Digital Directions
Exploring digitalisation in the asset finance industry

alfasystems.com/digitaldirections
About the Report

Alfa commissioned Invigors to conduct a survey of leading industry opinion aimed at assessing the status of digitalisation in the vehicle and equipment finance industry. We spoke to a range of C-level and senior executives, including bank-owned lessors, manufacturer captives, and fleet management and vehicle finance companies, as well as technology partners.

Our aim is to assess how far the asset finance sector has come on the journey towards truly transformative digitalisation, analysing the barriers and drivers along the way.
## Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Foreword</td>
</tr>
<tr>
<td>6</td>
<td>Overview</td>
</tr>
<tr>
<td>7</td>
<td>Introduction</td>
</tr>
<tr>
<td>8</td>
<td>Market status</td>
</tr>
<tr>
<td>9</td>
<td>What’s driving digital change?</td>
</tr>
<tr>
<td>10</td>
<td>Evaluating digital strategies</td>
</tr>
<tr>
<td>14</td>
<td>What are the obstacles to digitalisation?</td>
</tr>
<tr>
<td>18</td>
<td>Challenges and opportunities</td>
</tr>
<tr>
<td>19</td>
<td>Meeting the challenge</td>
</tr>
<tr>
<td>24</td>
<td>Opportunities</td>
</tr>
<tr>
<td>26</td>
<td>A note on data connectivity</td>
</tr>
<tr>
<td>28</td>
<td>Final word</td>
</tr>
<tr>
<td>30</td>
<td>Glossary: The technologies making the difference</td>
</tr>
</tbody>
</table>
Digital Directions: Exploring digitalisation in the asset finance industry
Foreword

We live in an increasingly connected world, where everyday tasks are handled online - from checking our bank balance, to buying groceries, to finding the route home.

Think of an industry and you’re sure to find some technology challenging its traditional model. Utilities are governed by smart thermostats and meters so we don’t waste energy; in healthcare, disease is understood and treated better through big data and machine learning; and robots perform military services and explore space.

Digitalisation is changing everything, and with smart banking, mobile payments and peer-to-peer lending platforms, the finance sector is at the forefront of the transformation. So too are smart vehicles, plant and agriculture, and manufacturing in general - but what of asset finance, our industry which links those two worlds?

The fact is, asset finance has always been risk-averse, particularly when it comes to technology. As technology providers, we at Alfa have always pushed our clients to innovate, but the cautious nature of large-scale lenders obliges them to wait for other markets to mature before moving forward themselves.

And so the use of the latest technologies like artificial intelligence, augmented reality and voice recognition is not widespread in our world. However, competitive pressures and changing customer expectations are compelling companies in the sector to take on this digitalisation challenge.

We surveyed a cross-section of industry leaders to understand how they view digitalisation, what their strategies are, and the nature of the barriers they face. For some it’s still early days, and the focus is on simple automation of existing processes. Others, meanwhile, are taking a holistic view - building an entire digital ecosystem that embraces internal and external partners, creating a proposition that is genuinely greater than the sum of its parts.

The move to digitalisation is challenging, and presents critical issues - particularly the constraints of legacy systems and the need to develop new skills. But the rewards can be significant.

We hope this report will provide insight and inspire action.

“Competitive pressures and changing customer expectations are compelling companies in the sector to take on this digitalisation challenge.”

alfasystems.com/digitaldirections
Overview
What is digitalisation?

Most asset finance organisations accept that there is a need to use digital technologies to develop new and enhanced customer propositions, or risk losing market share.

Some see digitalisation as being solely about customer self-service, and some see it as linking the finance process to traditionally non-finance related systems and data; while others associate the term directly with new technologies like machine learning, virtual reality and the Internet of Things.

“Digital solutions are about more than writing an app, providing data that wasn’t previously available, or moving back-office processes online.”

At Alfa we believe it is all of those things, but also that digital solutions are about more than writing an app, providing data that wasn’t previously available, or moving back-office processes online. Although enhancing customer self-service in these ways is valuable, the true benefits come from using technology to open up original ways of operating, selling, and improving, including providing a compelling experience that encourages customer loyalty.

But how successful are leasing organisations at achieving this? Our survey assesses the assertions above, asks how companies are planning to address them, and benchmarks the progress that has been made.

Changing your business model

A user wants to learn a settlement figure for his or her contract. Instead of needing to make a phone call, he or she can simply go online, log in and see the figure.

This example of ‘pushed’ functionality merely adds a new information channel, and doesn’t represent any material change to the relationship other than adding an element of efficiency. However, if the user can go online, log in, modify his or her weekly payment, apply auto-approved payment holidays, and not only generate but pay a settlement figure, then this changes the entire offering - and represents a genuine innovation of service.
Market status

Our survey showed that digitalisation is well understood and asset finance organisations have a clear idea of the barriers to be overcome, although they may be uncertain as to the best way forward. Leasing companies have not only developed distinct digital strategies, but are engaged in varying degrees of implementation. However, the breadth of vision and actual scope of digitalisation varies considerably between companies, and is notably greater in some sectors than in others.

While retail finance represents the vanguard of digitalisation, asset finance has been moving more slowly.

“‘It is important to move forward in small steps to minimise risks and retain employee engagement.’”

Around half the companies surveyed are currently implementing limited-scale digital pilots, usually in customer-facing contexts such as mobile and self-service, in order to learn and adapt in advance of a wider rollout. Respondents noted that it is important to move forward in small steps to minimise risk and retain employee engagement.

“The breadth of vision and actual scope of digitalisation varies considerably.”

As a generalisation, vehicle finance (B2C) is out in front, with fleet management and equipment finance next in line, although there are exceptions in agricultural, mining and construction equipment, where digitalisation is being driven by the manufacturers keen to leverage value from the application of telematics and other technologies.

“98% understand the digitalisation challenge”

47% are piloting digital

16% have created a fully digital business

Just under one in six respondents in our survey claimed to have created a fully digital business, establishing a digital ecosystem that connects internal and external processes and suppliers.
What’s driving digital change?

Our survey showed that there are five key factors driving digitalisation, consistently across vehicle and equipment leasing.

**Competition**
Lessors recognise the first-mover advantage gained by early investment and deployment of digitalisation initiatives. If they fail to offer similar products and services to their competitors, their customers are likely to go elsewhere.

**Cost and efficiency**
Digitalisation is seen as the means to achieve greater process efficiencies and improve cost-income ratios. For example, fleet management companies are looking to digitalise their supply chain, removing paper-based and manual processes.

**Customer behaviour and demand**
Customers are influenced increasingly by the digital services they use as consumers, as well as social media and the sharing economy, and want to see this replicated in the B2B sector. A younger workforce expects to conduct business online, and services to be available 24/7.

**Regulation**
Leasing companies, particularly those based in Europe, agree that increasingly tougher reporting requirements can only be met through extensive digitalisation, particularly of back-office systems and the associated reporting processes.

**Fintechs**
Fintechs such as Alfa, who push technology solutions the most, are themselves seen as driving the digital agenda. Responses told us that vehicle lessors (captives) and bank-owned lessors have the greatest engagement with fintechs - particularly in the form of partnering, and running innovation centres to explore digital possibilities.
Evaluating
digital strategies
We asked our respondents where they were on the journey.

Overall, our survey reveals that many in the leasing industry subscribe to a much broader vision of the possibilities opened up by digital. Over a third of those interviewed believe that digitalisation involves developing a ‘digital ecosystem’, under which their organisation acts as a digital hub, embracing customers, vendors, suppliers and other partners, as well as employees.

One in five of the companies we spoke to report starting on the path to transforming themselves fully into digital businesses. Even these pioneers are more likely to be working on digital pilots focused on generating internal efficiencies, with plans to link these together to form a more extensive digital infrastructure at a later stage, rather than an integrated strategy.

Nearly three quarters of survey respondents cite the goal of streamlining existing processes, where the focus is on driving greater efficiency from the asset and contract lifecycle through further automation and process improvement. This is essentially a defensive strategy aimed at countering competition, future-proofing current propositions, and preserving existing revenue streams.

Around a third of organisations interviewed have embraced the agile approach to development, not just of software, but the complete digitalisation initiative, including customer proposition, customer journey, products and services, contracts and processes. Development involves multi-disciplinary teams which extend beyond the immediate boundaries of the organisation, including customers, as well as specialists from sales and marketing, operations, legal and IT.

Organisations adopting this approach are developing completely new value propositions delivered through digital channels, of which mobility solutions and pay-per-use propositions are examples.

34% believe digitalisation means developing a digital ecosystem

21% have begun the process of full transformation

73% want to streamline their processes

31% operate under agile principles

Case study: Using MVP to accelerate the pace of new product development

One European CEO said his leasing organisation has adopted an agile business model for the development of a new digital channel and proposition.

Using storyboarding techniques, teams developed an initial concept from which a minimum viable product (MVP) or proof of concept was created. This could be as simple as a set of mocked-up screens. The lessons from testing were then fed back into an iterative development process consisting of a series of 2-3 week iterations.

This agile development approach offers several benefits compared to the traditional waterfall methodology, including shorter time to market, reduced risk, and lower development costs.
We asked our respondents where they were on the journey (cont).

Organisations are looking at developing integrated multichannel or omnichannel customer journeys for their users, designed to remove the traditional pain points. A third of those interviewed cited the development of an omnichannel business capability as enhancing the customer experience. The aim is to ensure that customers can interact with leasing companies in whichever way they choose, be that through the web, chat, social media, by phone or in person.

At the entry level, this can mean adopting self-service capabilities, enabling customers to fulfil simple processes or undertake account and contract enquiries online, but more sophisticated solutions are emerging. For example, one UK-based, bank-owned lessor is providing access through digital channels to its expertise and knowledge of business finance that was previously only available via relationship managers and in-house experts.

Digitalisation is viewed as a means of transforming leasing businesses and, by extension, the market. For two fifths of respondents, it is a way of enhancing the customer experience and strengthening customer relationships, by reducing the ‘friction’ often experienced when interacting with the company, as well as providing a better service. By creating an app or service that matches customer needs, companies have the opportunity to build customer loyalty, since the switching costs (those costs incurred by a consumer as a result of changing brands, suppliers or products) associated with moving to an alternative supplier are likely to include inconvenience, fees, or additional training.

Regardless of how broadly defined the digitalisation strategies, for the majority of respondents the focus is predominantly on customer-facing functions of the business. At its narrowest level, this is confined to providing customers with self-service functionality around contract management, invoicing and so on, leveraging the digital capabilities of the existing back office.

A strategy of mobility and pay-per-use is more proactive, targeting new customers and new revenue streams, and typically requires a different business model from that applied to existing business. It appeared to be less widely adopted, being cited by around a quarter of those interviewed, most of which were in the vehicle and fleet leasing sector.
Case study: Digitalisation applied in automotive retail

Car retailing is an excellent indicator of the direction of digitalisation. As car buyers undertake more of the buying process online, manufacturers and dealers are responding with an omnichannel strategy which enables customers to switch from mobile to desktop to dealership with ease, all the time retaining the customer journey. Manufacturers such as Volkswagen have embraced this 'clicks and mortar' approach, and are investing heavily in their dealer networks to adapt to a digital world where buyers undertake 80% of the buying process online and the average number of dealer visits per purchase has fallen from seven to one.

Other manufacturers like Hyundai have taken a more online-only approach. In the UK, Hyundai has adopted Rockar, a platform that provides a complete online experience for car purchase. In the US, the manufacturer has launched a nationwide programme called Shopper Assurance to streamline and modernise car buying, with test-drive bookings and credit screening handled online. Research had indicated the majority of car buyers are frustrated with the automotive retail experience.

The traditional role of dealers is further augmented by the rise of platforms such as Carwow, which began in the UK and has expanded to Germany. It is based on a ‘reverse marketplace’ model that removes the need for buyers to negotiate with individual dealers. Carwow asks website visitors to identify the car they want, then provides them with quotes from local and national dealers within 24 hours, eliminating the need for buyers to work through multiple websites and making the process faster and less demanding.

In the US, online car retailing is long established with sites such as CarsDirect dating back to 1998. Established used car resellers have also embraced digital. The second largest used car reseller CarMax has undergone a programme of digital transformation in recent years, integrating its large estate of used car lots with a strong online presence. CarGurus, set up by the co-founder of TripAdvisor, is now the most popular car research and shopping platform in the US.
What are the obstacles to digitalisation?
The survey identified five key challenges to businesses in their quest for digital.

1. Skills

The ability of existing staff to adopt new skills and working practices is an issue. Few report having the skills in change management required to move the company from its current approach towards a new way of working.

Around a quarter of respondents are focusing on the skills required to implement and manage digitalisation, reporting that they are keen to recruit ‘digital natives’, i.e. those considered to be at home with technology and able to respond to any challenges posed by digitalisation.

Around a third of respondents highlight the need for specific technical skills, such as analytics specialists, data scientists, and customer experience professionals. The general view is that these skills can be outsourced, or insourced from parent companies’ resources. Other respondents are seeking more generic qualities, such as willingness to experiment and challenge existing ways of working.

60% see skills gaps as a significant organisational challenge

23% prioritise recruitment of digital natives

35% are filling specific skill gaps

Challenge Story: Skills

The ability of existing staff to adopt new skills and working practices is an issue and, while some demonstrate the flexibility required and are comfortable working with technology, others do not. One UK CEO noted that the situation is similar to that in retail banking where staff are either reskilled for the digital, online environment, or transitioned out of the business.

2. Business Environment and Investment Appetite

Some sectors of the leasing industry are experiencing significant margin erosion, particularly for vanilla finance business, and there is little appetite for investment, even though there is a potential upside from digitalisation in terms of reduced costs and improved margins over the longer term. This is proving to be more of an issue for equipment lessors than the vehicle leasing and fleet sectors, mentioned by 20% of the former and none of the latter.
Challenge Story: Vision
The CEO of one major European bank-owned lessor reported challenges in achieving a shared vision of what the digital company should look like, as not all stakeholders were aligned and, even among the management team, different executives held different ideas of what the digital vision should be, depending on their background and perspective.

3. Technology

71% operate crippling legacy software platforms

Nearly three quarters of our respondents - particularly the bank-owned lessors - are still operating legacy leasing and banking platforms which impose numerous constraints on their abilities; such as introducing new products and services in a realistic timescale, or supporting pay-per-use contracts.

Many of those surveyed see technology as a challenge in itself, with most viewing it more as an enabler of digitalisation. However, the constraints imposed by older technologies are viewed as a clear obstacle to progress. One US-based CIO in the vehicle finance sector has completely replaced its lease management platform as their previous legacy system was unable to support the Service Oriented Architecture (SOA) they believe is essential to provide the flexibility and agility required support the digital transformation of their business.

“The constraints imposed by older technologies are viewed as a clear obstacle to progress.”

Challenge Story – Regulation
Regulation is, interestingly, seen as both a challenge and an opportunity. It is a challenge in that regulation imposes constraints on the extent to which some processes can be digitalised where human intervention is traditionally required.

The CEO of a European lessor quoted ‘Know Your Customer’ requirements as an example, arguing that validation of a customer’s identity can only be accomplished in person in order to remain compliant. However, software suppliers are now developing smart contract applications, combining online e-signature and automatic credit verification checks with video capture processes to produce solutions that can provide an audit trail of the customer verification process.
4. Innovation Culture

18% believe they are currently disrupting

Building and managing a culture of innovation is a challenge to risk-averse businesses which are heavily regulated, and where staff are often discouraged from taking risks. Organisations will need to recruit from outside the industry to attract new digital skills at all levels in order to encourage diversity of thought and action.

Despite high levels of digital awareness and activity, the responses show that only a minority have fully recognised the opportunity for disruption, and even these pioneers are not necessarily starting on a fully integrated strategy to transform themselves into digital businesses.

That’s not surprising, as driving digitalisation programmes through leasing organisations is not a straightforward process. Legacy systems, inflexible ways of working, differing cultural values and a shortage of critical skills are all barriers to success in this area.

“Legacy systems, inflexible ways of working, differing cultural values and a shortage of critical skills are all barriers to success.”

5. Partner Alignment

In order to build a digital ecosystem, it is vital to include partners such as vendors/dealers, manufacturers, funders, suppliers and technology providers.

The extent to which these partnerships can be embraced depends on how closely they are aligned with the lessor. If a partner doesn’t view digitalisation as a priority, this could represent a constraint on progress.

Challenge Story - Scale

The COO of one multinational IT lessor reports that creating scale is critical to successful digitalisation implementation, particularly for multinational leasing operations. Digitalisation calls for common platforms to be developed and implemented on a multi-country basis, with local country requirements such as products, processes, regulatory reporting and contract terms overlaid on top. However, this requires a significant level of scale to justify the investment involved.
Challenges and opportunities
How are our respondents, and others, meeting the obligation to change?

Organisations are addressing the barriers to digitalisation in a number of ways. The leaders are innovating, and quickly; running pilot projects to test out new products and services, using rapid development techniques and embracing the concepts of ‘Build fast, fail fast’.

These digital leaders recognise they need to innovate to continue to succeed, and that they can’t do it alone. To bridge their knowledge gap, they are turning to their solutions providers for help, and forming partnerships with fintech companies to accelerate the pace of change.

“The leaders are innovating, and turning to their solutions providers for help.”

Case study: Ford uses machine learning to enhance risk scoring

In the US, Ford Motor Credit recently announced it had teamed up with machine learning specialists ZestFinance to apply the technology to consumer risk scoring models.

Whilst Ford's proprietary risk scoring models have performed well over the years, a recent study compared these with a ZestFinance model developed through machine learning, and found that it could reduce future credit losses and improve acceptance levels, particularly for younger groups with thin credit histories. Given the millennial demographic now accounts for 29% of US new vehicle sales, increasing acceptances in this group while not increasing risk can give Ford a significant competitive advantage.
API as a product

No single technology or app on its own will transform a company’s business: the whole must always be greater than the sum of its parts. Connecting different processes together, integrating data and systems, is a critical requirement.

This kind of application will continue to be enhanced by the next generation of asset finance organisations, through the use of data from connected cars and the Internet of Things. Ever greater volumes of data about customers, assets, movements and trends will become available, and the challenge for organisations will be to find ways to use that data to locate actionable insights.

Some of these are already on the horizon, such as mobility solutions that combine usage information and different transport modes into a single, easy-to-use contract; or Volvo’s recent announcement of a ‘no haggle’ subscription car service with a flat-rate fee that covers every automotive expense on the driver’s behalf, including insurance, financing and maintenance.

Case study: CapitalOne and Vroom

CapitalOne’s tie-up with Vroom, a fintech company that provides online car retailing, is designed to support customers in buying and selling used cars online. CapitalOne developed its car financing product as an API. Providing extensive scalability and control, it enables buyers to pre-qualify for finance online. The aim is to use a sophisticated back-end architecture to deliver a simple user experience.

Whilst the Vroom implementation represents a single partner implementation, the intention is to offer this ‘API as a product’ to other CapitalOne finance resellers, thereby opening up a much wider potential community of users.
Case study: Black Horse and Piaggio

Another example of API as a product has been implemented by Black Horse, the vehicle finance division of Lloyds Bank in the UK. Black Horse offers a range of financial products including HP and PCP for customers seeking finance for motorcycles or scooters from the Piaggio group. This covers multiple brands, and previously buyers had to follow the traditional route of applying for finance in the dealer’s showroom; a process which slowed the sales cycle, generated wasted quotes and lost sales. The cloud-based system implemented by Black Horse enables buyers to obtain finance quotes on multiple makes, models and finance options.

The system utilises a third party system, iVendi, to generate PCP quotes through an API and pushes data out to the customer though an API which can be integrated with dealer or manufacturer websites. Customers can generate multiple quotes and explore various finance options either at home, through their smartphone, or at the dealership.
Innovation Labs

Some companies are taking an innovative approach to partnering, and have established innovation labs to both foster and learn from digital startups. These initiatives are sponsored by the vehicle manufacturer and not confined to the finance division, although the latter plays an important role and finance is often a focus for innovation.

Case study: Arval’s ‘Shed’

Fleet finance and management provider Arval has also established an innovation lab, nicknamed ‘The Shed’ and based in Paris. Unlike other labs, this has a single focus on the development and testing of Arval’s telematics platform, ARTEL. Rather than relying on vehicle manufacturers or third parties, Arval is developing its own telematics solution in order to better understand customer behaviour and develop new products and services. It also has agreements with some manufacturers to take their vehicle telematics data, which is being integrated with their fleet data to develop new propositions.

Case study: BMW’s innovation lab

BMW has set up an innovation lab for startups to trial new products, while receiving access to mentoring and funding. Now in its second year, each ten-week programme acts as a corporate accelerator for startups to develop and trial new products at scale. Co-located at the company’s UK headquarters, the innovation lab provides access to data and insights as well as enabling them to test products and services in a live customer environment. Programmes are focused on four key areas of interest to BMW – customer experience, enhancing business processes, access vs. ownership and what BMW refer to as their ‘regtech wildcard’, a means of rating risk dynamically while offering a transparent process to the customer.
Auto manufacturers are always looking to harness the innovation of Silicon Valley. Toyota opened its Collaboration Laboratory (Co-Lab) in California with the aim of providing an access point for creators and innovators working on products, services or other initiatives that transform mobility. The manufacturer says it wants to adopt a holistic approach to mobility innovations that incorporates physical, psychological, social and technical factors, and the Co-Lab is open to creators and innovators from various backgrounds, including engineers, scientists, designers, entrepreneurs and even artists.

Ford’s research and innovation center in Palo Alto is home to more than 160 researchers, engineers and scientists, who are driving Ford’s collaboration with the Silicon Valley ecosystem. Its role is to drive the company’s smart mobility initiative by accelerating innovation in connectivity, mobility, autonomous vehicles, the customer experience and big data. As examples, Ford researchers are partnering with local company Nest to explore ways to integrate the group’s home monitoring data with Ford SYNC 3. The bike-friendly culture of the Bay Area has helped foster two initiatives: The info cycle mobility project is gathering data about how bikes are used in urban transportation and the MoDe:Flex modular electric-assisted bicycle is showing the world Ford is thinking seriously about the future of mobility.
Opportunities

Tracking asset usage

How can new technologies allow asset finance companies to leverage tracking of their assets under finance?

Asset trackers
Used frequently in the insurance world to calculate premiums, vehicle trackers incorporate geofencing and analytics on driving behaviours, such as driver speed and safety issues. In a finance context, the same technology can be used in skip tracing (tracking down vehicles whose drivers have skipped payments), monitoring the condition of assets, limiting range, and allowing better and more accurate pay-per-use.

Track low-value assets
Usually, assets would only be tracked by a finance company if they had a discernible residual value, for purposes of condition, usage and so on. Using RFID allows assets to be scanned at certain intervals so the finance company can be alerted to the absence of low-value assets from a larger set. This applies to very small-ticket items such as beer barrels, bikes, and some office equipment and appliances. The finance company can then adjust agreement and the associated fees automatically.

Tolls and parking
Through geofencing, a digital solution has the potential to be made aware of a driver’s travel through congestion zones and other toll points, and to pay (and renew) this automatically on the driver’s behalf, passing the cost into the agreement.

Such a solution could also be used to pay and renew parking. For example, a sensor at a car park entrance could scan the vehicle’s registration, compare that against the database of pre-paid users, and allow the driver in for free. This could integrate with existing auto parking payment services such as RingGo to pay parking on the driver’s behalf, on the day, or for a longer period.
Applications aimed at drivers

The study revealed a number of digital initiatives being implemented within the industry and vehicle manufacturing sector. With much of the focus on customer experience, there is a strong emphasis on mobile, particularly driver apps, which some of the vehicle and fleet lessors had either implemented, or are developing currently.

How can new technologies enhance vehicle and fleet apps?

Usage limits

If a driver is forecast to exceed his or her mileage allowance in a given period, a warning can be provided as a push notification, with some action options suggested (buy more usage, change agreement, and so on). This is touchless process, and end customers will see it as positive.

This can also apply proactively, where usage is expected by the end customer to decrease or increase. The app would allow the driver or fleet manager to ‘auto tune’ the contract to match usage, while predictive analytics can provide alerts to possible future arrears, and offer options.

Configurable rules and processing are built in as part of a robotic process.

Mobility

For drivers of a certain brand, a digital solution can provide continuity and the opportunity to be loyal to the brand by easily renting vehicles while travelling.

Charges could take a format similar to maintenance, where the customer pays a premium for a service that may or may not be used according to requirements, and which is priced according to its overall use. Users can avail of services and manage the full finance picture inside their app.

This has the potential to leverage pay-per-use costs for the driver too. The solution could allow you to rent your own vehicle to a third party while you are travelling (in the mould of easyCar Club), allowing the driver to drop his or her car at the airport and pick up another when they land. All parties derive value.

Enable product features

Tesla manufactures its cars with all features included, but turns them off and on through software. If you wanted to upgrade your lease car, you could do so through an app, renegotiate your contract, and be using the new features within minutes.

Sharing machinery across farms

Farmers don’t necessarily need a whole number of combine harvesters. The land they farm might require only the capacity of one and a half.

Using geotracking, farmers and their neighbours can leverage the use of a single asset across multiple locations, working together and saving money on wasted resource. This is also useful because farmland often doesn’t have hard borders.
A note on data connectivity

In digitalisation, connected data is the most important resource you can exploit. If you want to be ready make changes in your business, you need to prepare access to your systems, linking up feeds and sources in ways that allow you to use them together. Only once you make your data accessible can you think about innovating your proposition.

At Alfa we are champions of the enterprise service bus (ESB), which is widely used to integrate any application, data source or API. We use this to operate a system API, alongside a process API - which breaks that down into functional process - alongside an experience API, which allows aggregation to a set of services appropriate for a particular purpose.

Connectivity can be hamstrung at the outset: we rarely see broad-based collaboration between OEMs and their finance company counterparts. So what is technically possible sometimes isn’t allowed to take place because of business restrictions. This is often because of competitiveness over ownership of the customer relationship, but there are other concerns in the form of security, privacy and compliance. However, some organisations are looking to unify and standardise vehicle data.

“With respect to digital, data is the key. Whoever collaborates the best on data can innovate the most and be the most successful.”

Richard Jones, Managing Director, Black Horse Motor Finance, May 2017
Digital Directions: Exploring digitalisation in the asset finance industry

Case study: PACCAR’s Connected Truck

Data coming directly out of financed assets is usually controlled by manufacturers, and access to that by the finance company is typically not allowed, even in a captive context.

PACCAR is a global technology leader in the design, manufacture and customer support of premium trucks under the Kenworth, Peterbilt and DAF nameplates. In PACCAR’s case, the finance company is allowed by the OEM to access the asset’s data, and this has led to the ‘connected truck’, which reports mileage, tyre pressure and other sensor-related data, and is subject to remote diagnostics.

PACCAR says the connected truck technology helps provide maximum uptime, keeps deliveries on time, streamlines service management, and ensures trucks are running at peak performance.

The company is opening an advanced technology research and development center in Silicon Valley to coordinate next-generation product development and identify emerging technologies that will benefit future vehicle performance. Areas of focus will include advanced driver assistance systems (ADAS), artificial intelligence, vehicle connectivity and augmented reality.
What digital transformation in asset finance does most is push functionality out to the end user. But the goal in our industry is not just to affect end user functionality. Moreover, it is to change the nature of your business’s interaction with the customer fundamentally, to the extent that you change your entire business model.

We’ve read that most are focusing their efforts on the customer acquisition side of the process. We think in-life experience is more critical to retaining the relationship.

Most asset finance organisations have much to do if they are to embrace the full potential of digitalisation. It’s not easy to move from a largely transaction-based approach, with a focus on cost efficiencies, to an all-embracing digital offering that puts the customer at the centre of everything the company does.

Many companies are aware of the path they need to take, some have started on the journey, but very few are as advanced in their approach as their peers in other industry sectors.

Final word
External partners and suppliers can be extremely useful, and by working collaboratively with them it is possible to build systems that deliver greater value.

It is not just the volume of data provided by assets which is critical, but the ability to analyse that data and spot where new products, services and improvements can be developed.

Asset finance organisations need to take action to establish their role in the digital ecosystem, or risk being overtaken by technology disruptors.

It’s vital to embrace new ways of working, with more diverse views and approaches reflected throughout the organisation.

External partners and suppliers can be extremely useful, and by working collaboratively with them it is possible to build systems that deliver greater value.

Think ahead
Build an infrastructure
Tackle the skills gap
Exploit data
Don’t go it alone
Glossary: The technologies making a difference

What new technologies are being deployed by asset finance companies looking to digitalise their business?

**Big data**
As processes become digital, and infrastructure and assets such as business equipment and cars become more connected, there has been an explosion in the amount of big data available to asset finance providers.

Lenders can use transactional data to optimise workflows and ease customer pain points; while analysing data from the asset provides enhanced understanding of how it is being used.

**AI and machine learning**
AI and machine learning are used to spot trends, and apply that knowledge to wider situations. This can widen the scope of activities based traditionally on a few key indicators, such as credit scoring.

Using AI, it is possible to draw on additional ‘soft’ indicators from large volumes of data in order to assess more potential customers than might previously have been possible, such as younger people with thin credit files.

**Robotics and robotic processes**
Robotics doesn’t just refer to robots, but also software.

In financial services, robotic process automation is used increasingly to automate routine work that lacks the scale or value to warrant full automation through core systems. Soft robots mimic the way people interact with applications.

Multiple robots can be seen as a virtual workforce - a back-office processing centre but without the human resources. Costs are lower, and firms are also seeing improved accuracy, timeliness, and operational flexibility.

**Voice recognition**
Combined with AI, voice recognition is used in virtual assistants or chatbots, which answer queries or guide users through processes on a call or website.

This reduces the cost of customer support, while ensuring an organisation remains compliant with regulatory requirements.

**Virtual and augmented reality**
For dealers and manufacturers, VR and AR have opened the door to solutions that allow buyers to look around a car before buying, previewing the modifications of their choice.

**Telemetry**
Telemetry is well established in the fleet market and gaining wider acceptance in retail auto.

Typical applications include analysing information on speed, braking, tyre pressures and other data from in-vehicle sensors. This can help spot opportunities to reduce costs by altering routes or maintenance schedules, or encouraging changes in driver behaviour.

**Geofencing**
Geofencing enables software to respond when a mobile device enters or leaves a particular area.

For a connected car, on-board sensors can receive information about local amenities, and push an alert to the car’s user interface. For construction equipment, the technology can provide alerts if assets are moved into unauthorised areas.

**Blockchain**
Financial services companies use this decentralised system as a way of exchanging contracts between authorised parties without using an intermediary. Blockchain also brings the concept of ‘smart contracts’, under which the terms of the agreement are written directly into lines of code, and triggered by specific events such as a purchase or expiry date.

While Blockchain opens the door to greater efficiencies, it also represents a number of challenges: since transactions are anonymised, participants need to trust their partners, as there is no longer a third party central authority, legal system, or external enforcement mechanism.

**The Internet of Things**
IoT ensures customers can manage their equipment more effectively, and suppliers can be more proactive in the support they provide. Lessors can better understand when equipment should be serviced, and pinpoint the right time to offer technology upgrades or new products.

**Quantum computing**
Widely viewed as the next big technology breakthrough, quantum computing follows the laws of quantum mechanics to create computing power, rather than the current binary approach based on transistors. Operations can be carried out up to 100 million times faster than classical computers.

A commercial machine has yet to be launched, but would increase the performance of AI solutions significantly, since data could be collected more widely and processed much more quickly.
A digital future can only be achieved using modern systems with deep functional power. Genuinely sophisticated tools and valid goals are essential. If you’re not truly innovating, you’re not embracing the potential.

Challenge your software and service providers to outline how they’ll be using AI and other modern technologies to add business value to advanced analytics, intelligent processes and advanced user experiences.