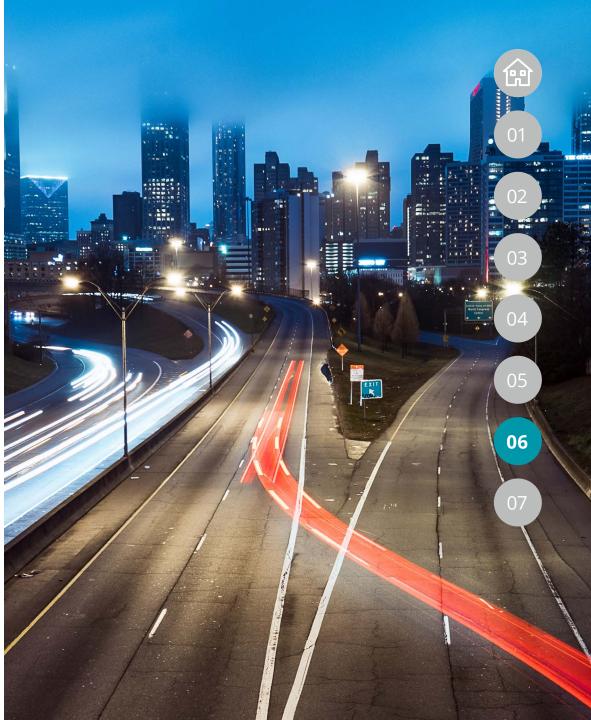
To win in the future, finance software providers need to do more than respond to buyer expectations; they need to get ahead of disruption and create opportunities in the marketplace.

Beyond ensuring easy and flexible integration with existing systems and meeting functional demand, vendors will need to innovate at scale to design and deliver future products.



6.1. Future opportunities

Offering new ways of financing in a dynamic industry such as mobility and equipment will require novel ways to manage residual risks and create new opportunities for capturing value. To achieve this, vendors will need to utilise new technologies and stay in line with industry requirements. We set out examples of these below:



Artificial Intelligence (AI)

Software providers that strive to push the boundaries of business intelligence are likely to win the competitive set as they support their customers in reaping the benefits of data and analytics. However, like asset-based organisations, financial institutions are more focused on improving operational efficiency than targeting growth and product innovation. Most financial services organisations already use some form of AI, either at a pilot stage or to scale for the future⁵⁰.

Current applicable use cases include process-centred AI capabilities such as lending and credit risk predictions

and residual values forecasting. The true benefits of AI are in the more insight-driven organisations that devote time and resources to improving customer experience. Through AI models, users can identify patterns in real-time and respond with more agility. For instance, models can minimise the risk of future loan defaults through predictive capabilities by deeply understanding a customers' credit risk profile. There is a significant opportunity for digitally savvy software providers to educate and guide their customers through their analytics journey by allowing their innovation journeys.

An illustration of the potential for software providers to democratise Al in the financial services industry is the joint venture (JV) between Alfa and Bitfount, AlfaiQ, which aims to equip lenders with the resources needed to develop internal analytics capabilities. Another example is NetSol's white-label technology platform, Otoz, designed as a digital-native, Al-based solution that enables businesses to build and operate a mobility business.

"The true benefits of AI are in the more insight-driven organisations that devote time and resources to improving customer experience. Through AI models, users can identify patterns in real-time and respond with more agility."

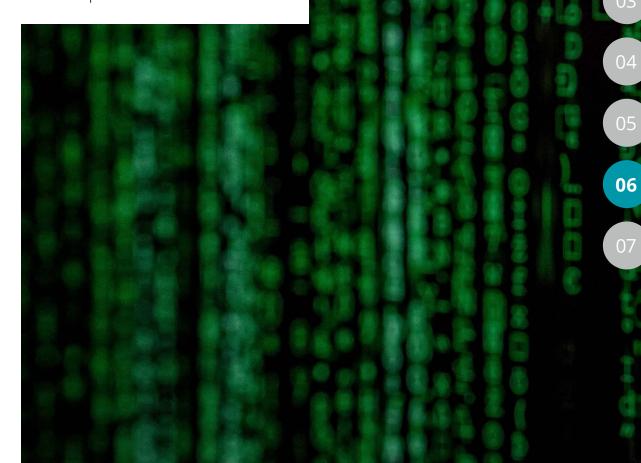
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Automation and RPA

The most innovative solutions have automation inherent in their systems. For those missing automation rules from their core, supplementary approaches such as Robotic Process Automation (RPA) can be used. RPA uses software to automate manual tasks and acts as a cost reduction lever and a revenue driver. Large scale repetitive financial and regulatory-related activities, and other highly operational tasks, are prime for operational improvement. At its core, automation releases resources from low-value generating tasks, creating more innovation and strategic product

improvement time. Currently, RPA is deployed to expedite processing time and reduce human errors, while future automation will likely focus beyond the sub-process level. A successful example is VW Group, which deployed RPA capabilities at the height of the pandemic to automate customer enquiries (incl. ID and verification, eligibility criteria checks, and others). However, RPA does not constitute native automation and comes with its limitations. Lack of cognitive capability in RPA solutions may hinder their relevance when the business updates its processes or requires immediate changes and updates to remain functional.

Additionally, RPA solutions often cannot readily handle operations at scale as they require consistent data and processes.



Sustainability

Sustainability matters have been at the forefront of each business's strategic plan. The pressure imposed by external and internal stakeholders, including customers, regulators, shareholders, and employees, create a tighter set of standards that organisations will have to meet moving forward. Companies in the automotive and equipment industries are making commitments to reduce their greenhouse gas emissions. Demand for investing and financing in sustainable products and green transactions will increase as portfolios become more sustainability focused.

"Financial software will need to be designed and integrated to enable the execution of each transaction according to the new guidelines and regulations." Green guidelines across the world, such as the Green Loan Principles, set voluntary best practices to be followed by market participants on a transaction-by-transaction basis, mainly to regulate green products and deals. Financial services providers follow suit by enabling their customers to achieve their targets and consciously offering finance to those with higher standards (e.g. Lombard⁶¹). Financial software will need to be designed and integrated to enable the execution of each transaction according to the new guidelines and regulations.

For example, software solutions should offer relevant data tracking and reporting, e.g., gathering and analysing asset-based waste disposal. Many providers offer a configurable platform that supports changes in key regulations while maintaining memberships across industry bodies to ensure their products are in line with the latest requirements.

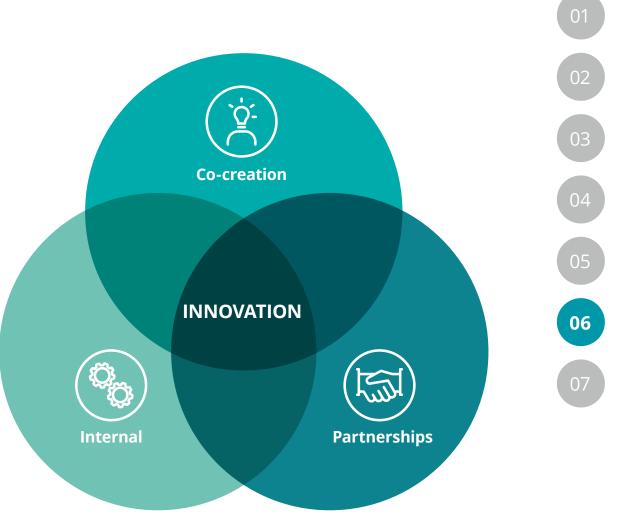
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6.2. How will software Cocreation providers respond Software cor

New product creation, relevant and in line with what end-user's demand, requires robust innovation and R&D processes. As disruptors capture first-movers' advantage and innovation cycles shrink, organisations will have to rethink how they innovate. Developing and delivering integrated solutions is often challenging for a single company to address independently, costefficiently, and effectively. Depending on each provider's strategic aspirations and operational model, they might innovate by capitalising on existing internal capabilities or acquiring and partnering.

Software companies often cocreate with clients through projects, developing an ecosystem that complements their efforts in developing new offerings. Co-creation is more readily available to those offering specialist solutions, with which the end-users engage and develop a product that works for them. The same level of concurrent operation is not possible in ERP or in-house solutions. Innovating in parallel with implementations enables organisations to deliver more customer-centric products and generate targeted value. Solutions are deployed more rapidly as pilots



and proofs of concept are tested on the ground. With constant feedback and direction from the clients, products are designed tailor-made for the use case itself. The cocreation innovating process is conducted more efficiently, with a higher probability to succeed in the long run and lower risk than traditional product-development approaches. For example, defi SOLUTIONS co-operated with Toyota Motor Credit to configure and implement a multi-product, multi-service solution to fit the credit organisation's specific needs and unique specifications. Similarly, TietoEVRY will co-operate with Kesko, the retail operator, in

implementing the retailers' strategy while developing digital capabilities and operational efficiencies through technology.

Partnerships and acquisitions

A well-established and varied network of partners that can flex based on strategic requirements can act as an invention, transformation, and disruption engine. Particularly for specialist solutions providers, vendors choose to build partnership programmes to expand their capacity and broaden their capabilities.

Partner networks can be beneficial for developing products while also delivering end-to-end outcomes to customers more effectively. A multi-disciplinary partner network can augment staffing and resources through an ad hoc deployment to meet project and implementation requirements. Alternatively, experts can be engaged for their specialisation and subject-matter expertise to support implementations or product creation. Partnerships can be a powerful tool for innovating, as vendors utilise external organisations' capabilities, know-how, and technologies. An amalgamation of skillsets and

mindsets can contribute significantly to the generation and design of ideas that improve or expand the vendors' existing solution portfolio. In the industry, there are various examples where vendors augment their existing capabilities through partnerships. For instance, Alfa offers different types of partnering, from staff augmentation to support standard implementation execution to engaging System Integrators and technology partners to enhance delivery, extend product offerings and integrations. Sopra Steria is expanding its range of capabilities through the proposed acquisition of Labs, a Norwegian user experience consultancy.

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Internal R&D

Those looking to innovate and generate disruptive ideas are shifting to an agile and iterative approach to business and technology⁵¹. There is an opportunity for finance software providers to innovate by setting up their operating model to act as an enabler for change and experimentation. Similarly to forming external ecosystems, internal collaboration between different disciplines and sets of know-how is likely to improve the quality of outcomes. Finance software providers are more likely to develop a winning

product if they enable an organic innovation function that feeds from an agile operating model and collaboration between teams across the organisation. These should actively be reflected through cross-functional teams' formation and reallocation investments onto product development. Currently, ten of the biggest software providers in the world⁵², ranging from varying applications and industries including ERP, CRM and cloud, exhibit an average of 21% R&D spend of total revenues, with some even reaching 39%⁵³.

Based on available data from the asset finance software market, most vendors deploy less than 11% of their revenues to innovation – except for Alfa (24%). Even though this indicates their appetite to invest in new products and solutions, it highlights the potential for bolstering the innovation culture in the sector looking forward.

"There is an opportunity for finance software providers to innovate by setting up their operating model to act as an enabler for change and experimentation."

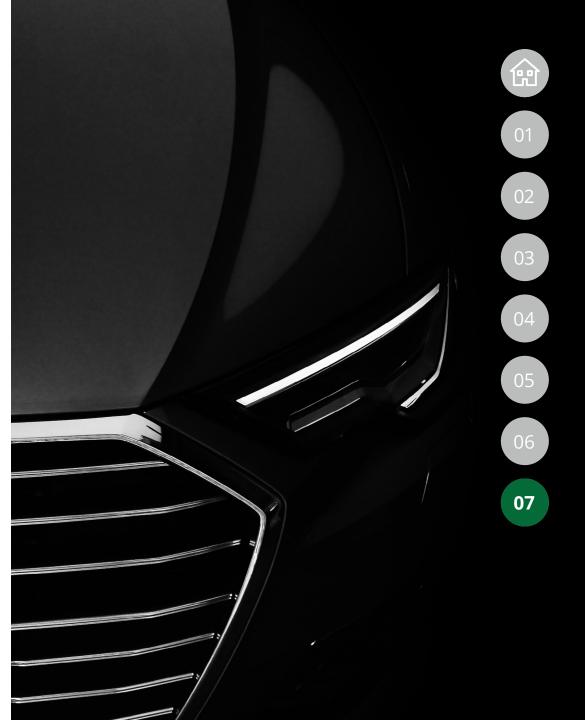




7. Closing remarks

Business models across asset finance are changing. As the underlying markets respond to buyers' needs and incorporate new technologies, software providers must continue providing the marketplace with innovative asset finance software solutions.

Consumer demand for digital and personalised solutions pushes the automotive and equipment value chain to rethink its approach within its channels. Software providers need to further integrate subscription services into their platforms while maintaining a seamless, digitally secure service. With competition and consolidation continuing to challenge established positions in the market, we expect providers to push the boundaries of innovation as they embrace emerging trends.



Endnotes

- To reflect the impact of the pandemic, a more accurate depiction of how the market is currently performing can be drawn by comparing 2021 performance so far to historical 2019 performance
- 2. 2018-2019, World Leasing Yearbook 2021
- 3. North America accounts for 37.4% at \$509.8bn including Canada and Mexico (\$473bn for US only).
- 4. World Leasing Yearbook 2021
- 5. The Business Research Company
- 6. According to the annual SEFA (Survey of Equipment Finance) ELFA
- 7. 2019, Bureau of Economic Analysis, US Department of Economic Analysis
- 8. Fitch Ratings
- 9. 360iResearch
- 10. Gartner
- 11. Technavio, Fortune Business Insights
- 12. The Business Research Company
- 13. ELFA
- 14. Followed by China (18%)

- 15. 74% of growth will come from APAC; Technavio
- 16. Deloitte
- 17. IMF, Deloitte
- 18. Deloitte Eurozone Economic Outlook
- 19. IHS
- 20. IHS
- 21. Deloitte
- 22. The production of the German car industry fell by 13% in June from May, after a steep 20% fall in May. Deloitte Eurozone Economic Outlook
- 23. Based on the Oxford Economic Model (OEM), Deloitte 2021 manufacturing industry outlook
- 24. Deloitte Reimagining the auto manufacturing supply chain network
- 25. Deloitte The impact of COVID-19 on financing and leasing in Europe
- 26. Note that COVID-19 has disrupted implementation
- 27. Weakening banking regulations through reform of the Dodd-Frank Act and introduction of the Consumer Protection Act of 2018

- Leveraged Lending Guidance was not legally binding on federally supervised financial institutions that are substantively engaged in leveraged lending activity.
- 29. FCA Dear CEO to firms providing services to retail investors about coronavirus March 2020
- 30. Overall, the automotive leasing market exhibited a negative growth rate of about -20.6% in 2020
- 31. Finance and Leasing Association (FLA)
- 32. Finance and Leasing Association (FLA)
- Now offered in Germany as well through the fintech Cluno and their Porsche inFlow car rental scheme
- 34. Deloitte Future of Captives; Captives contribute on average up to 1/3 of their OEM groups' total profits and often up to 50% of their total assets
- 35. Forbes
- 36. Recognise Bank press release 12/05/21
- 37. System Integrators
- 38. Customer interviews

- List is not exhaustive. The vendors outlined are selected from a longer list of software providers
- 40. NETSOL's NFS Ascent® Retail Platform Goes Live in China for Major Global Auto Captive
- 41. R&D spend from AFB, Codex, Sopra Banking Software and SOFICO was not available
- 42. For which financial information was publicly available
- 45. Sopra Steria's acquisition of Sopra Financial Technology (a joint venture with the Sparda banking network)
- 46. TietoEVRY, Sopra Banking and FIS Financial Statements
- 47. LineData Financial releases 2020
- 48. White Clarke Groupe Financial Statements
- 49. White Clarke has been acquired by IDS, a prominent finance software provider, with joint performance to be reported from 2021 onwards

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Endnotes

- 50. 64% of financial services executives expect to become mass adopters of AI in just two years, 77% also anticipate AI to be of significant strategic importance - World Economic Forum 2020 Survey, Financial Conduct Authority UK
- 51. 42% of technology vanguards are shifting to a product model and are taking an agile approach to both business and technology, compared to only 14% of more traditional organisations. Maximising the impact of technology investments in the new normal - Deloitte
- 52. Forbes 2019 list for the "Software & Programming."
- Deloitte analysis. Estimated for each from the last financial year reported (2020). Sources include annual reports, company websites and FDI Intelligence
- 54. Fortune Business Insights The methodology used for the market sizing takes into account the total spend on IT software and services that is currently relevant for an enterprise application software provider (for example, but not limited to, software licences for enterprise application software, including updates and upgrades, and project-based advisory services for operational improvements and application implementation). The model then estimates the proportion that is used by finance providers and particularly, those specialising in commercial finance and captive models. The estimated spend is then framed as the proportion evaluated to be deployed for asset finance specifically, and particularly for the products of automotive, equipment and wholesale. The market sizing is based on external research and

Deloitte experience to date

- 56. Ally Tech
- e market 57 NetSol total 58 Electrive rvices that 59 Deloitte analysis
 - 60 Tieto and Evry merger in 2019; \$35m in merger synergies and \$95 in revenue run rate
 - 61 Lombard Sustainable Business Finance
 - 62 https://on.to/
 - 63 https://zeti.co.uk/
 - 64 https://www.wagonex.com/
 - 65 https://www.silvercar.com/
 - 66 https://www.ezbob.com/
 - 67 https://www.10xbanking.com/
 - 68 https://www.mambu.com/
 - 69 https://corporate.enelx.com/en
 - 70 https://www.cazoo.co.uk/



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