

Going Digital: Current Activities and Future Expectations





Established in 1989, the Equipment Leasing & Finance Foundation is a 501c3 non-profit organization dedicated to inspiring thoughtful innovation and contributing to the betterment of the equipment leasing and finance industry. The Foundation accomplishes its mission through development of future-focused studies and reports identifying critical issues that could impact the industry.

Foundation research is independent, predictive, and peer-reviewed by industry experts. It is funded solely through contributions. Contributions to the Foundation are tax-deductible. Support the Foundation by making a 100% tax-deductible gift today at www.LeaseFoundation.org.

Equipment Leasing & Finance Foundation 1625 Eye Street, NW • Suite 850 Washington, DC 20006 www.leasefoundation.org 202-238-3429 Kelli Jones Nienaber, Executive Director

Table of Contents

Purpose of the Study
Executive Summary
In Summary7
What Does It Mean to "Go Digital"?
What is "Going Digital"?
Macro Trends: Customer Expectations and the Drive for Digital
Consumerization of Commercial Lending10
Factors Leading to Digital10
Competitor Activities
Current Status of Digital in Commercial Lending14
What Do Customers Want: The Need for Segmentation15
Small Ticket and Large Corporate Lead15
Middle Market Conundrum16
The Customer Perspective16
Key Constraints in Adopting Digital Technology18
Banks and Captives
Independents
Technology Trends and the Emerging Importance of Artificial Intelligence (AI)22
What is AI versus Machine Learning?22
Defining the "Ecosystem": Key Digital Tools Across the Lending Business System
Data Comes First
Deep Dive into Lending
RFPs and the Need for a Dynamic Due Diligence Process
RFP Creation
In Summary: Due Diligence Checklist

Going Digital: Current Activities and Future Expectations

Staffing and Technology: New Demands and Changing Roles35
Creating a Digital Culture
What are the key elements of a digital culture and how does a company encourage its development?39
The Future: What is the Likely Path Over the Next Five Years?
Current Status
Future Focus
Final Thoughts48
Sidebars
Case Study. AP Equipment Financing: "All in" on Digital50
Case Study. Servicing First: Key Equipment Finance51
Case Study. Creating a Journey Map: TIAA Commercial Finance53
Appendix55
Research Methodology55
Interviewees
Interview Topics
About FIC Advisors, Inc. (FIC)

Purpose of the Study

Going Digital summarizes the impact of digital lending on the expectations of a growing number of end customers: "Better, Faster, Cheaper." Some of the challenges facing the industry include: "Lenders are focusing on making the entire customer experience...frictionless, seamless, and easy...Digital investments offer the potential for improved customer experience, new revenue opportunities, reduced risk, and improved efficiency." With more automation, equipment finance lenders must preserve customer relationships and their ability to provide the expertise-based insights that differentiate them. Our interview group included banks, captives, and independents, serving all business segments. Our research suggests that equipment finance companies serving very similar customer segments approach digital initiatives from different starting points but also with different end goals.

The industry's approach to technology and the degree to which it invests in providing a digital experience differs in part based on the company's years in business and the complexity of its organizational structure. Younger companies may have been formed with a focus on digitalization from their start; older firms operate with legacy systems and legacy mindsets and more complicated internal bureaucracies that can often slow the adoption of new concepts.

Customers also approach digital technology from different starting points. Some end customers are pushing their equipment finance lenders to adopt more technology quickly while other end customers resist using ITbased options. Lenders point to certain industries such as office equipment as being slow to adopt technology both internally and in how they interact with lenders; lenders view other industries such as healthcare as being more advanced. In short, in the pursuit of digital innovation, no one size fits all. That is no surprise given diverse requirements and capabilities, but it means that broad generalizations are likely to be inaccurate.

The purpose of this study is to provide equipment finance industry practitioners with a perspective on the current and expected state of digital lending, including:

- What digital tools are equipment finance lenders using today?
- What expectations do lenders have for digital initiatives in the next few years?
- What are the roadblocks or constraints to the adoption of digital solutions?
- What internal approaches should a lender use in considering a third-party digital partner?

Based upon lender and end customer interviews, industry research, and FIC's client experience, this report also provides recommendations concerning how equipment finance companies can best determine priorities and, then, implement their digital choices.

Charles Wendel, President FIC Advisors, Inc. cwendel@ficinc.com



Executive Summary

Industry research and the opinions of 20 interviewees on the impact of digitalization range from suggesting urgent action ("The customer is way ahead of us") to a few skeptics that see the limited impetus for digital change. These perspectives highlight the range of views held by the industry and indicate the different levels of priority that equipment finance companies, some of them competitors with one another, place on digital transformation.

Several key findings emerge from FIC's extensive research, our interviews with equipment finance industry executives, and our consulting experience in this area.

The equipment finance industry differs in its approach to digitalization and even what they mean by "going digital."

Some players are "all in" and emphasize they have no choice but to embrace digital change: "There is a revolution happening today. Lenders failing to recognize this and act immediately, put their future at risk." Others are moving more slowly due to concerns about security, cost, or what they view as customer indifference: "We don't have a POS system... because we are afraid of being hacked", and "Our bank is committed to technology investments only to the extent that the FDIC needs us to be committed."

Digital does not define success...yet.

Despite the diversity of their perspectives, each of the companies cited above has been successful continues to grow its revenue and profits, and equipment finance lenders focus on different end customer segments with diverse loan products and distinct economics driving their bottom lines. Each may be pursuing the best digital (or analog) approach for their company. But, both the tools and customer requirements are changing.

Industry research points to growing commercial borrower demand for a digital experience.

Research from multiple technology and consulting firms cited in this report underscores the increasing importance of a digital experience to more business lenders. Research shows more end customers expect digital access in origination, servicing, and other areas with their use of digital tools and channels increasing yearly.

Technology adoption is usually a long process.

In some cases, digital technology has long been available. Cost savings innovations like e-signature and Optical Character Recognition have been available for up to ten years or more. Yet, innovation adoption is slow. Adoption usually requires the active support of top management.

The internal process for vetting and implementing technology solutions needs to be simplified and shortened.

The process for evaluating and adopting technology can take years due to internal legal, compliance, and business group concerns. Companies need an agile technology review process, one that begins with clarity concerning what they are trying to achieve through a particular digital initiative. Companies that begin their digital transformation with an internal focus may be best positioned for sustainable change. Several interviews focused on the importance of building internal digital workstations as a requirement for more direct digital access by customers.

Equipment finance companies are proceeding, but with caution.

Some companies appear hesitant to move quickly because of regulatory concerns and their view that much of digital technology remains largely untested. An industry expert added that, in general, "IT adoption has always been slow in equipment finance. As one operations head summarized, "New technology is fun, cool, and exciting, but discipline is required."

End customers range across the digital spectrum, and some customers may resist change.

More smaller companies now expect an Amazon-like experience and want "instant" approvals and full 24/7 online transaction transparency. Large corporate customers tend to be the most technologically advanced and may require integration with lenders. Middle market companies appear more difficult to categorize because some have yet to digitalize their internal processes due to concerns over IT cost and/or no perceived near-term need.

Digitalization is a tool, not a "secret sauce."

Companies often pursue a "secret sauce," the innovation that will set a company apart from others and resolve nagging organizational, strategic, and customer challenges. Digitization can play an important role in growing revenues, improving operating expense ratios, and enhancing the customer experience. The value it provides across a company's business system will increase over time as digital solutions mature. Digitization provides a powerful tool but is not sufficient for success unless a company has a clear strategy context. Digital serves as one tool among others.

The digital transformation process is in its early stages and is never-ending.

Those companies already having demonstrated significant commitment to digitization consistently state that the process is ongoing, dynamic, and as one person said, "Never-ending."

The impact on traditional equipment finance personnel is unclear.

Executives at several bank-owned companies expressed concern that the role of their bankers has been narrowed from lead business generators to product specialists, supporting bank RMs. Others offered an opposite view, promoting the importance of equipment finance lenders in building relationships.

In Summary

Research supports the view that the value and long term significance of digitization permeates the industry. But, the industry is in the early stages of traveling the digital path.

Each equipment finance company needs to develop its own digital roadmap, one they customize based on an assessment of their current technology, customer expectations, internal "pain points," and budget, among other factors.

What Does It Mean to "Go Digital"?

Digitization can provide benefits to equipment finance companies wishing to improve the customer experience. Offering a digital experience can also fend off competitors and increase customer retention and loyalty. Internally, digital solutions help to streamline and replace traditional paper-based processes, reduce errors, lower operating expenses, and spur a lender's ability to leverage customer data to improve pricing, risk management, and product development.

What Is "Going Digital"?

Going digital means less or even no paper.

One interviewee summarized some of the things it is not: "Paper processing is not digital, faxing, and then typing an application into the system is not digital, picking up a phone is not digital."

Going digital means less or no human touch required with a focus that can range from reducing repetitive tasks to 100% touchless originations.

Digital requires "no human touch when none is necessary," leveraging automation and technology for processing and decision-making. An interviewee commented, "We need to do things differently and use companies like Uber as models." Digitizing elements of the equipment finance process is becoming a more common approach across all business segments. Examples: smaller ticket firms often provide digital originations'; large corporates may ask for equipment finance integration into their systems; in the middle market digital can make an analog process more efficient and accurate without eliminating customer contact in internal and customer-facing areas such as statement spreading, notification of application status, and documentation.

Going digital often means transparency and 24/7 access.

Another definition offered by an industry insider highlights access: "Digital lending involves the electronic movement of information and the transparency of that information." Transparency allows knowledge of the status of an application and the loan portfolio...anytime, anywhere, any device." End customers may differ on the importance of transparency.

Going digital requires a transitional process at many companies.

Some interviewees mentioned that their companies lacked the foundational infrastructure to provide a digital experience and appear to be in a transitional period with legacy systems needing to be changed. "Internally, we are re-platforming now; our systems are lagging; we need to replace the core and other systems. We are not ready to go to customers with a digital offer."

An expert commented: "The real needs are basic...but some companies continue to have old systems that rely on outdated languages such as COBAL."

Going digital demands a digital strategy with priority setting.

One interviewee said, "Every prospect and client has a 'digital strategy' in motion or underway, but a digital strategy to a bank, an independent, or a captive is different." Another commented: "A technology strategy

is a concept to them...For example, companies want to 'explore' new technologies, meaning they want to study them rather than adapt them. Oftentimes, they lack targets and dates for decision making."

Going digital deserves some caution.

One equipment finance executive was concerned about the newness of digital and felt "skepticism because digital strategy is a new hot topic like blockchain was a year ago...There are so many technologies being deployed; most are not proven yet: machine learning; robotic process automation; chatbots; AI; among them." Digital involves many offers, some "old" such as credit scoring (initially developed it the 1940s) and some new such as artificial intelligence and blockchain.

The skepticism also involves the willingness of companies to adopt available digital options:

- "We provide lots of solutions around mobile to our clients, but not 50% have adopted them." (Vendor)
- "The timeframe for their making decisions has not been shrinking." (Vendor)
- "I have seen customers who say they want a web portal as part of an RFP. It checks the box for them, but they may never log into the portal." (Independent)
- "All ask about the Cloud, but 95% choose to go on-premises." (Vendor)

The quotes suggest a potential disconnect between what customers ask for and what they use, suggesting that end customers, like some lenders, lack a digital strategy.

Going digital requires continued servicing of the analog-oriented customer.

This report shows the equipment finance industry is in various stages in its approach to implementing digital solutions. So too is the end customer. Many companies and customers are moving faster than the overall industry in their digital transformation, but others remain wedded to the past.

The industry needs to operate with the flexibility to serve a digitally savvy customer and an analog customer: "We think about offering a technology umbrella to our customers. It includes a vendor portal, direct integration, mobile apps, and customization based upon the needs of our customers." Digitization will impact both revenues and expenses. Similarly, the digital customer experience may begin with the application process or servicing but, ultimately, will capture the entire process.

Going digital may demand multiple vendors.

To achieve cost reduction lenders employ out-of-the-box operating platforms (such as Linedata or LTi Solutions) and link them to other applications, for example, Salesforce for sales and workflow management, SuperTRUMP for pricing, and Vertex for tax.

Going digital requires reimagining.

Few companies approach digital with a fundamental relook at their business model. An independent executive summarized that "going digital" requires a company "to reimagine how we work with customers, vendors, and internally." This reimagining is critical to achieve the full benefit of digital.

Macro Trends: Customer Expectations and the Drive for Digital

Providing a digital *consumer* customer experience has become an increased focus at national banks such as Bank of America and U.S. Bancorp. Some regionals, like Citizens Financial, have created digital-only banks. Non-bank startups have also been marketing to select consumer segments. For example, www.aspiration. **com**, considered a "challenger bank," provides consumer-banking services aimed at Millennials who are "green" focused.

Consumerization of Commercial Lending

Consumer banks offering a digital customer experience are responding to a growing group of current customers for 24/7 access. A digital, paperless infrastructure can also reduce operating costs. Virtually all providers of consumer financial services now include and, in some cases, emphasize a digital offer and have internal teams concentrating on this effort.

Many of our industry interviews mention how commercial lending is similarly becoming "consumerized." They mean that more commercial customers expect the type of buying and service experience they receive as consumers. Interviewees highlight the experiences provided by Tesla, Amazon, and the Apple credit card and state that many equipment finance lenders are heading in a similar direction.

In response to customer requests and in pursuit of internal efficiencies, some equipment finance companies have already digitalized much of their customer interactions and internal processes. Other companies are following a slower and more measured approach based upon the near-term need to address "pain points," resolve software issues and manage to the reality of limited budgets.

Factors Leading to Digital

A **Capgemini survey**¹ lists key factors driving banking firms toward digital transformation, the two major factors being offering customers a better experience and cost reduction. While the focus of this survey centered on banks, our interviews in the equipment finance space support the relevance of most of these factors for leasing and equipment finance companies.

Improving the customer experience comes first as a priority, and our interviewees tell of customers pushing for change and companies being forced to catch up in order to retain them. While the customer comes first, the second item, cost reduction, comes close in importance. Banks are now facing a low-interest-rate environment for the foreseeable future; lower rates result in lower revenue dollars to cover expenses and, therefore, a focus on cost reduction. At most, lenders' personnel costs represent the major cost category, one that automation and innovations such as AI can reduce. The third driver listed in the survey focuses on revenue growth. Digital technology can result in new revenue sources; for example, it has lowered the cost of lending to smaller borrowers, allowing some equipment finance companies and Fintechs to increase their focus on this segment.

As financial services pursue transformation, many businesses hold a negative view of the financial services industry regarding the quality of the customer experience provided. A **Salesforce Research report**² shows

that financial services have a negative ranking that exceeds every other industry for customer experience, except the government. It contrasts the strong reputational position of technology companies like Amazon and Square with traditional lending competitors. As for captives, as an indication of their relative position, manufacturers enjoy a low negative percentage, much less than financial services.

Digital inroads into consumer financial services raise expectations in the commercial area. A Fraedom³ survey shows that 85% of commercial customers also use digital banking for their personal banking needs. The same survey found that "72% of corporate customers view digital capabilities as a key factor in bank selection" and that nearly every company (95%) wants their lender to provide the same aggregated financial view, the same mobile access and the same real-time transactional information as for their personal accounts.

Specific to micro and small business customers, the vast majority wants digital access. A 2019 Personetics survey⁴ found that 90% of small and mid-sized business owners want to conduct their banking digitally and that slightly more than 40% already do so. These statistics suggest a growing demand that traditional financial services providers need to address to avoid customers going elsewhere for a digital experience.

A Federal Reserve⁵ analysis illustrates another trend, this one related to increased digital loan applications, initially among smaller companies. The 2017 survey shows a steady rise in online loan applications by companies up to 500 employees. In 2015, 20% of companies applied for a loan using an online application; in 2016, it rose to 21% and then 24% in 2017. Those percentages have likely accelerated since 2017 due to the greater availability of online applications and the continued loan push by Fintech lenders. Other research sources put current percentages at more than 30% today.

Competitor Activities

The rise in digital activity and online applications in the business space has occurred in part because of technology companies offering banking services (Figure 1).

As Figure 1 shows, companies including PayPal, Amazon, Square, and others are now actively providing loans. Each company has an established relationship with its business customers, ranging from providing accounting services to offering a sales marketplace. Each has unique and detailed knowledge of its customer's activity and daily cash flow. Their knowledge and strong client reputation allow them to offer real-time loans, as well as other services that can help build their customers' businesses.

Founded in 2009, Square, Inc. is a mobile payments company. Square Capital leverages its knowledge of the payments and cash flow patterns of its customers and proactively communicates to them when they are eligible for a loan through Square Capital. The customer does not have to go through a detailed application process.

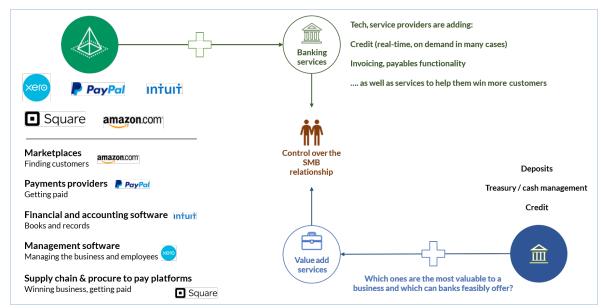


Figure 1. Technology Companies Lend - Non-Bank Entrants

Source: 2018 Fundation⁶: Barlow Research Business Banking Conference "Transforming Business Banking," May 21, 2018.

In just a few years, non-traditional lenders like Amazon and Square and Fintechs such as Kabbage, OnDeck, and Funding Circle have become major small business lenders. PayPal leads this group with an estimated \$4B of short-term loan originations. Other leaders are OnDeck at \$2.1B, Kabbage with \$2.0B, and Square Capital with \$1.6B of originations.⁷ Some Fintechs are now beginning to aim at larger dollar loans, entering the mid-ticket space.

Figure 2 shows how Xero, providing accounting software for small businesses, has linked up with APIs to provide an integrated offer from front to back office. Xero has more than one million clients and provides multiple services for small and mid-sized companies; it offers access to real-time cash flow reporting, online customer invoicing, and other value-added services.

Related to lending, they work with Square on payment processing, then are able to offer financing. Xero is developing digital relationships by teaming up with other "single-product" partners, allowing them to position themselves as presenting a "best of breed" offer to their clients.

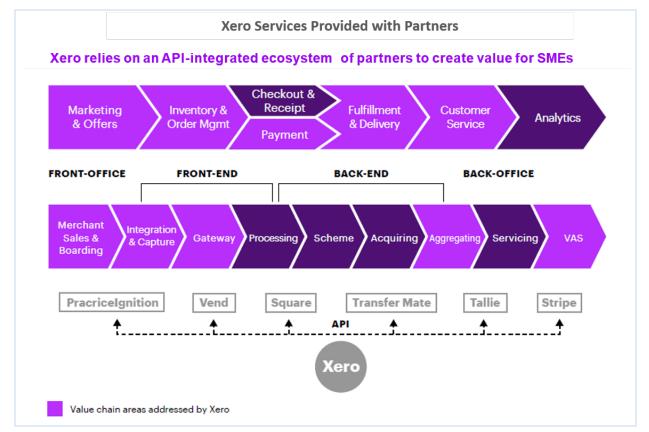


Figure 2. Xero and its Development of an API-Integrated Ecosystem



More directly related to equipment finance, other Fintechs, including Fundera and Biz2Credit, provide "instant" equipment-related financing, again aimed at needs usually up to \$100,000. In effect, these companies are loan kiosks. They have developed "partnerships" with banks and non-bank lenders, including some equipment finance companies, whereby they screen potential borrowers using credit criteria provided by the lender. Applying that criteria to the needs and performance of the potential borrower can result in delivering three or more options for the company to consider. Fundera and others add a personal touch to the digital, bringing in a phone-based loan consultant early in the process. Fundera's loan product set includes SBA, term loans, lines of credit, invoice financing and equipment finance loans. Its "financial partners," not all of which are lenders, include American Express, Capital One, Live Oak Bank, OnDeck, and about 15 others.

For each loan type, Fundera provides both summary comments and offers a comparison with other loan products⁹ including product pros and cons.

Current Status of Digital in Commercial Lending

Expectations among most interviewees are that the drive for digitally based transactions will continue. One captive executive commented, "Micros, small ticket borrowers, and large corporate demand this."

While consumers have led the way to digital lending, traditional lenders are now showing signs of focusing on business banking (Figure 3). A Tenemos survey of banks worldwide shows that, while Business Banking lags other digital sales initiatives, capabilities in this area have been increasing.



Figure 3. Comparison of Digital Sales Capabilities

This level of growth indicates the priority that financial services companies place on providing digital choices to more commercial borrowers.

What Do Customers Want: The Need for Segmentation

FIC's focus was on determining the end customers' interests and priorities related to digital initiatives. We evaluated a wide range of industry research, questioned equipment finance lenders and vendors, and also conducted one-on-one interviews with a small number of equipment finance borrowers. While a small group, these end customers offered some worthwhile insights on this topic; some of those interviews suggest that other priorities, in addition to digital access, often drive borrower decisions.

One independent leader summarized his view of customer interest in digital. It depends on "the culture of the institution, its leadership, and the nature of its business. Does the business require them to be a leader in using technology, or does the success of their business not depend upon it." That comment suggests certain industry segments would naturally be more aligned with digital than others. Even industry segments may not always be consistent with one equipment finance commenting, "We all think professionals are technologically sophisticated, but we have dental clients that send faxes to us and want faxes back... Many of our customers remain very paper-based; different industries operate with varying degrees of digital sophistication."

As for general digital trends among end customers, the 2019 Salesforce study, *State of the Connected Customer*, lists more than a dozen channels that consumers and businesses use to communicate with companies. The preference for email now exceeds in-person or phone contact.¹¹

Customer preferences change depending upon the "context," meaning the need being addressed by the customer. For example, beyond a certain point, businesses want access to a person for problem-solving. A more complex financing structure also changes the context to one in which individual expertise may be required.

Small Ticket and Large Corporate Lead

Two segments appear to be more uniformly digitally oriented, although in different ways: small ticket and large corporate. The AP Equipment Financing case study discusses how management has developed an end-to-end digital offer, one that allows small ticket vendors to apply digitally and track and make changes to their portfolios. The interviews we conducted with equipment finance companies in the small ticket space all emphasized 24/7 digital access. At the same time, some companies provide up to eight channels for making an application, allowing the customer to choose.

While small companies may expect a consumer-like experience (online application, 24/7 access, paperless, portal). Several equipment finance companies see their client portals having greater utilization from large corporate and upper-middle market clients, particularly sophisticated clients. They use the portal to obtain a view of their outstanding exposure and for asset reconciliation. They also demand e-signatures and electronic data submission. Some larger companies want lenders to go to their invoicing portal, find the relevant P.O., and enter the dollars due for payment: "At the high end, they all have invoicing portals." Some larger companies expect lender integration into their own accounting systems.

Middle Market Conundrum

The pace and type of change in core middle market companies seem more problematic to determine. Most of the middle market-oriented lenders we interviewed view digital as being of limited importance to their customers (albeit growing) versus other selection factors:

- "Customers don't engage with us in that [digital] way...our transactions are more complex... In general, our clients do not use online banking."
- "There is no demand from our customers to access us through a portal or get real-time information as there might be in vendor or small ticket financing."

Another lender to this segment whose transactions are team-oriented believes that transaction tracking is unimportant for most of his clients: "What do they need to know? They run their payments on their own amortization schedule." At the same time, these customers want some digital functionality, frequently involving e-signature and the ability to close remotely: "Clients want to close deals through the Internet."

One customer interview revealed that his middle market firm does not use technology consistently: "We have Salesforce, but we leave its use up to the individual." Other lenders also commented about the poor IT infrastructure at many middle market clients limiting their focus on digital.

The Customer Perspective

We interviewed eight end customers, four middle markets, and four small business clients of equipment finance lenders. Their comments suggest unfulfilled desires and a need for lenders to assess borrower needs better.

Skepticism About Lender's Digital Capabilities

End customers express some doubts about the ability of lenders to provide a digital experience:

- "All lenders will tell you they have a digital platform, but one finance company sends us paper leases through the mail."
- "Ensure the basics operate well. I almost laughed when you asked me about a digital experience because most lenders are not even close."
- "No significant lender has brought an Amazon experience to me."
- "Out of eight lenders, one provides an electronic invoice that we pay online; others send bills by mail."
- "I have four banks in a floating rate deal; two of them can't get the paperwork right. I audit the bills before I pay. It is either wrong, or it does not provide basic data. Never mind about digital."

Concern Over the Value of Digital

Some companies see other factors as more critical than digital:

- "Digital access does not offer that much value to me. It would be nice, but it is not critical to my relationship."
- "In some cases, rates rule. Can they get the deal done? It's about the rate!"
- "I use all the digital capabilities, but my lender makes the difference."

Some Frustration with Their Lenders

End customers view lenders as not using the technology they already have available: "They don't offer e-signature; their internal processes bog down progress." But smaller lenders may not possess the ability to lend sufficient dollars:

- "Our major bank does not ask for feedback on its software."
- "What customer experience? They tell, not ask. They tell us what they think we need... They don't sit down with the customer and listen to us and offer customized solutions."
- "We have a similar operating issue at the end of each quarter. I've asked the lender to anticipate it, but nothing happens."
- "Smaller boutique companies can offer us a fully digital experience, but they cannot meet our financing requirements; their balance sheet is too small... They have the technology but no heft."

Key Constraints in Adopting Digital Technology

Banks, captives, and independents each operate with unique opportunities and challenges related to digitization. On the plus side, in general, banks and captives operate with a bigger capital budget than is available to most independents. However, independents often have a streamlined decision-making process and an ability to test and introduce new technology more quickly than traditional lenders. This section summarizes some of the constraints that banks, captives, and independents face related to digitization. Some issues cross over all three groups while others are largely limited to one group.

Banks and Captives

Some independents interviewed express a view close to envy in discussing the capital budgets that banks and captives can apply toward technology investment, believing that their available investment pockets are deep. While they may appear to have a substantial investment advantage, corporate decision processes, and changing priorities often impact the ability of banks and captives to introduce digital capabilities.

Some bank lenders view independents as if "the grass is greener" elsewhere. One senior banker commented that in his view, "independents are more eager and flexible" related to digital investments. Another banker offered a similar perspective: "It is easier for small and newer companies to adopt than it is for a company that has been around for a long time." That is certainly a view also promoted by Fintechs and their own strengths.

The issues banks and captives face include:

Internal Approval Process

The requests of both banks and captives need to survive an internal approval gauntlet that can be time consuming and enervating. Multiple functional groups need to be involved, including IT, Legal, Compliance, Risk, Marketing, Operations, Strategic Planning, with multiple groups promoting a digital focus that may not be aligned across the institution. A bank's internal digital approval process can be complex, slow, and in the words of this banker "tortuous."

Challenges include building a business case that quantifies the positive economic impact of an investment: "It is hard to calculate the economic impact of bringing in new technology. Yes, digital technology might result in better compliance or cleaner files, but how does that translate into dollars that management can measure if there is no hard revenue impact?" Another commented, "To provide a portal is expensive... initially, there's no cost reduction, and it's hard to show revenue impact."

No Urgency

Banks, in particular, are concerned with reputation risk and avoiding any regulatory issues. Technology priorities focus on fraud and risk management first. The customer experience comes afterward and may be viewed as unnecessary: "Some executives don't buy in to digital. They like how things have been for the past 20 years."

Another banker, at a highly regarded and well-performing bank, commented on his management's lack of interest in digital: "It is a hard sell to add employees for technology... The concept of investment and return is not well received here. We may need digital one day to deliver products and capabilities, but not now... We are locked into traditional channels with an archaic loan system."

A view akin to "if it ain't broke, don't fix it" exists at some companies. Old technology seems to hang on, both due to already expended costs and the perceived value it continues to provide. One regional bank still uses Lotus Notes and has "since the 1980s. It still works." The unit is awaiting an enterprise-wide IT effort, after which it may move to newer technology.

In a similar vein, another banker, his company, still following a largely analog path observed, "Our level of success makes it hard to change." However, even they use digital data rooms to conduct virtual due diligence to buy and sell deals and then exchange "real" documents.

Enterprise Emphasis

At many banks and captives, IT initiatives are assessed within the construct of the companies' enterprisewide approach to IT. That means projects that may be valuable to the equipment finance group can lose out to other initiatives. Both bank and captive executives mentioned changing priorities as causing IT projects already underway to be delayed.

Companies want to leverage the capabilities of other parts of the organization and ensure that its technology platform is consistent across the company. Management hopes that internal best practices are tested and then transitioned from one part of the bank to another. One positive example of this approach involves an equipment finance group's use of Optical Character Recognition (OCR). Over a year ago, another group in the bank began using OCR technology. While its use was developed elsewhere, equipment finance evaluated it, saw its value, and assigned it a priority position in its six-month plan.

In response to the hurdles that digital decisions face, a bank interviewee recounted that the approach another bank unit followed. They had a client requirement demanding a certain digital capability. Rather than wait to become an IT priority and obtain corporate budget approval, that unit "just went and did it" without the involvement or approval of any central support groups. In the era of centralized decision making that requires the input of multiple groups across a bank, approaches that build off more freewheeling approaches to IT development may be over.

Limited Appetite for Experimentation and Possible Failure

One captive executive mentioned the need for a culture in which "failing fast" is part of the culture; "Are we willing to take some risk and fail fast?" This involves trying an approach and, if unsuccessful, abandoning it without internal recriminations. Our client experience is that no matter what senior managers may say they have a limited tolerance for "failures," no matter the reasonableness of the concept considered.

Current Technology

A company's current technology platform appears to be one of the major impediments to the adoption of digital tools.

While TIAA Commercial Finance's case example outlines a multi-year roadmap for digital transformation, most companies follow an approach aimed at addressing near-term pain points and gaps in current technology.

One company commented. "Our challenge is the legacy systems we need to address before we can offer more advanced digital technology...we really can't have a detailed three-five year roadmap."

In a similar vein, another industry executive said, "Many companies lack an API strategy, in part because it requires updates to old operating systems, a cost and time investment some players are delaying. For some, this is still a transition period during which legacy systems need to go." Yet, another company commented: "We have fractured systems and no unified leasing platform. The vendor says they provide an end-to-end solution, but that is a joke." This means that tools like AI cannot be used.

Internal Investment Policies

Seemingly byzantine internal investment policies may act to the detriment of equipment finance groups that have been operating efficiently. Joseph Heller's World War II novel, *Catch-22*, introduced that phrase. One definition of Catch-22 is that "It involves a situation in which someone is in need of something that can only be had by not being in need of it."

One bank's discussion of the challenges it faces in obtaining funding for IT projects seems to fall under that definition. One bank's equipment finance group has been performing at a high level of efficiency, in general, with a better operating expense number than other units. As might be expected, top bank management prioritizes its investment decisions based upon the likelihood of those investments improving efficiencies. Since this business unit already is highly efficient relative to others, it is finding it difficult to get investment dollars for more technology. They are close to the point at which they need to hire additional personnel in lieu of technology, thereby becoming less efficient and as a result, clear candidates for additional funds for technology investments. Catch-22.

Particular to Captives

Captives face many similar but also some unique issues regarding digital investments. As with banks, the owners of captives need to agree with the digital roadmap that the captive has developed and stick with it over the long term. One captive executive stressed how hard this could be to accomplish: "We need to fight for capital on a yearly basis. We may be in year two of a five-year plan, but management can decide to shift resources to another area, like R&D... I've seen that happen."

Captives exist to support the sale of equipment; anything they might do to undercut that role raises internal problems. The captive's parent may be particularly sensitive to any new technology that could harm the customer relationship or lead to loss of sales: "We need to vet out new technologies very carefully to avoid any blowback...we have been told, 'Don't lose a customer by trying to be innovative.'"

Independents

Some of the above constraints also apply to independents. Specifically, current technology, budget, and available bandwidth are among the key challenges facing independents.

Technology

Many independents face similar technology constraints to other lenders. One independent commented, "We are not using AI to the degree to which we could. We have more foundational things to work to give us the framework required to use AI effectively. We want to modernize our back end and customer-facing systems first.

Budget and Balance Sheet

Independents should be able to operate with greater speed and agility related to technology, but most also have fewer dollars for CAPEX and, perhaps more important, for lending. Some bankers view any independent advantages as counterbalanced by the expertise and large balance sheet that banks have and their ability to provide a range of specialized "financing solutions."

An interview with an end customer suggests one competitive benefit that banks possess is a large balance sheet: "Frankly, the independents we deal with offer better technology, but we have extensive financing needs, and banks have the deep pockets to do that. I might like to work more with independents, but we need to go where the dollars are."

Bandwidth

Independents, perhaps more than other lenders, need to prioritize digital projects due to staffing limitations: "We face the issue, how much can we handle at any one time? How much can we do now?" The large staffs that many banks enjoy often do not exist at leaner independents.

To some degree, banks, captives, and independents share many of the same constraints, particularly related to their current technology platforms. Interviews suggest that each sees its competitors operating with advantages they would like to have. Planning, priority setting, and persistence all play a role in managing through their individual issues.

Technology Trends and the Emerging Importance of Artificial Intelligence (AI)

It is beyond the scope of this report to review all the emerging digital technology options available to the equipment finance industry. The number and complexity of options can be daunting to all, but the most sophisticated IT experts, one of whom commented, "The digital roadmap is not static."

What is AI versus Machine Learning?

A report published by Splunk, a software company, operating in the AI space states the problem facing those trying to understand AI and its value: "AI has been with us in one form or another for over 50 years, and yet it seems to be more misunderstood today than ever." Splunk distinguishes between what they term "Weak AI," "Strong AI," and Machine Learning (Figure 4).

Figure 4. Weak AI, Strong AI, and Machine Learning

Weak AI:	Strong AI:
Weak AI, also sometimes called "narrow AI," is a collection of technologies that rely on algorithms and programmatic responses to simulate intelligence, generally with a focus on a specific task. When you use a voice-recognition system like Alexa to turn on the lights, that's weak AI in action. Alexa may sound smart, but it doesn't have any advanced understanding of language and can't determine the meaning behind the words you speak.	Also called "true AI," strong AI, in contrast, is intended to think on its own.These are systems built with the human brain as their archetype. Strong AI is designed to be cognitive, to be aware of context and nuance, and to make decisions that are not programmatic in nature but rather the result of a reasoned analysis.Strong AI, in general, is designed to learn and adapt, to make a decision tomorrow that is better than the one it made today.

Source: Splunk, 5 Big Myths of AI and Machine Learning Debunked.¹²

The AI industry is moving toward Strong AI, but, given its complexity, its use is still in the early stages. In Splunk's, view Machine Learning (ML) "is just one example of AI put into use" and involves the ML algorithms learning from data and generating additional and more accurate insights from it. Figure 5 summarizes the options available today to companies considering AI use and the maturity of those capabilities.

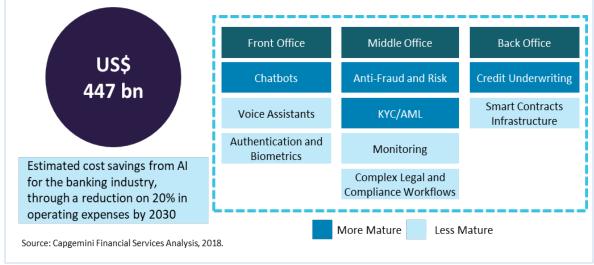
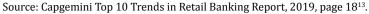


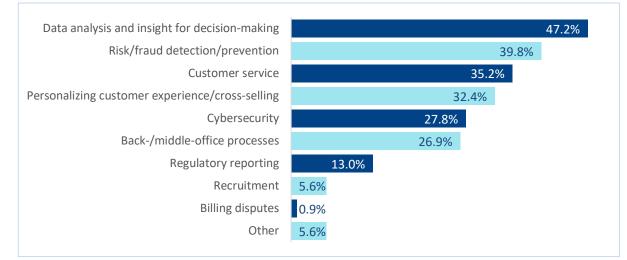
Figure 5. Artificial Intelligence Use Cases in Banking



This chart evaluates bank use of AI in the front, middle, and back offices. It views some activities in each area as being more mature in their application than others. Fraud, risk, credit, and KYC are all primarily directed internally to limit risk and ensure regulatory compliance, a major focus for all lenders and a top priority for AI use. Potential cost savings drive much of the focus on AI. Capgemini estimates close to \$450B available to the financial services alone by 2030 if AI is applied effectively.

An SAP survey puts data analysis for decision-making and risk/fraud prevention at the top of financial services priorities (Figure 6).

Figure 6. What areas within your organization are currently exploring, evaluating, or testing AI technology?



Source: SAP¹⁴

Potential adopters of AI technology need to determine which of the areas they should focus on versus the dozens of initiatives Gartner and many other firms highlight, based upon an assessment of internal priorities, budgets, and the current quality of the available technology. For example, several interviewees selected the back office as their digital entry point, in part to streamline internal processes before providing a digital application. Because of customer requests and competition, others decided to provide a digital application first while initiating a back-office process. However, without an internal digital underwriting and servicing process supporting the upfront application, a lender risks being unable to deliver a seamless customer experience.

Within equipment finance, interviewees say their interest in AI links to its potential to take on repetitive tasks that today need to be conducted manually, requiring a high cost to complete. For example, one lender mentioned the need to track violations on vehicles it had financed so that tolls can be paid and billed to the borrower: "Robotics could decrease these competitive tasks."

Al also offers a customer-facing role. Today, some larger banks are using predictive analytics to guide customers in managing their finances and provide them with recommendations targeted to their specific needs and lifestyles. While much of this activity centers on the consumer in the past year, this focus has broadened to include small business customers.

One of the leading providers of this service, Personetics, highlights several lending-related areas as part of its proposition to financial services partners, stating their technology can help a lender:

- Suggest corrective actions to avoid cash shortages and other business disruptions...this "enables the business to preempt expected balance shortfalls by predicting future cash flows."
- Increase business agility by identifying and responding to liquidity and growth needs.
- Educate the business about relevant bank products and services.

They are suggesting that, at least with smaller businesses, AI can identify cash flow issues and then present solutions to the SME, without the personal involvement of bank sales staff. Several of the equipment finance lender's interviewed mentioned that their parents are promoting an enterprise-wide approach to their clients, one that captures not just specialized lending, but a more holistic relationship. AI may be able to play a key role in this initiative with parts of the SME segment.

Interviews with equipment finance executives and related industry research all cite several concerns about AI:

- The company's ability to use effectively: "We don't have the foundation in place to use it."
- Al governance is a critical issue: 'Some will view its application as discriminatory."
- Gartner states that 75% of workers believe that AI will result in net job losses.

A McKinsey & Company chart (Figure 7) categorizes key AI risks.

Figure 7. Where AI Risks Arise and How to Control for Them

Where AI risks arise and how to control for them Risks spanning the entire life of an AI solution, from its conception to when it's used and monitored, can touch off unintended consequences. We've identified risk-specific controls that can help companies manage them.						
1. Conceptualization	2. Data management	3. Model development	4. Model implementation	5. Model use and decision making		
Potentially → unethical use cases	Incomplete or \rightarrow inaccurate data	Nonrepresentative $ ightarrow$ data	Implementation \rightarrow errors	Technology- → environment malfunction		
Insufficient → learning feedback loop	Unsecured → "protected" data	Biased or → discriminatory model outcomes	Poor technology- → environment design	Slow detection → of/response to performance issues		
	Other regulatory \rightarrow noncompliance	Model instability → or performance degradation	Insufficient $ ightarrow$ training and skills	Cybersecurity \rightarrow threats		
				Failure at the → human-machine interface		

Source: McKinsey & Company Exhibit 215.

Each risk can be mitigated by understanding its possible impact and with an upfront plan:

- Managing conceptualization risks involve ensuring the ethical use of AI as well as instituting a tracking system to gauge model performance. This will be important for small ticket lenders, since, the Consumer Financial Protection Board, includes small businesses within its purview.
- Avoiding data management risks requires a process for strong data integrity. Many of the clients we work with have significant gaps in this area.
- Minimizing model development risks entail using representative data and reviewing models to avoid model degradation or bias.
- Risks related to model implementation require independent testing and strong training and may involve third parties with experience at multiple companies to assess the modeling's quality.
- Model use and decision-making risks include focusing on cybersecurity threats.

This section has provided a perspective on the choices financial services firms need to evaluate. While some of these initiatives may offer limited near-term value, lenders should be aware of emerging innovations and develop an approach to focus on those that are essential to grow revenue, minimize costs, and maintain continued relevance to key customer segments. Salesforce refers to AI as "the backbone of today's emerging technologies." Given the breadth of the areas AI impacts and its foundational role in many digital initiatives, it will only grow in importance.

Defining the "Ecosystem": Key Digital Tools Across the Lending Business System

The lending process begins with marketing and origination and, depending on the company, ends with asset sales. Digitization can improve performance in each element of the business system, whether customer-facing or internally focused.

Data Comes First

As a foundation of digital lending, data analytics cannot be separated from digital lending activities and cuts across and drives every aspect of the lending business system from prospect identification to asset disposition:

- **Targeting**. Data analytics helps to target prospects and identify potential equipment finance sales to bank or captive parent customers.
- Underwriting. Credit analysis for smaller business loans relies heavily on data analytics. Initially, credit scoring focused only on loans of \$25K or less; at some lenders, the cap is now as high as \$1M. One bank described their use of automated decisioning as starting as an evolution and now increasing at an exponential rate, largely because of the impact of data analytics.
- **Compliance and reporting**. Increasingly, lenders are using RegTech software applications fueled by internal and industry data to manage regulatory compliance.
- **Risk and fraud management and protection**. Data analytics feeds into the review of current and prospective borrowers' activities and highlights anomalies.

Creating a strong data capture and database system requires discipline and time. One executive has focused on credit and risk management as "the next big thing" at his bank. This emphasis connects to an increased emphasis on recession planning. On a centralized basis, his company is determining its approach to data capture with the goal of quantifying company-wide exposure to industries and certain borrower types, for example, the oil and gas industry. Improving the credit underwriting system also requires establishing a multiyear process to create a central database that provides flexible workflows for all aspects of the loan business system, including origination, credit underwriting, portfolio management, workout, and loan dispersal.

Digitization can enhance each aspect of the business system, whether customer or internally focused, including:

Prospect Identification

Data analytics firms and Fintechs can strengthen target prospect marketing based upon criteria the lender sets, eliminating some low-value prospects and potentially allowing further sales to current bank or captive owner customers. While this capability has long existed, the number and quality of data sources, as well as the data science has improved.

Loan Application

More businesses expect a consumer experience, one that simplifies the application process. The AP Equipment Financing case outlines the digital application process that it provides vendors.

Credit Decisioning

Biz2Credit, a Fintech focusing on the small business space, provides a good example of the multiple information sources they access in developing their business score (Figure 8). Input ranges from traditional vendors such as the IRS and credit bureaus to additional sources that, depending on the industry, might include Yelp reviews. A small ticket player we interviewed said that the entire credit decision process was the most labor-intensive function at his company and required an emphasis on reducing the number of touches, including related to information collection.

Operations and Servicing

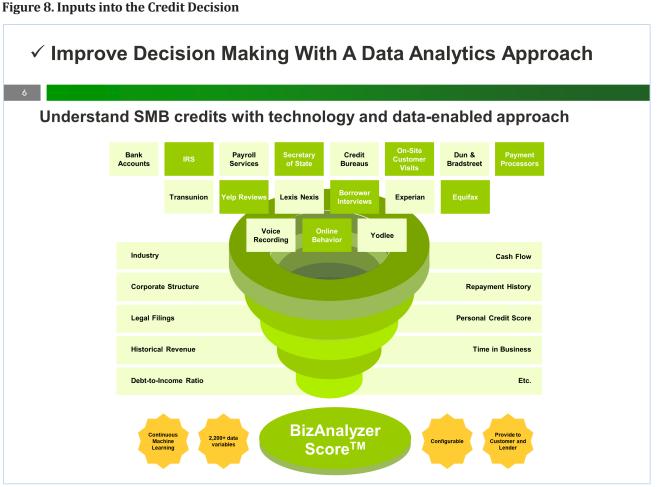
Interviews with lenders and end customers highlight the need for transparency and the desire to be able to access information and make self-service changes to the current portfolio. Some lenders have placed the greatest priority on providing a digital servicing experience, responding to customer requests. These companies provide automated billing and invoicing, and portfolio information is transparent and easy to access.

Fraud

Financial crime mitigation software covers anti-money laundering, fraud prevention, and KYC. Fraud-related vendors seem to be increasing in number daily, all offering a digitally enabled solution.

Deep Dive into Lending

The number of variables that some lenders consider in evaluating a loan has been increasing. Biz2Credit, a Fintech lender that focuses on the small and mid-sized lending space, lists 20 inputs.

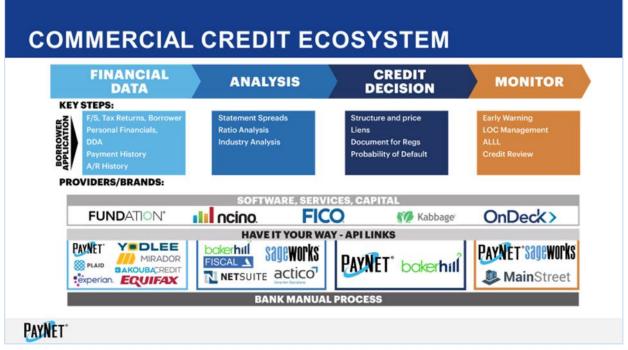


Source: Biz2Credit¹⁶

They collect virtually all of this information digitally and continue to refine their approach due to their continuous machine learning process. They believe the decision quality increases as they gain more experience. This chart raises several questions: What is the marginal value of many of the inputs into the quality of the decision made? For those that are important, does an individual lender have the expertise and staffing to create this approach, or should they work with a third-party platform or API provider to do so?

The Commercial Credit Ecosystem created by PayNet (Figure 9) in 2017 breaks out the credit process into its major component parts or key steps: financial data; analysis; credit decision; and monitor.

Figure 9. Commercial Credit Ecosystem



Source: PayNet17

Financial Data

As with the Biz2Credit chart, this credit ecosystem slide involves capturing relevant information about the potential borrower. This may include financial statements, tax returns, business owner statements, current and historic checking account data, payment, and account receivable history. Lenders have some, but usually not all of this information, much of it in paper form.

Analysis

Analysis involves taking that data and "crunching" it to conduct the necessary insights. While some lenders have automated this process, creating a digital review remains a challenge at many lenders that continue to favor paper processes.

Credit Decision

This area remains highly "analog" at many lenders and is a major focus of automation activities. Risk-based pricing is often guided by internal modeling or the use of software in 2017 such as SuperTRUMP. Fintechs and others have adopted automated decisioning with the input of AI-based methodologies.

Monitor

This function includes compliance and an early warning systems. For many lenders, this has been an area of sharply increasing expense, as regulators request more information, some of which continues to be created by a group of analysts rather than through automated reports, the focus of RegTech.

Under Key Steps, the graphic presents a horizontal heading, "Software, Services, Capital." The companies listed all provide outsourcing of end-to-end or significant parts of the lending process. Biz2Credit, Fundation, Kabbage, and OnDeck partner with lenders and integrate with them in the small loan space, or they provide elements of their software to a lender, a SaaS model. nCino provides cloud-based operating systems for lenders that offer a single platform that includes lending and account opening. Each of these firms can most likely provide a digital 24/7 experience much quicker than can be offered by internal IT development.

The "Bank Manual Process" section at the bottom of the graphic provides options for lenders not wishing to commit to an end-to-end solution from one provider but prefer to select one or more API links for these and other areas. The list selected by PayNet is a small percentage of the companies focusing on areas like this.

Some vendors focus on one function, but the trend has been toward acquisitions creating companies that can fulfill multiple requirements and allow for the sale of multiple solutions to the same company. As discussed in the RFP section, the dynamic nature of the technology industry requires potential users to assess the ownership structure, capital base, and future intentions of any potential partner. Since PayNet created this chart, Equifax acquired them, and Velocity Solution acquired Akouba Credit. Other firms are owned by private investors and foreign companies.

One firm not included in the graphic, Salesforce, has developed the dominant position in customer relationship management software and moved beyond that area. Salesforce is used as the CRM for account servicing reps but also used across some companies for cueing and workflows (see the AP Equipment Financing case example).

Leveraging partners such as those listed above, digitally enabled lending can result in increased revenues. Several lenders have entered into partnerships with digital lending platforms such as OnDeck and Biz2Credit. Lenders use a Fintech's software platform to take costs out of the small-dollar business lending process and build more client relationships, with Fintech's providing lending as a service. OnDeck estimates that it can reduce a lender's total origination cost by 65%.

Beyond improving the customer experience and meeting customer requests, industry interviews often reveal a strong focus on using technology to reduce loan-related time consuming manual tasks that need to be performed correctly but are of relative low value. One large company now beginning a digital process lists ten items for their focus, many of which more digitally advanced lenders have already addressed: obtain a copy of lease/loan documents; view/obtain a copy of invoices; make a payment; enroll in ACH auto debit, among others. Each equipment finance company will have a distinct priority list. Also, the total number of operating efficiency opportunities will only grow with improving digital technology.

The credit ecosystem continues to evolve as new players enter the market, new digital capabilities emerge, and more lenders become open to applying digital solutions both for the customer and internal process improvements.

RFPs and the Need for a Dynamic Due Diligence Process

The number and type of digital technology investment options available to equipment finance companies has been increasing, as has the complexity of the process and the number of internal groups involved in the approval process. Some equipment finance companies, particularly independents, will lead the RFP and due diligence processes for their firms. Bank-owned and captives may need to coordinate their decision making with the parent or wait for corporate decisions before they can act. The focus of their RFPs may need to be guided by overall corporate preferences concerning technology and preferred vendors, potentially limiting equipment finance vendor options.

Several interviews stressed the budget constraints and budget reviews existing related to the dollars available for new technology investment. From 60-70% of the technology, the budget has to be allocated to maintaining technology infrastructure with another 10-15% to provide continued support to new initiatives already underway. That leaves only 10-20% of the budget possibly available for "totally new" initiatives; one person commented that was also the area most likely to be reduced in the face of budget issues or a reordering of internal priorities.

One larger company determines its selection for a potential project and RFP by consistently evaluating Fintechs, described as those startups that "are doing things differently." It will put dozens of companies through its screening funnel before it selects one or two for proof of concept. They also prefer to avoid full integration with a Fintech partner because they want to mitigate the impact of a vendor "disappearing." Therefore, they pursue what they term "loose integration" with a plug and play model, and they specify the need for this approach in their RFPs. One of the major areas of RFP focus centers on privacy issues and data confidentiality. This entails not only the safe transfer of private customer information to a vendor but also its deletion at the end of a contract, for example, related to data analytics.

In many cases, prior to being sent to prospective vendors, RFPs require the involvement and signoff of multiple internal groups related both to internal and business issues. In our experience, Legal, Compliance, Finance, and IT will be part of the RFP process as well as including the input of one or more business lines, as necessary.

Once a company selects a vendor, the due diligence process begins in earnest. Many executives commented that digital transformation never ends. "There is no finish line," as the technology, customer expectations, and competitors all change. This carries implications for the due diligence process as well; due diligence is now continual and dynamic. Unlike due diligence in other areas, the digital technology-related due diligence process involves an initial decision, ongoing reviews, and, potentially, a change of vendors, as the company or customer requirements evolve.

Based on interviews with equipment finance companies and FIC's clients, the process for a successful longterm technology relationship involves a three-phase process that needs the active involvement of the leaders of critical functional areas and lines of business as well as top management.

RFP Creation

An IT relationship often begins with a formal Request for Proposal (RFP) or Request for Information (RFI). This first step can turn into a misstep for many companies, one that wastes time both for the proposal initiator and the vendors receiving the proposal. Often, RFPs are written with the input of multiple business segments and support groups. The result may be an unwieldy document that fails to provide vendors with a clear priority list of key project goals and critical screening criteria. Some vendors, the receivers of the RFPs, view them as "a laundry list of wants that does not match up with their choice." For example, one prospect company demanded the vendor provide digital access capability but never implemented it. "They [companies] keep adding so many modules to their request. Sometimes this requires additional development on our part. Then they don't buy all they asked for." Because of the number of internal areas and staff involved, some larger companies create overly long RFPs that request information that is not essential to the selection process; for example, one Bank provided potential vendors with a 400 question RFP; even worse, they then decided to do the project internally.

Companies also send proposals out to vendors who have no chance of selection. FIC's experience with one client saw them provide an RFP to four companies while knowing, in the words of the selection process leader, that the winner was "pretty much pre-determined." Reviewing those proposals requires the company's time investment and does a disservice to the vendors involved.

While formats differ widely, many RFPs begin with the bank, captive, or independent providing potential vendors with a list of specific goals that the "partnership" hopes to achieve. RFPs should be tailored to each situation and must be focused on the essential details required. Depending on the project and its goals, categories of information requested may include:

- Technology: Details on the company's experience in "integrating" technology with partners
- Risk management capabilities and organization
- Compliance focus and their experience working with regulators
- Data security: How the vendor protects data provided to them and procedures related to service disruption
- Ownership structure
- Balance sheet/Income Statements: Focus on capital strength

Phase One: Selection and Vetting

The initial work related to due diligence centers on determining which vendor can best meet the goals of the vendor relationship, over both the near and long-term. Areas for consideration include:

Goal setting. Improving customer experience, developing customer analytics, reducing costs, and building a
new revenue stream are all worthwhile and often inter-related goals in pursuing digital solutions. However,
having a primary focus on one area versus another may require a specific type of technology partner.
Understanding how the goals over the next few years can help to ensure that consensus exists on the key
strategic selection criteria.

The "laundry list" of requested capabilities that some companies request can be reduced by insisting on greater discipline and reality checking before RFPs and RFIs are given to vendors.

 Piecemeal decisions. Digital decisions often focus on near-term "pain points." In some cases, lenders want to catch up with what competitors are offering and close a near-term competitive gap, for example, related to digital applications. Others may lack the budget or corporate sponsorship to launch a program that requires a multi-year commitment.

Conversely, relatively few lenders have followed the "journey mapping" approach described by TIAA, an approach that requires a multi-year process. Journey mapping entails a significantly different due diligence process versus making piecemeal or single "pain point" changes. It requires both multi-year planning and larger budgets, although the incremental approaches others pursue may increase the overall expense of the transformation process, lengthen its time frame, and result in the near-term selection of a vendor that does not fit with longer-term requirements.

Despite its transformative value, companies may be unwilling or unable to commit to that journey. Near-term demands to close an immediate gap with the greatest efficiency possible often take precedence. Companies following this path need to assess vendors with an eye to their ability to meet emerging needs as well as their survivability as vendors. As one company commented, "We will revisit where we are and the next steps once we complete our Phase One."

Technology vendors that can meet a specific functional requirement may not possess the product breadth or analytic capabilities to provide a broader offer, as a company's digital commitment grows. When needs evolve, it may want a different partner. Even as it is onboarding a vendor, a company should consider the process required to replace it later for a more holistic provider.

Phase Two: Implementation

The importance of rigorous execution may be self-evident as a critical success factor for digital partnerships, but lenders and their vendors often fail to develop this area in sufficient detail. Communication between the lender and the partner needs to be continuous with clarity around their respective responsibilities. This includes but goes beyond a legalistic contractual requirement and can require the partner's input into some critical tactical areas, potentially involving:

Vendor best practices

Lenders want to benefit from a vendor's experience with its other clients. In particular, showing how others use dashboards, cueing programs, and report templates can better leverage technology.

Lender training and incentives

Investments in software achieve maximum benefit only if they are used by all lenders and internal staff to the fullest extent possible. At some clients, we see lenders being given the choice to opt-in and only partial software functionality being employed. As illustrated in its case example, companies like AP Equipment Financing believe they gain higher efficiencies, have better controls, and provide superior customer service due to fully embracing their technology capabilities company-wide.

Phase Three: Execution, Retrofitting, and Reselection

Digital transformation is an ongoing process that needs to be planned with a longer than usual time horizon. For example, one large equipment finance company began a program years ago with a goal of completing

major initiatives by 2025. Even when those goals are reached, the internal working team will continue to develop the program. In short, digital transformation is never complete, nor should it be.

In Summary: Due Diligence Checklist

Effective due diligence requires rigor, agility, and the commitment to an end goal with an understanding that the end goal may change and continue to be elusive. Client experience indicates there are at least seven critical elements required as part of a due diligence process.

1. Clear decisionmaking and partner selection process

One person, as opposed to an amorphous group, needs to be in charge of moving the process forward. This person should have seniority and the internal respect required to drive the process.

2. Involvement of key line and support group personnel and clarity on responsibilities

Due diligence processes can include staff from more than a dozen internal areas. Ideally, the project leader will vet these selections for appropriateness and experience. To ensure continuity, functional groups cannot change team members without prior approval.

3. Strong due diligence to include assessment of financial stability, management, references, Fintech's reliance on third parties, exit strategy, etc.

Many companies have developed detailed vendor management policies, but a digital partner requires a different approach. Evaluating a relatively new company with little track record presents challenges. Some of the providers with the best digital offers are years rather than decades old.

4. Agreement on company priorities

In short, what are you trying to accomplish, why, and how? Achieving agreement on this issue allows for targeting a vendor that best matches specific goals.

5. Establishment of timeframe

Agreeing to a timeframe instills discipline into the decision process.

6. Clarity around implementation responsibilities

Establishing clear internal and external roles and following up to revisit and revise them is required.

7. Senior management involvement and commitment

This item might best be listed first, as it outweighs all others. The highest levels of a company need to understand the value of the initiative and appreciate the level of commitment required. Due diligence has been viewed as a defensive process, protecting a company. The "new" process provides input into current and emerging areas for the use of digitally based technology.

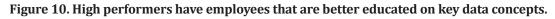
Staffing and Technology: New Demands and Changing Roles

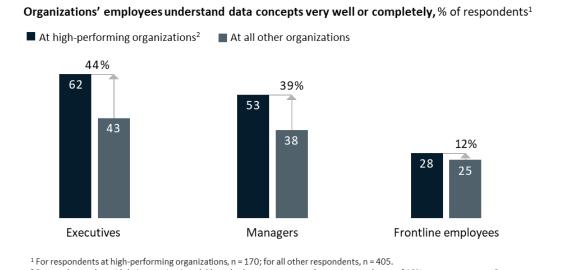
Human Resources groups (HR) may be facing unprecedented challenges as equipment finance continues its move into the digital era:

- Many experienced employees, those who provide industry expertise and a continuity link with customers, are at the cusp of retirement;
- Skill needs are changing with more focus on AI and related technologies;
- Competition for tech-savvy employees is high;
- In general, financial services lacks the cachet of Fintech, technology, and other industries and needs to work harder to attract tech-savvy employees;
- Within financial services, equipment finance may not have as high a profile versus other areas such as private banking;
- Some employees are increasingly concerned about their future as needs change.

In short, there are many moving parts with some important performers leaving, other employees concerned, and a new group to be hired, trained, and acclimated to a company's particular culture.

Figure 10 summarizes a McKinsey & Company study in which high-performing organizations show a significantly greater understanding of data concepts and analytics than other firms.





² Respondents who said their organizations (a) have had an average annual organic growth rate of 10% or more over past 3

Source: McKinsey & Company¹⁸

years and (b) have had an average annual growth rate in earnings before interest and taxes of 10% or more over past 3 years.

The knowledge gap in the executive and manager ranks is particularly large. High performers in this survey also state that "their data and analytics initiatives have contributed at least 20 percent to earnings... over the last three years."

Our equipment finance interviews focused on two questions related to personnel, both the newer staff required for success and the continued role of traditional sales staff:

- How can equipment finance companies attract the staff required for digital transformation?
- Does an increased digital focus change the role and importance of the equipment finance lender?

Regarding staffing, a BAI Banking Strategies Executive Report, titled **Decisions Bankers Need to Make for 2019**¹⁹, focuses on what it terms "Winning the Talent War." Equipment finance companies and, more generally, financial services companies face challenges resulting from low unemployment and "high demand for skills and experience in innovation, particularly in digital transformation" and from companies that cater to the tech-savvy.

Three factors that impact the ability to attract, retain, and develop employees for the long-term.

First is the current economic environment. Competition for digitally knowledgeable employees remains fierce, with many potential hires having multiple options; employers note that Millennials can look for and receive job offers online.

Interviews with several bank-owned equipment finance companies highlight the difficulty of retaining digital experts: "They have too many choices." Some companies say they face the issue of a young IT person questioning, "Do I want to work for a financial institution?" Interviewees also indicate an increasing focus on talent retention: "To retain good people we need to provide a fun environment, in which they see forward momentum, and think they are at a 'wow' company." Given the emphasis on digitization in financial services and beyond, the scramble to find talent and retain talent is likely to increase. Further, some new hires just out of college may be likely to leave after two-four years of gaining marketable experience.

The second area involves two aspects related to digital technology experience. Not only does the employer need to find experienced employees, but interviewees state that one factor in attracting appropriate employees involves their believing they are joining an organization with strong existing expertise they can benefit from and a commitment to digital. One interviewee commenting on this topic said, "They want to join an existing team, and not feel they are on an island." Frankly, the age of IT staff may also be a factor in attracting staff. One bank executive in an IT group commented, "I am 40 and the youngest guy here."

The third area of focus is industry reputation. Earlier in this report a Salesforce research survey quantified the relatively poor view that businesses have of their financial services experience in contrast to their positive experience with technology companies. Therefore, some independent equipment finance companies proactively present themselves to potential employees as technology firms rather than traditional lenders.

The Foundation's 2019 report on independents profiled two companies that, in part, base their businesses' success on their commitment to being "all in with technology": Currency Capital and AP Equipment Financing. Currency said they provide the work qualities of a Silicon Valley company to attract and retain Millennials. AP uses a three-part interview process for new hires. Their final interview focuses on cultural fit and finding employees who are self-starters, comfortable in a company that views itself as "disruptive." AP also will exit employees if a cultural fit does not exist.

A BCG publication²⁰ lists the key skills required for a digital worker, including:

- Data Mining, engineering, and analytics;
- Programming and web development, including front- and back-end development;
- Digital marketing, including influencer marketing and marketing analytics;
- Digital design, including user experience (UX) and user interface (UI) design;
- Mobile application development;
- Artificial intelligence, including machine learning;
- Agile ways of working;
- Robotics and automation.

HR groups are also using automation and chatbots, among other digital initiatives, to screen potential hires.

Industry interviewees expressed a range of views about the continuing value of equipment finance lenders within traditional banks. Depending on the bank, digital initiatives may be having less impact than a bank's desire to reduce costs and emphasize relationship banking.

Digitization occurring within borrowers. Some borrowers that have digitalized their processes may now see less need for direct communication with an equipment finance lender. One lender said: "Clients don't want to see you. It is no longer a relationship business."

Desire of more bank-owned equipment finance companies to "sell the whole bank." At some banks, commercial relationship managers (RMs) are increasing their role in selling equipment finance loans: "The RM will do most of the sales work; the leasing group will just take the handoff." The equipment finance salespersons then act more as product specialists. One manager commented banks "No longer needed an independent salesforce."

The focus of these banks has changed to emphasize client development rather than having the equipment finance lender generate new business leads for the bank. One interviewee commented that his bank prefers to "deal only with strong credits and is afraid to take risks...the potential clients that need our structuring expertise aren't good credits...the bank wants to take on less risk."

With this change occurring, this shift may have positive implications for independents that continue to pursue niches unattractive to banks. The bankers we interviewed viewed this as providing an opening for independents with their niche orientation, credit expertise, and decision speed.

Cost reduction focus. Given the interest rates and continued cost pressures, "More banks are looking at how to do this business cheaper." Several of our clients are pursuing similar approaches to reduce compensation. Moving equipment finance lenders from external salespersons to internal facilitators lower expenses, but its revenue impact may be significant, resulting in the loss of sales talent.

In contrast, one bank interviewee presented a different perspective on the ongoing role of his bank's salesforce: "We find that we are more successful, we get more business when we have more in-person contact." He added that his bank is actively counting the number of calls made by bankers across bank segments and that increased in-person calling "has become a bank-wide initiative." The equipment finance lenders continue to play as critical a sales role as the RMs who are "not always familiar" with leasing products. Even with current clients, the equipment finance lender often plays a lead role; some customers call them directly because of their ability to provide customized financing solutions.

One additional topic centers on the degree to which digitization will eliminate employees. One interviewee felt that reductions would be minimal, instead of allowing for the completion of more transactions with the same level of staff: "I have never seen people laid off due to the adoption of credit scoring." Conversely, an operations specialist FIC interviewed said he looked forward to applying AI to routine tasks and expected "significant" cost take-outs.

Going forward, to attract digital staff, Independents may need to rely on their flexibility, pace, and culture to attract talent while banks and captive emphasize their stability and economic strength.

Creating a Digital Culture

What are the key elements of a digital culture, and how does a company encourage its development?

Culture is always difficult to define, establish, and maintain. Success in building a digital culture within an established lender may be more difficult, as many traditional equipment finance lenders have achieved success with their current approach for years, if not for decades.

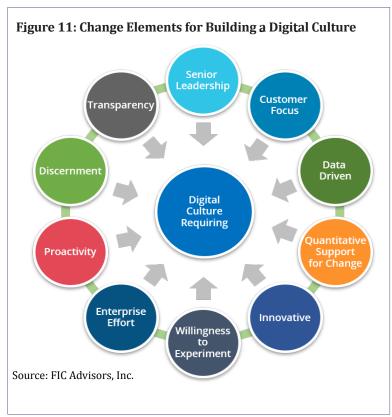
In some instances, both they and their customers have become accustomed to traditional "high touch" ways of doing business together. Understandably, the inherent competitiveness and risks in lending also increase concerns over any negative impact of proposed changes on customer satisfaction and portfolio performance.

Building a digital culture requires a company to operate with a mindset that, while not ignoring the factors that have made it successful previously:

- Encourages moving away from past practices in response to customer expectations;
- Focuses on enhancing the customer experience;
- Exploits opportunities to improve internal efficiencies;
- Avoids alienating current customers;
- Maintains portfolio quality while making other changes.

One interviewee described this process as "changing tires while the car is moving."

Figure 11 captures many of the elements required to build a digital culture and begin the transition to a new corporate mindset.



Customer Focus

As noted in this report, customers are driving much of the digital transformation, with lenders often trying to catch up with or anticipate their demands. Some customers, particularly smaller ticket ones, describe themselves as having been "spoiled" by the Amazon experience and now expect similar levels of service in other areas. Interviewees also mentioned the Tesla shopping experience and the new Apple credit card as examples of the level of consumer experience that more business customers expect.

The Salesforce graphic, illustrating how customers rank their experience with multiple industries, shows the overall challenge facing financial services. Beyond the generally negative view in that table concerning

financial services, customer experience differs widely by type of company and the degree to which they provide high touch versus high tech service. Unfortunately, no industry-specific Salesforce numbers are available for equipment finance, but some interviewees suggest that the level of customer experience that equipment finance can provide may be increasingly out of its control and depend on the parent. As more companies move to provide "Enterprise-wide" solutions, equipment finance groups may need to wait for digital initiatives driven by the larger corporation.

Data-Driven

Financial services companies possess massive amounts of data that they need to use more effectively. A consistent data management process and a focus on data integrity are necessary for digital technology to succeed. The discussion on AI underscores this. We spoke with multiple companies that said their data was not yet organized and accessible enough to allow for applying AI for insights or decision making.

Figure 12 from McKinsey & Company summarizes the steps that equipment finance companies need to take in order to create a data-driven decision making culture.

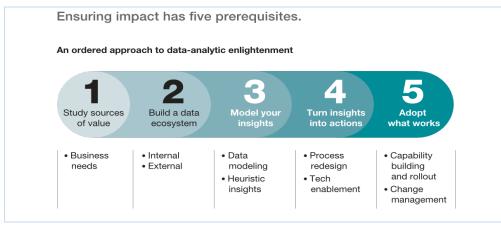


Figure 12: How Big Data is Changing Banking and Finance

Source: McKinsey & Company²¹

Step One. Study sources of value.

Agreement on the use of data analytics could be most valuable to the company. What are the "pain points" that better analytics could help to address? Related to this, one vendor commented, "Lenders often fail to put a stake in the ground about what they really want."

Step Two. Build a data ecosystem.

Create a data system for the capture of data and to ensure data integrity. Data quality continues as a major constraint at many firms. Initially, data gaps need to be identified and addressed. Equipment finance companies owned by captives and banks need to consider the extent to which enterprise-wide data needs to be assessed.

Step Three. Model your insights.

Basically, heuristic insights mean insights that may not be perfect but provide a reasonable or satisfactory solution to a problem.

Step Four. Turn insights into action.

Form action plans based upon the insights.

Step Five. Adopt what works.

Institute a change management process with recommendations potentially focusing on risk management, repricing, product features, or other areas.

Quantitative Support for Change

Providing a digital experience for customers and using digital technology to replace current processes needs to be founded on an economic rationale in order to become a priority initiative. Leveraging data supports that approach. A projected increase in revenue dollars and/or improved operating efficiencies should back up recommended changes. Several interviewees mentioned the need for an "ROI conversation" and "cost/ benefit analysis" for proposed initiatives. An economic case may be particularly important in larger companies in which multiple units are competing for investment dollars.

Innovation

In a conversation several years ago, one bank client who was leading a digital effort said, "Our bank is an innovation killing machine." He meant that the internal screening and approval processes for any new ideas were lengthy and ineffective. Another noted that "No one person in a bank can say 'yes,' but lots of people can say 'no.'" Internal approval of digital innovations may require the signoff of up to ten or more internal groups, involving dozens of staff. Captives also have to meet the requirements of their parent, while many independents may need to operate within more limited budgets. In addition, introducing innovative ideas may entail working with third parties, some of which are small and/or have limited operating histories. The internal approval hurdles established by vendor management may eliminate some of these companies as potential partners.

Willingness to Experiment

One captive quoted earlier commented that parent company personnel stressed the need to avoid alienating customers with any digital innovation. More lenders are creating what they call "sandboxes" to allow concepts to be developed and either expanded, altered, or dismissed.

Company-wide Efforts/No Silos

This report recounted interviewees discussing their parent's interest in enterprise-wide solutions. We also describe how some innovations like OCR moved from one part of a company to another, an example of internal best practices at work. Digital's cost and complexity usually require a company-wide effort, rather than individual businesses or functional groups going in separate directions.

Proactivity

Innovations such as digital signatures and digital end-to-end processes have occurred in response to the requests of commercial customers. In some cases, customers have put a line in the sand, saying that unless a digital capability is in place, they will go elsewhere. Contrast that to Square Capital's approach whereby it informs customers without the customer's applying that they have a credit line available for immediate use. With TIAA's case, we learned of the digital journey that they are pursuing. Proactivity and multi-year planning is a critical element of building a digital culture.

Discernment

Gartner's top ten strategic technology trends for 2019 scratch the surface of digital options for equipment finance companies to consider, but most IT trends will not be appropriate for equipment finance companies, given factors such as the state of their IT platforms and budget. The overall company and the equipment finance unit have to select both priorities and appropriate timing.

Transparency

Amazon customers know their order's status from inception through delivery. Now, many business customers expect a similar degree of transparency related to their lending activities. One independent said that its operating philosophy was to allow its customers to make requests and answer any and all questions online at the customer's option. Full digital transparency is their goal.

Senior Management Leadership

While we list this element last, top management's involvement in the foundation of digital success. A 2016 *Harvard Business Review* **article**²² states that CEOs need to lead a digital transformation and develop a "digital DNA." Earlier, we quoted an executive from a bank who stated that his senior management would not support the level of investment required to transition to digital operating environment. That interviewee cited cost and the belief that its client base did not require a digital experience.

Without strong senior management involvement, equipment finance units will be limited in their ability to digitalize. To improve the likelihood of gaining that support equipment finance leaders may need to build a business case that includes quantifying the impact of digital initiatives, whether internal or customer-focused. Management wants to see digital investments resulting in one or more of the following: increased efficiencies, higher revenues, and/or meeting customer requirements.

FIC's experience also suggests the following tactical steps provide value in promoting a digital:

- Create a Customer Technical Advisory Board. This group can test and validate proposed enhancements and new features and functionality. Reaching out to a select number of customers can provide insights concerning emerging trends.
- Engage customers by having them talk with Product Managers. Ask them, "If we build it, would you be interested in buying it?" and "What features are insufficient today?" A few companies have active programs to engage with the customer, but only a handful of companies we spoke with encouraged non-salespeople to speak with customers.

• **Regularly solicit input from employees,** particularly those working directly with clients, to gain market intelligence concerning competitive actions.

Unencumbered by legacy systems or legacy mindsets, startup equipment finance companies can be digital companies from day one. Most equipment finance companies find themselves in a different situation. They need to manage through older and more complex organizations and deal with other internal groups competing for resources.

The Future: What is the Likely Path Over the Next Five Years?

This section summarizes how equipment finance companies view their current progress toward digitization and discusses expected changes in the digital landscape.

Current Status

Most equipment finance interviewees view their industry as well behind leading digital players and even lagging other aspects of financial services, far from where it needs to be in adopting technology:

- "If Amazon is a 10, we and the industry are at 2-3."
- "Adjacent industries are much further ahead, for example, mortgages. We pride ourselves as being so unique and creative and responsive, but I don't think we are."
- "I would put the industry at a '4'. We are not even half-way. Our movement forward is being driven by what the customer demands or what the customer resists. But the good news is that I would have put it at a '2' one year ago."
- "We are behind other industries. We are not letting information drive the business. People are not focusing on data to gain information to serve customers better and reduce costs. There is a need for data quality, and there is not enough investment in that."
- "The industry is still paper-intensive."
- "The intent to digitalize may be there, but the capacity to do it is limited."

Of course, as our case examples show, some companies are already far along the digital path or are making progress: AP Equipment Financing operates in a largely digital environment; TIAA Commercial Finance is following a multi-year digital roadmap, and Key Equipment Finance is introducing digital servicing and other capabilities.

The extracted comments above, typical of what we heard from the industry, provide several insights:

- The industry is making progress in adopting digital initiatives. Progress may not be happening at the pace it could, but the equipment finance companies we interviewed are all increasing their focus on digital or, in one case, at least know they should be.
- In some cases, end customers, particularly large corporates, continues to lead or "push" the lender to provide a digital experience. Depending upon the customer, however, they have different needs: Some want an end-to-end Tesla-like experience; other end customers just want self-service and portfolio transparency; another group prioritizes a digital application or a single function, such as e-signature.
- One comment from our end-user interviews, quoted elsewhere, said that lenders came to them and, in effect, told them what the customer should want rather than asking what they wanted. Several company interviewees supported that view: "I think we do a really bad job at reaching out. Only our salespeople talk to customers, and they don't do a good job at that."

Another comment effectively summarized the industry's current status: "I believe the finance industry is just now getting fully immersed in digital capabilities. Adoption is steadily increasing, but I believe we are behind the times as an industry in adopting digital technology."

One piece of good news for industry laggards is that we are still in the initial phase of digitalization. Yes, a handful of players, mostly startups and independents are in the lead, but in most instances that lead is not insurmountable. In addition, digitization is not a zero-sum game; multiple players can win both in the front and back office wars through digitization.

Future Focus

The report has provided ample examples of the diversity of focus and commitment to digital lending that exists with banks, captives, and independents. Each begins from a different starting point and with different priorities. Each of our 15 interviews will also pursue future digitalization differently. Figure 13 summarizes our view of the equipment finance industry's current status, based upon our 15 equipment finance interviews.

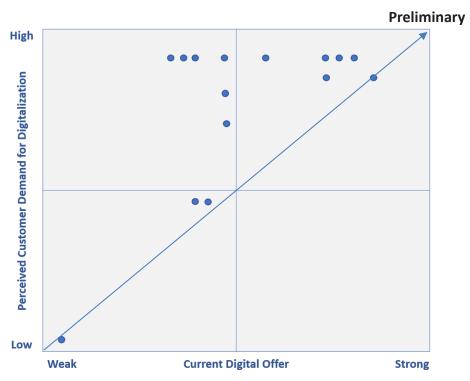


Figure 13. The Digital Matrix Diagnostic

Source: FIC Advisors analysis.

The dot points on this matrix summarize FIC's perspective and may not be aligned with an individual equipment finance company's view of its business. The "y" axis presents how equipment finance companies perceive their end customers' demand or desire for a digital customer experience. Those end customers in the upper right quadrant want a full digital experience while those in the lower-left quadrant give digital little importance. The "x" categorizes our view of the equipment finance's current digital offer; again, individual equipment finance companies may disagree. Those to the right on the x-axis are "digital natives," providing a strong digital offer; those on the left half of the graphic are at various stages of digital development.

Our perspective is that most of these companies have substantial work to accomplish and need to establish a priority-setting process then engages senior management. Depending upon the quadrant, the equipment finance company's required future focus differs significantly.

Weak Digital Offer/Low Perceived Customer Demand:

- Engage senior management for support;
- Develop a "quick win" plan, whereby the company focuses on pain points that all need to be addressed;
- Focus on internal processes, if management perceives little end-customer demand;
- Monitor end customer needs with one-on-one surveys to avoid being blindsided by changing customer expectations.

Strong Digital Offer/Low Perceived Customer Demand:

• Unsurprisingly, no equipment finance players fit into this box. Most equipment finance companies design their digital offers with existing customer demands in mind and do not try to lead them.

Weak Digital Offer/High Perceived Customer Demand:

The majority of interviewees fit into this quadrant:

- Fix "fractured systems"; focus on the foundation platform; address the gaps that need to be fixed before leveraging AI and other technologies;
- Create a multi-year budget with a signpost of success for each year;
- Highlight tools that have been vetted but might out be used or used extensively, e.g., OCR and E Signature;
- Deliver Minimum Viable Products when possible;
- Ensure the technology in place is being fully utilized. Interviewees speak of the need to get metrics on the level of digital utilization, as well as tracking the reason for phone inquiries. Those inquiry areas could be the next focus for a digital effort;
- Survey customers to determine their priorities and desired solutions, e.g., applications, servicing, and the most appropriate technology, e.g., IOT. Several conversations stressed the need for some type of "voice of the customer" effort;
- Work closely with Enterprise groups and leverage internal best practices;
- Engage senior management regularly to keep top of mind.

Many players in this quadrant will continue to address and resolve discrete "pain points" rather than committing to a transformational journey. Tradition also ties some companies to the past: "There is a tribal mentality prevailing here whereby we think our business is different from others...We seem to create our own constraints. Our muscle memory makes us resistant to change. The forces of change come from the client, not from us."

TIAA Commercial Finance, with its commitment to a multiyear plan, may be an outlier versus most organizations. Many other companies do not have the luxury of that approach. Said one, "We talk about technology strategy, but the costs are high. So, we focus on pain points and make small investments that can have a big impact; we are not looking at a three to five-year technology environment." This banker estimated that the type of systems conversion that would bring his company to technology leadership would take two to three years to complete and cost more than \$10mm; management's appetite for that type of expenditure does not exist.

While multi-year planning may be ideal, companies in this quadrant express skepticism about its value: "Five-year plans are not fruitful," because of changing priorities and the willingness of some companies to commit to a multi-year plan. Several interviews included comments in which the executive mentioned the need to revisit budgets and project approvals each year.

High Digital Offer/High Perceived Customer Demand

This group is in the preferred position of having customers that want a digital experience and being at a company that operates with a digital mindset, even if the company does not possess current capabilities to meet those requirements and exploit all opportunities. While some companies approach the upper right-hand corner, none can reach it, as the dynamic nature of digital lending continues to bring change.

These companies already have a strong technology foundation and the opportunity to take advantage of advanced tools, such as AI, as these tools improve. One vendor commented: "Every day, there are new technologies being launched, but there is little adoption." Two examples of potential value for those in this more advanced quadrant follow:

- Repetitive tasks lend themselves to the application of robotics and AI. One transportation area lender highlighted that if they have a vehicle on lease and that vehicle goes through a toll, they receive a bill from the municipality. They then go through a "very manual" process to determine the company ultimately responsible for paying the fine. This lender has to resolve hundreds of these violations monthly. In this case, decreasing manual, repetitive tasks might not result in a reduction of headcount, but it could eliminate the need for outside contractors and overtime.
- The loan documentation process provides another area in which upper quadrant players could focus. "If I could take attorney documents and identify and pull out the terms that we need to close a loan, that would be a game-changer." This would require AI technology that reads terms such as the closing date field, principle amount, and the interest rate. Tools are now emerging that work with documents from different law firms and build algorithms around them. One banker observes that "Today, the quality is not there for equipment finance contracts," but his bank's trade finance unit is using similar technology and finding it to be 80% accurate. This lender estimates that if he could adopt this technology, he would be able to change the role of Contract Administrators to become Quality Assurance focused and reduce staffing by 30-50%.

The industry's current status leaves room for digital improvement. Equipment finance companies begin the next phase of their digital journeys from different starting points, some more advanced than others. Equipment finance leaders should conduct a frank assessment of their company's position on the decision matrix and agree on how they should move forward to change or strengthen then their position.

Final Thoughts

This project allowed FIC to review dozens of reports on digital lending and interview 15 equipment finance companies and another five vendors and industry experts. We also interviewed five end customers and several of our financial services clients for their input.

Several conclusions emerge from our work:

- "Digital" is here to stay. The emphasis on digitalization will only increase as more end customers transform themselves, and the desire for a consumer-like experience grows.
- **Digital is a tool,** one among others, for meeting strategic objectives. Too often, little alignment exists between corporate strategy and technology investments.
- Companies should develop multi-year technology roadmaps. Some of our conversations suggest that at least a few companies are just responding reactively to customer demands, in part due to management reluctance to commit to longer plans. This forces a company to play catch-up continually and likely increases IT costs.
- Al will increase in importance. Our report focuses on AI, both defining it and evaluating the value it can provide. AI is a family of capabilities, and many of them remain in the early stages of development. As equipment finance companies improve their foundation platforms and AI matures, its value will be significant.
- Top management should be able to articulate what digitalization means to their company. In our experience, relatively few senior managers appear comfortable discussing digital issues, often giving that responsibility to others. That is an error because of the linkage of digital to the overall strategy.
- Beware the pace of change. A few equipment finance interviewees felt that their middle market customers
 had little interest in things digital. Even if they are correct, that situation can change quickly. In a short
 period of years, every lender will need to articulate how they use digital, both internally and externally. In
 some cases, customers will demand it; in other instances, it might be investors requiring change.
- When possible, "buy" rather than build. The digital leaders we interviewed work with third-party providers both to improve speed to market and to obtain the best offer. In general, avoid building internally except to customize applications. As one interviewee commented, "If you do it in-house, you are not getting the best."
- Track performance and communicate success. Some equipment finance units are competing with other internal groups for resources; a need exists to show an ROI or other performance metrics that demonstrates the value of digital initiatives.
- Work to instill a culture that understands the nature of digital. A digital transformation has no endpoint; that can be a frustrating fact for senior management.
- Inform and work closely with top management. The best digital players have top leaders who understand the need for digital reinvention and support it fully. As with all critical and expensive initiatives, if they do not buy-in on its value, only limited progress. Equipment finance companies, whether banks, captives, or independents, need to build the type of digital culture discussed earlier in the report.

 Start with the customer. During one end customer interview, a business owner said almost plaintively, "Whatever happened to good, old fashioned customer service?" Unless digitalization begins and ends with an emphasis on improving the customer experience, it will fail to achieve its potential. Fortunately, a digital experience provides multiple benefits to the business customer, potentially reducing the time required for a loan application, increasing portfolio transparency, and reducing the "hassle factor" that many borrowers dread.

The dynamic nature of digital lending means that the specific technologies available will change and that new initiatives may outshine some of the areas that we highlighted in the report. Nevertheless, the leadership, organizational, and cultural issues discussed through this report will remain critical to long-term success.

Sidebars

Case Study. AP Equipment Financing: "All in" on Digital

AP, formed just over 20 years ago, is a small ticket lender that sells both directly to end customers and through vendor relationships. The company operates with about 70 employees and will have a 2019 volume of approximately \$200mm.

Company management describes its digital focus as having occurred in three stages:

- 1. **Early years.** As a startup, the company's best option was to focus on story-based lending, taking deals from brokers that were often nonbankable credits, and that required more structuring and collateral. Understandably, technology played a secondary role to AP's ability to underwrite and price effectively.
- 2. Post-recession. Coming out of the recession, about seven years ago, the company made a major commitment to technology, and what for a relatively small company was a significant investment in Salesforce. While it had a software platform that marketed itself as an end-to-end solution, AP found it could not be used to easily supply customers with data, and that is was not highly customizable, a capability that AP felt was a necessity. Understanding data and collecting it so it could be used as a competitive advantage also became a company priority.

AP focused on industry niches that required specialized credit knowledge and, because of their limited revenue opportunity, did not attract large banks: "Big banks didn't see the volume opportunity." These segments include arbor, commercial cleaning and restoration, delivery contractors, and sanitation. To be successful, "We needed to adapt to their needs and provide excellent customer experience," including "using technology to expand and find business partners, industry-specific services and provide equipment to make their businesses more successful."

3. **Technology focus.** In recent years AP has customized Salesforce and other third-party technology: "We took the out of the box technology and highly customized it," creating a "scalable and very nimble platform." To a significant extent, they now rely on data and analytics to run the business.

Dashboard and work queues in Salesforce now drive much of the workflow process from lead generation to funding and all the way through the servicing cycle. For example, their system determines the documents required to complete a deal. Work queues vary based upon the industry, equipment being financed and data analytics concerning relevant past performance. Transparency is high with all documentation steps being time and date stamped for easily tracking efficiencies and illustrating areas of opportunity for process improvement. Leveraging additional technology with the integrations of a pricing engine, commercial and personal credit reporting, UCC filings, exposure data from the accounting system through an API, and risk-based pricing matrices have also been developed for each industry segment.

Technology decisions are made after a cost-benefit analysis to ensure that the proposed solution improves operating efficiencies. For example, they introduced e-signatures after assessing the cost of purchase and implementation versus the savings from the reduced amount of people touching a document and the quicker revenue generation from less turnaround time to book a transaction. Now, "We live and breathe technology."

However, IT-based cost efficiencies do not mean that AP is the lowest cost provider. Their use of technology improves the customer experience and is central to its value proposition: "If we had not invested in technology, we would not be relevant today." It allows AP to position itself as providing quicker decisions and superior service: "We are not the cheapest, but we give our customers what they need very quickly."

Management leverages technology to build a sustainable competitive advantage with clients. "We are not just providing financing; we help our clients run their business." Their reputation has even resulted in their peers inquiring about their approach to glean any knowledge they can about AP's approach to technology.

Management also believes that AP's culture plays an essential role in its successful use of technology: "We use technology to stay ahead of the game and emphasize an innovative spirit and culture, but we have the attitude that we are always behind from a technological perspective—this keeps us innovating at every corner." Perhaps in contrast to other more formal companies, employees are empowered to move fast and, "We are encouraged to take calculated risks."

One critical focus for AP to support its culture centers on the hiring process. Typically, new hires go through a three-part interview process, first with HR, then with the departmental manager and, finally, with a senior manager who conducts a "cultural interview." That interview focuses on an applicant's attitude and tests their mindset about "how they see work…are they innovative and self-starters?" Once hired, the employee's peer plays a key role in that person acclimating himself to the AP culture or, conversely, the company quickly determining the lack of a cultural fit.

Today, the company believes that the traditional business model will not work in the future, and they are "trying to think like an Amazon rather than a traditional leasing company; we want to disrupt and continue to change the game." Considering how to use technology both to become more efficient and provide value to a customer's business remains a major focus across the company.

Take-aways:

- Amazon and companies offering a similar customer experience provide a model for more equipment finance companies to emulate;
- Personnel requirements are changing and hiring processes may need a redesign;
- Culture plays a fundamental role in digital transformation.

Case Study. Servicing First: Key Equipment Finance

Key Equipment Finance (KEF) focuses on four business areas: direct origination to end customers, government lending, vendor finance for commercial vendors, and specialty finance (including Capital Markets and Lender Finance). Its segment emphasis is primarily on middle market and larger companies.

Digital transformation activities occur in response to customer requirements and practical constraints, with each lender facing different external and internal issues and needing to address them accordingly. KEF's focus on middle market and larger customers has taken it in a different direction than some other players, particularly small ticket lenders.

KEF's digital change process began four years ago when it was embarking on a major Core systems conversion. KEF formed a planning team that included taking line people out of their positions across the business and dedicating them to evaluate current business processes and tools and determine the group's optimal path. This worked tied into a market disruptor focus as well, allowing future planning to be balanced among current and future capability needs. While this approach wasn't easy, the approach and quality of the people on that team communicated a positive message about the importance of this initiative. As one executive commented, "We took time to be really clear about what we wanted our digital efforts to accomplish; we were deliberate." The bank also encouraged "digital mindfulness" in its employees, many of whom had grown up and succeeded in an analog world.

Lenders with a small ticket concentration often begin with the need for a strong digital origination capability to improve the quality and cost-efficiency of high volume businesses. KEF, with its middle market focus, found that its customers' priorities centered on streamlined but still customized onboarding experiences, as well as more mature and crucial area, servicing.

Prior to providing a digital solution, KEF needed "to modernize our internal systems first," before offering meaningful end-to-end client experience improvements and digital access for customers. These changes are ongoing and include an assessment of current processes, agreement on how best to streamline them, internal data cleanup focus (what it terms "data hygiene"), and a priority setting process for improvements that are critical for processing quality but that the customer may not be aware of.

KEF continues along with its digital roadmap and takes the view that a successful digital business will never reach the end of its roadmap. KEF sees future areas of focus as continuing to build out its digitally assisted onboarding experience, that is, documenting, closing, and funding transactions by leveraging more digital capabilities. KEF is also taking advantage of the institutional capabilities of Key Bank. It will piggyback on the bank's selected vendors for its client-servicing portal and will likely do the same for security, messaging and other enabling features required for a robust client experience in an authenticated environment.

The company recognizes that digital for the sake of digital provides its customers with little value: "Clients want speed and transparency. They want processes made easy for them, and they may be ambivalent about the type of solution," meaning whether it involves digital or an alternative streamlined approach.

KEF also recognizes the value of the personal relationship its bankers have been able to develop: "We don't want to stop talking with our clients...We are trying to be who we've always been, but increase our value to clients by making it easier to do business with us."

Take-aways:

- Internal systems issues often need to be addressed prior to or as part of focusing on digital initiatives;
- For some equipment finance companies, providing a digital servicing (or other) capability for customers may take precedence over a digital front end;
- Each segment of the customer (small ticket, mid-sized, large corporate) may differ in what they want their banks to provide.

Case Study. Creating a Journey Map: TIAA Commercial Finance

Successfully navigating the changing business landscape requires banks to embrace new technologies. Despite an improved ability to serve clients more effectively, many banks have been slow to adopt technology in favor of sticking to outdated practices. In the case of TIAA Commercial Finance, two key factors have allowed the lender to embrace digital innovation and improved client services.

First, the company is young, formed in 2004, and existing for just 15 years, initially as a six-person startup named US Express Leasing before being acquired by EverBank. Founders of the original company began with a whiteboard approach, fostering a culture that operated with the discipline and flexibility required to take advantage of competitive opportunities. The creative entrepreneurial mindset from that startup still exists within the current leadership team, enabling the drive for transformation.

The second critical factor was TIAA's 2017 acquisition of EverBank. By the time of the acquisition, the commercial finance group was among the top 10 leaders in Monitor's "Vendor Channel New Business Volume" and operated nationwide in commercial real estate and specialty lending.

Prior to its acquisition, the company limited its technology expenditures for digital projects.

But TIAA had an appetite for growth and investment, as well as a track record of digital transformation across the enterprise. One executive commented that TIAA plans for years and decades, not quarterly. The acquisition served as a call to action that moved the group toward a digital transformation.

As part of TIAA, TIAA Bank management prepared its enhanced vendor equipment finance business plan, positioning the company for growth. That plan focused on becoming digital by design.

The digital transformation process began with TIAA's operating approach encouraging the Commercial Finance leaders to go back to their startup roots and plan a multi-year digital transformation for their business.

A company's digital activities often begin with a one-off initiative that builds a digital front end connected to internal analog operational processes, a near-term but insufficient solution to a customer pain point. Instead, Commercial Finance's digital transformation is built around the well-known industry concept of journey mapping. This multi-year process has three main elements:

- Offering a digital point of sale (POS) capabilities to improve customer contact, transparency, and enhance the customer experience. In other words, the customer gains easy 24/7 access to the commercial finance capabilities.
- Delivering a digital lifecycle so that all aspects of a transaction, end-to-end, from application, decisioning, funding, and payoff can be accessed digitally. The need for human interaction becomes close to, if not fully, optional.
- Developing an internal digital workplace for bank staff. This streamlines current processes and aims to replace traditional paper-based analog methods. TIAA Commercial Finance initially focused on building a minimally viable product, infrastructure, through a custom digital workplace called WANDA (Web Application to Navigate Daily Activities.). This technology offers an improved work environment and increased internal operating efficiencies. WANDA serves as the internal enabler of the digital POS and digital lifecycle product suites.

Management points to several factors resulting in a digital mindset having become embedded in its culture and driving its change process:

- **Rebuilding wing-to-wing, maintaining the 2004 mindset.** The company went back to its whiteboard roots to look at the business with fresh eyes rather than pursuing incremental change with an emphasis on an integrated solution that includes all parts of the ecosystem.
- Working from the customer in, except for needed infrastructure. Its emphasis is on changes that will eliminate analog processes for the customer after essential infrastructure changes are completed.
- Avoiding core conversion. Rather than go through the cost and time to change its core system provider, the group partnered with its provider to supplement the reliable and scalable core system with Web services. The group now integrates its own customer experience software products, creating immediate business value.
- Efficient vendor management process. The digital focus includes an emphasis on increasing operating efficiencies to increase operating margins while ensuring service levels.
- Leveraging TIAA vendors and capabilities. The company took advantage of the IT capabilities of the parent, acquiring digital infrastructure from them while meeting Reg W requirements.
- **Building off strong parent support.** TIAA Bank and the parent enterprise have been vocal in support of TIAA Commercial Finance's digital focus and provided the budget required.
- Measuring performance monthly; recalibrating investments annually. The business ensures that progress
 remains on track with a monthly evaluation of digital product delivery and associated KPI improvements.
 Additionally, a yearly evaluation process provides an opportunity to assess progress in areas such as
 operating expenses, asset growth, and the customer experience, with the parent adjusting funding to
 speed or slow the desired rate of investment.

Today's TIAA Commercial Finance is still the client-centered lender of 2004, with even greater capabilities to serve clients. The journey continues as the business transforms itself into a technology company that delivers leasing capabilities. Poised to navigate the ever-changing digital landscape, TIAA Commercial Finance's driving force is the same commitment to exceptional client service. As for when TIAA will complete its digital transformation, the answer comes as a resounding never, due to the continuous nature of digital change and TIAA Commercial Finance's commitment to a digital product future.

Take-aways:

- The process required for journey mapping provides powerful insights into areas for change and how best to achieve them;
- Providing an internal digital workplace may merit priority before providing digital access to customers;
- Digital transformation is an ongoing process that requires internal transparency and top management support.

► Appendix

Research Methodology

FIC's approach for researching and writing this report involved reviewing and evaluating publicly available industry research from more than a dozen technology and consulting firms focusing on the digital space. We also conducted interviews with 20 banks, captives, independents, and vendors to the equipment finance industry. Prior to this project, FIC already was familiar with issues related to digital lending, having worked for banks and Fintechs in this area. In addition, over the past 25 years, FIC has consulted equipment finance and commercial finance companies, completing projects related to growth strategies, productivity, organizational redesign, and M&A.

Acknowledgments

The authors are appreciative of Equipment Leasing & Finance Foundation Research Study Steering Committee members Katie Emmel, Kelly Reale, Deborah Reuben, Tawnya Stone, Andrew Sutherland, and Tom Ware, who collectively provided invaluable guidance in the development of the study concept and review of the study outcomes.

Interviewees

Our interviewees included a cross-section of bank, captive, independent, and vendor company leaders. This group represented a variety of company sizes and strategic approaches related to digital lending.

Our Interviewees Included:

Raphael Absa, Linedata Lending and Leasing	Kelly Reale, Key Bank Equipment Finance
Janet Alonzo, Toyota Commercial Finance	Deborah Reuben, Reuben Creative, LLC
Deborah Baker, HP Inc.	Rafael Rosato, DLL
Don Bryson, Canon Financial Services	Vinodh Sankaranthi, John Deere Financial Services
Tina Cartwright, US Bank Equipment Finance	William Sigmon, Bank of America
Andrew Cotter, Somerset Capital Group, Ltd.	Alan Sikora, First American Equipment Finance
Jeffry Elliott, Huntington Bank Equipment Finance	Jeff Van Skyke, LTi Solutions
Jim Jordan, Toyota Commercial Finance	Tawnya Stone, GreatAmerica Financial Services
Ron Meyer, Linedata Lending and Leasing	Denis Stypulkoski, TIAA Commercial Finance
Raquel O'Leary, AP Equipment Financing	Scott Thacker, Ivory Consulting Corporation
Walter Rabin, Signature Financial	Tom Ware, Tom Ware Advisory Services, LLC

Interview Topics

Our equipment finance company interviews focus on discussing the company's approach, enthusiasm, and progress toward digitalization.

Background Information:

- Company business focus
- Company size (assets, volume, and employees), growth rate, etc.

Perspective on Digital Lending:

- What have been your company's major digital investments, and why?
- What is your company's goal(s) related to digitization?
- How do you lever digital to:
 - 1. Reduce costs
 - 2. Enhance the customer experience
 - 3. Improve credit and risk management
 - 4. Other areas?
- How do they leverage third-party software solutions providers both to increase efficiency and enhance the customer experience?
- How important to your customers is digitalizing your offer? In what areas? How do you feedback from them?
- What resources has the company put to this effort? How far along is the company in achieving its digital goals?
- How do you view the equipment finance industry's progress in adopting digital lending capabilities? Where should the industry be focusing?
- What's required to be a "winner" as digital lending evolves over the next three-five years? What are key internal challenges that a company needs to address?

We also conducted a small number of end customer interviews with small ticket and middle market customers. Those conversations centered on discussing their perspective on the value of digitalization and how their lenders are employing it today.

End Customer Interviews:

- How do you define "digital"?
- How important are digital capabilities to the quality of your customer experience with your lender? Why?
- What digital capabilities and innovations do you expect from your lenders? Are they meeting your expectations?
- Have digital capabilities improved your business so far, either related to efficiencies or revenues?
- Are there some existing pain points that a digital solution can improve? What can the industry do better for you?
- Are some digital capabilities fundamental to considering a potential lender?
- When you think about leaders in digital lending, which companies come to mind?
- How do you expect to change your use of digital capabilities in the next three-five years?

About FIC Advisors, Inc. (FIC)

For 25 years, FIC, a Miami-based management consulting firm, has provided fact-based analysis and advice on issues related to growth and profitability to financial services clients around the world. FIC emphasizes practical, bottom-line results. We provide specific and targeted recommendations and work with our clients to ensure their successful implementation. Beyond our core consulting work, we have completed several research reports on critical industry issues for the Equipment Leasing & Finance Foundation.

In preparing this report, we leveraged our extensive client experience over the past 25 years in the equipment and commercial finance segments as well as the industry contacts we developed in working with the Foundation and the Equipment Leasing and Finance Association.

Our equipment finance related consulting work includes:

- Evaluating expansion opportunities in new segments, markets, and geographies;
- Recommending and implementing process redesign changes to increase lessor and commercial banker productivity;
- Assessing acquisition opportunities;
- Providing insights on adopting industry best practices;
- Developing strategic plans with a detailed implementation roadmap.

FIC has also completed projects in commercial finance, inventory finance, franchise finance, timeshare finance, factoring, among other areas. We tailor how we work with our clients to their needs; our approach may involve a formal engagement, targeted workshops, and/or ongoing retainer-based counseling to clients.

Visit our website at www.ficinc.com for more information about our consulting and advisory services.

For additional information about the research presented in this report or to discuss FIC consulting capabilities, contact:

Charles B. Wendel President *cwendel@ficinc.com* 917-744-6600



1060 Brickell Avenue, Suite 4505 Miami, Florida 33131

Endnotes

¹https://www.capgemini.com/wp-content/uploads/2018/11/Top-10-Trends-in-Retail-Banking-2019.pdf

²Salesforce Research, 2019 State of the Connected Customer Report, Third Edition

³https://www.fraedom.com/2056/whitepaper-business-banking-with-a-consumer-touch/

⁴https://personetics.com/small-business-customers-embrace-ai-driven-insights-and-advice-integrated-into-online-and-mobilebanking/

⁵Federal Reserve Small Business Credit Survey, 2018

⁶Fundation: Transforming Business Banking, Barlow Research Business Banking Conference, May 21, 2018

⁷https://debanked.com/smallbusinessfinancerankings/

⁸https://www.accenture.com/_acnmedia/pdf-90/accenture-open-banking-businesses-survey.pdf

⁹https://www.fundera.com/business-loans/equipment-financing

¹⁰https://www.temenos.com/insights/white-papers-reports/report-2019-state-of-digital-banking/

¹¹Salesforce Research, 2019 State of the Connected Customer Report, Third Edition

¹²https://www.splunk.com/en_us/form/5-big-myths-of-ai-and-machine-learning-debunked.html

¹³https://www.capgemini.com/wp-content/uploads/2018/11/Top-10-Trends-in-Retail-Banking-2019.pdf

¹⁴https://www.sap.com/documents/2019/06/22649998-517d-0010-87a3-c30de2ffd8ff.html

¹⁵https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/confronting-the-risks-of-artificial-intelligence

¹⁶https://bizanalyzer.biz2credit.com/get-started

¹⁷Paynet, Inc. 2017 company presentation

¹⁸https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/catch-them-if-you-can-how-leaders-in-dataand-analytics-have-pulled-ahead

¹⁹https://info.bai.org/executive-report-decisions-bankers-need-to-make-for-2019.html

²⁰https://www.bcg.com/publications/2019/decoding-digital-talent.aspx

²¹https://www.mckinsey.com/industries/financial-services/our-insights/analytics-in-banking-time-to-realize-the-value?cid=socweb

²²https://hbr.org/2016/12/digital-leadership-is-not-an-optional-part-of-being-a-ceo

The Equipment Leasing & Finance Foundation

WHY GIVE? INVESTING IN THE FUTURE

BENEFITS OF VALUED DONORS

- Early access to industry-leading research and resources
- Recognition among peers in the industry
- Relationship-building with industry thought leaders
- A voice in creating new industry research
- Opportunities to author industry-related studies and articles
- Connect with the next generation workforce through the Guest Lecture Program and online Internship Center
- Free digital library to access insightful, in-depth industry resources

YOUR SUPPORT IS VITAL TO THE INDUSTRY

The Foundation is funded entirely through charitable donations from many generous corporations and individuals. These donations provide the necessary funding to develop key resources and trend analyses, maintain our grant program, and support the research products published by the Foundation. We value our donors and recognize contributors in print, online, and at a distinguished awards presentation.

Make a lasting impact and donate today at www.LeaseFoundation.org.

JOIN THE CONVERSATION **F C in V**





1625 Eye Street • Suite 850 Washington, DC 20006 www.leasefoundation.org 202-238-3429