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The Age of Omnichannel: Utilizing Technology to Meet Customers Where They Are

MONITOR: AI and robotics process automation are hot topics. How close is the equipment finance industry to adoption of these trends and how will it affect large and small lessors?

GHAURI: With tens of millions of customers holding loans worth trillions of dollars, any technology that can make even a small improvement in a company's returns on the loans they hold, or that can improve their share of the market, would be worth a significant amount of money. That is why both established leasing companies and startups in the field are constantly looking for ways to harness the customer data they hold — and artificial intelligence (AI) and machine learning (ML) technologies are naturally suited to exploring this type of big data use-case. AI and ML have applications to data captured across various customer journeys, from point-of-sale [to] credit underwriting through to customer service.

The key to leveraging AI and ML technologies lies in being able to access data of good quality across the asset finance value chain about customers. Traditional leasing firms are still simplifying their legacy architectures and manual processes, and data remains locked into silos. This gives newcomers and younger firms who are more digitized the ability to leap frog using AI/ML. The bigger players will need time to get their house[s] in order before they can start leveraging the plethora of data they have on customers, as they embark upon their journeys to digitally transform.

MITTAL: Lessors are creating learning organizations by using past data and external information to drive current and future behavior. This is being applied to credit decisions, residual valuation and collection strategies. This was being done manually and then progressed to analytics and predictive analytics. More sophisticated algorithms are being developed using AI which, combined with ML, provide the ability to automate the learning process.

NATARAJAN: When people hear AI, some still associate it as a future technology. But it's already pervasive in our everyday lives — this is true even for equipment finance companies and the technology companies that partner with them. ML, which falls under the umbrella of AI, is one compelling use case. Take credit decisioning. Credit bureaus use ML to derive a credit score and determine a customer's risk assessment. How much further can we take that? How can we make it local?

We can continue to mine our own customer data more meaningfully for predictive analytics. We can make our systems smarter, training chat bots to assist in booking leases based on predefined parameters. Through robotic process automation (RPA), another derivative AI technology, we can reduce the manual intervention required by our workforces to perform rote tasks by enabling our systems to learn and replicate.

The more we can automate and enrich our processes and technology with AI, the more it levels the playing field for companies of any size to compete. There really are so many practical applications; the future of AI for leasing companies is very exciting.

VAN SLYKE: The financial services industry continues to reduce sales and customer service-related costs by billions of dollars each year through the use of programmatic AI. Industry tools, such as Salesforce, have integrated the technology into their applications and made it widely available to their customers. We believe the next wave of innovation within the equipment finance industry will be AI and ML. The adoption will likely be slow at first and led by the most innovative >>

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companies in the industry but will eventually be commonplace among companies of all sizes. The improvements in sales, operational efficiency, customer service and risk management can and likely will be revolutionary for the industry. As a technology provider, it is incumbent upon us to work as closely with our customers as possible to identify specific areas where AI and machine learning applications can have the most impact and thereby lead the way with solutions for adoption of these technologies throughout the industry.

MONITOR: A recent *Monitor* article by Stephen Whelan suggested that blockchain technology is ideal for use by parties that know each other, such as the close-knit equipment finance industry. How can companies within the industry begin to explore this technology?

GHAURI: Even though it's a close-knit industry, there is still heavy resistance to sharing the financial information of an asset. The industry is starting to share non-financial data, like asset maintenance information, owner information and so on. Rules need to be defined against the financial data and what is to be shared. Do we share yield information/profitability information throughout the life time of the asset or basic financials? We still need to define the rules of engagement.

Exploring new technologies is paramount to understanding how financial firms remain future-proofed from a business model and technology perspective. Innovation has become mandatory for firms to grow and remain competitive in an ever-increasing world where business models are being attacked and disrupted by new startups, regulations and changing customer behaviors. Setting up an innovation division provides a good platform on many fronts.

MITTAL: Blockchain provides a decentralized database, or digital ledger, of transactions that everyone on the network can see. It has many potential uses in the leasing lifecycle, such as registration of lease contracts and lessee obligations, UCC registration and sale of receivables and/or residuals in securitizations or syndication.

The primary issue in blockchain is the adoption by the community. In my opinion, adoption will happen if the database on blockchain is the regulatory source of truth, otherwise adoption will be sporadic and slow, resulting in the initiative sitting in adoption limbo for years, maybe decades.

NATARAJAN: Blockchain has fertile ground in equipment finance given how intrinsic close-knit relationships are to the way our industry itself functions. Technologies that facilitate transactions and reduce underlying transactional costs and promote efficiency within the overall business model have the potential to disrupt it. In this context, DLTs and the impact they will have on our industry is inevitable; it's a question of which technology begins to evolve [into] dominance and gains critical mass in terms of adoption.

Leasing companies can get in on the game by leveraging advances already in use in peripheral industries. An increasing array of opportunities are opening up; whether it is cross border payments for international asset purchases or advances in IoT and blockchain for certain types of assets could all be meaningful gateways.

VAN SLYKE: Blockchain solutions may well be on the horizon for our industry. In the last year alone, many companies and organizations have begun to implement blockchain within their private networks between trusted partners. We could see this being extremely valuable for financial transactions, contracts and customer records. Security of information in technology is a major priority within our industry and as more is known about blockchain technology, I could see this offering great benefits and advancements to this cause.

MONITOR: In another recent article, Joseph Bonanno explored the legal aspects of smart contracts. When will these contracts become the norm, and what steps will be necessary to fully eliminate paper contracts?

GHAURI: Smart contracts are essentially business logic code which sits on the blockchain and executes. Typically, this business logic can include buying or selling shares, exchange documents or any proprietary information between participants. Smart contracts on blockchain help deal with providing trust and conditionality before executing a transaction.

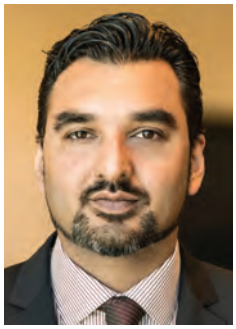
The main challenges to adopting smart contracts are technical and legal. Technically, once a smart contract has executed, it is not possible to undo changes, which makes it difficult to rollback. There also is the cost of executing the transaction and scalability of existing blockchain platforms which has hindered this from scaling. On the legal side, with the role of third-party intermediaries which blockchain circumvents, there needs to be safety mechanisms built in to prevent contracts from behaving the way they are intended to, whilst protecting the rights of the participants.

MITTAL: Smart contracts are used to drive down the time of completing a lease and funding the dealer in the micro-ticket and small-ticket space. However, selling these contracts to investors may become a challenge with some funders insisting on wet signatures.

For smart contracts to become the norm, they need to be accepted across the value chain by funders and investors that purchase the lease contract or a part of it, banks that lend money against security of leased assets and courts for settling disputes with lessees or other parties.

"The key to leveraging AI and ML technologies lies in being able to access data of good quality across the asset finance value chain about customers. Traditional leasing firms are still simplifying their legacy architectures and manual processes, and data remains locked into silos. This gives newcomers and younger firms who are more digitized the ability to leap frog using AI/ML."

— Farooq Ghauri, *COO*, NetSol Technologies



NATARAJAN: Bonanno's article rightly points out that smart contracts aren't a matter of "if" but of "when." As wider audiences are exposed to blockchain technology and some of its derivative uses, smart contracts will follow suit. That said, technology still has quite a way to go to evolve blockchain and related cryptocurrencies, so it will take some time before smart contracts are regular practice.

There is an interim step before smart contracts to more fully adopt digital signatures and contracting. Despite relatively slow adoption in the leasing industry, we have seen this gaining momentum within our customer base over the past two years.

VAN SLYKE: Smart contracts can be a great solution for industries where the terms and conditions of agreements tend to remain fairly static. By managing contracts across a network, users drastically reduce inefficiencies and safeguard against human error associated with manual contract creation.

If we are referring to physical paper, I think we are well on our way to becoming a paperless industry. However, if we are referring to paper as a concept for the manual process of contract creation, I don't know if our industry will ever fully eliminate paper contracts. Agreements with special and customizable terms may always be a reality.

MONITOR: According to the ELFA's 2017/2018 Business Technology Performance Index, obtaining a 360-degree view of the customer has become a goal of at least a third of equipment finance companies. What are the steps toward achieving this goal and why should the other two-thirds add it to their list?

GHAURI: The auto finance industry is moving from a transactional mindset to a relationship- and data-driven mindset. Captive finance and leasing companies are now aiming to become entirely customer-centric, fully digitized, integrated financial and mobility service providers, operating in the most efficient way. This requires a 360-degree view of their clients from first touch and then subsequently building a holistic mobility ecosystem to create customer lock-in and increase share of the wallet.

To move towards this goal, leasing companies need to offer broader mobility solutions to create opportunities for frequent interactions with clients. They must also digitize the core of their businesses, so it becomes easier to gain large-scale customer data, which can be harnessed using AI/ML to understand customer needs, capitalize on upselling opportunities and ultimately become a trusted mobility companion.

Once the digitization is complete, three easy steps will build a 360-degree view of the customer: 1) define the perfect world view of the customer, 2) understand the state of the data and where it exists and 3) look toward social media to create a profile based on likes and preferences.

The competitive advantage gained will convince the other two-thirds.

"A first critical step to understanding your customer is to take the time to audit the touchpoints they have with you. In 2018, we are in the age of omnichannel. Companies have to meet people where they are and in the style with which they are accustomed to working. Equipment finance companies need to be thinking about their technology roadmap as part of their value proposition in meeting the needs of customers and outside stakeholders. Choose a core platform that provides integrated customer portals, vendor portals, online chat hubs or chat bots and mobile-forward solutions that are accessible from a multitude of devices."

— Madhu Natarajan, *CEO*, Odessa Technologies

MITTAL: The acquisition cost of a new customer is very high for lessors. Having the ability to increase their share of business from existing customers through trade ups and cross selling of other products is a key focus for lessors. As the remaining lessors identify that they are increasing their ability to work with existing customers by having a 360-degree view, they will add it to their list.

NATARAJAN: The customer is front and center in today's uber-transparent world. Just as companies have technologies to track behavior and enable segmentation for micro-targeting them, customers also have a ready voice and audience to share their experience with brands. Their feedback is coming through a "digital bullhorn," whether it's a favorable review or weaponizing a bad experience. Whatever the message, it is imperative that companies are listening.

A first critical step to understanding your customer is to take the time to audit the touchpoints they have with you. In 2018, we are in the age of omnichannel. Companies have to meet people where they are and in the style with which they are accustomed to working. Equipment finance companies need to be thinking about their technology roadmap as part of their value proposition in meeting the needs of customers and outside stakeholders. Choose a core platform that provides integrated customer portals, vendor portals, online chat hubs or chat bots and mobile-forward solutions that are accessible from a multitude of devices.

VAN SLYKE: A 360-degree view of the customer is a compelling value discipline, and using technology to focus on this discipline is achievable by providing customers with a solution that is flexible, sophisticated and reliable.

Flexibility in your technology solution is step one and a critical differentiator to being able to provide valuable solutions to your customers. Flexibility is paramount to the entire equipment finance workflow, including structuring, credit adjudication, servicing and end-of-term >>

operations. A 360-degree view is further enhanced by adopting a technology solution that is flexible enough to meet both your customers of today and tomorrow.

The second step is the process of capturing data to better understand your customer's tendencies, preferences and hot buttons. Understanding what your customers want will allow you to go beyond the basic services and provide them with a solution that is both intimate and efficient at meeting their needs. However, it is not just a matter of collecting and analyzing your customers' data; to be effective, you must take action, and only a flexible technology solution can adapt to your customers' individual needs.

MONITOR: At the ELFA/IMN Investors conference, a panelist stated that the makeup of equipment finance companies will shift in the future as technology becomes more important. What can companies do today to ensure their staff is keeping them ahead of the curve?

GHAURI: Building skills and capabilities in next generation technologies is critical to remaining future-proofed from a business and technology perspective. Finance companies must make innovation part of their corporate strategy and create a servant leader culture which fosters innovation. Leasing companies should also move away from traditional waterfall approaches towards a more agile mindset to learn and adapt.

MITTAL: Lessors have an aging workforce in the process of retiring. They run the organization very effectively using the tools they developed many years back and are not willing to change or have little incentive to investigate what a change entails. 'If it ain't broke, don't fix it' is a common theme. This mindset poses a significant risk to an organization's ability to hire younger workers, adopt to business or regulatory changes and be highly efficient in its use of operational capital.

Attracting new employees, the millennials, to work on decades-old processes is very challenging. Existing employees need to think about changing their approach by adopting new tools and processes for maintaining a healthy and growing organization.

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— Mukul Mittal, *EVP*, Lease, Cloud Lending Solutions

NATARAJAN: The concept of there being "technology companies" and "other" companies is gone — every company must also be a technology company. The marriage between development and operations impacts all business verticals, and it requires constant experimentation to navigate the ever-changing technology landscape. The key imperative for equipment finance companies — and all companies — is to pivot towards a more agile way of working. Give technology a seat at the boardroom table, and put it at the forefront of every decision.

VAN SLYKE: Fostering a culture of continuing education is a great start to staying ahead of the technology curve. The tech industry is constantly evolving, so it is important to ensure that employees have access to materials that keep them informed. I believe that fostering an environment that incentivizes your workforce to keep their skills relevant and up-to-date is extremely important.

In addition, companies in the industry should have a clear long-term technology roadmap that is adjusted on an annual basis so they can begin to determine the impact to their human capital. Analysis across areas of technology adoption and developing plans to educate their people on more value-added activities versus the activities that may ultimately be eliminated or are more efficient through the adoption of new technologies. An education plan of this sort has many benefits, including removing the worry of people losing their jobs through the adoption of technology, which can often be a hurdle to industry change. In addition, it shows the company's focus on investing in the continuing education of its employees as the organization grows and the operations change. In the end, the equipment finance market place is a small niche and the knowledge of the industry and company itself that employees gain over time has true value and must be retained through the adoption of technology and the resulting change in operational workflow.

MONITOR: Technology is moving at a rapid pace. How can equipment finance companies of all sizes keep up and learn to utilize technology effectively?

GHAURI: Equipment finance companies should employ innovation as core part of their corporate strategy. They should set up a separate innovation division with a dedicated team outside the core to operate and move ahead with agility without being hampered by traditional organization politics. Innovation should be carefully applied to the firms taking a portfolio view where 70% of innovation efforts are focused on improving and future-proofing the core business and 30% on developing disruptive business models.

Successful industry leaders will not use today's thinking to plan 2030. Only by understanding the

future path of technologies and simulating the world of tomorrow can one understand the impact of where technology is heading.

Also, collaboration and working with strategic partners has become increasingly important as it is no longer possible to have all the capabilities needed to create next generation products and services. Partnership models should be considered, which provide a combined value proposition where both partners synergize on each other's strengths.

MITTAL: Lessors need to position themselves to leverage technology that applies to them as they may not need to take up all the latest technology. As most innovation is taking place on cloud-based platforms, lessors should consider moving their entire front, mid and back-office operations to the cloud.

NATARAJAN: Technology is moving at such a rapid pace of change that there won't be a point where you're "done." Instead, implement practices and processes that support regular change and enable innovative thinking. Adopting DevOps as a practice can help to shorten work sprints, open feedback loops and ultimately provide more complete, useful technology solutions.

VAN SLYKE: Companies are sometimes hesitant to adopt new technology because they are not sure how to approach it. Working with a technology partner that understands your business and strategic goals will make the process less daunting. The first step in the process should be to identify your needs and then lean on your technology partner to educate you on the best practices to meet those needs.

While it is tempting to try and use technology as a competitive advantage, you should never adopt technology just for technology's sake. This type of practice often leads to over-engineering, creating a complicated and often-slower process. Conversely, a well thought-out plan will create a well-engineered solution that is more efficient and seamlessly automated.

Adopters of technology should continue to focus on their most critical business needs and the elements of their business that create a competitive advantage and always challenge the current state from a technology perspective. Technology is continuing to advance, so the worst mistake you can make is to be content. A willingness to continually assess your business and how new technologies can assist in solving your most critical business needs can ensure that you will continue to maintain a competitive advantage.

MONITOR: In your opinion, what will be the next big technological trend in equipment finance?

GHAURI: The confluence of IoT and ML can be a critical differentiator for equipment financing companies. This combination would give them the ability to monitor uptime and productivity more accurately. Uptime can be improved by predictive analytics, which track equipment behavior and spot impending faults before they occur, which results in preemptive maintenance intervention so productivity is not affected.

"I believe that better customer experience and engagement is where the industry focus is shifting. Through our discussion of blockchain technology, AI and smart contracts, I believe that as the technology develops, we will see greater strides in process automation and risk identification analysis. Integration of these tools will be vital in the development of the equipment finance industry. Along with data security and compliance, finding ways to better identify customer and business needs will allow solution providers to offer better services to their clients."

— Jeff Van Slyke, *President/CEO*, LTi Technology Solutions

MITTAL: Leveraging connected devices through the equipment finance lifecycle is the next wave. Billions of devices are now connected using IoT technology. Lessors need to evaluate how to use this information to help lessees and add value to their leasing operations.

NATARAJAN: The shared economy will continue to gain momentum. And I'm not only talking about collaborative consumption of assets, but also of services and technology platforms — intellectual property.

The way we work is changing, and, as a result, many asset classes are underutilized and may go unused for large portions of their useful life. The IoT will become more and more meaningful in facilitating the shared economy, particularly as we bridge the gaps for closer connection with the underlying technology manufacturers implement to track assets.

VAN SLYKE: I believe that better customer experience and engagement is where the industry focus is shifting. Through our discussion of blockchain technology, AI and smart contracts, I believe that as the technology develops, we will see greater strides in process automation and risk identification analysis. Integration of these tools will be vital in the development of the equipment finance industry. Along with data security and compliance, finding ways to better identify customer and business needs will allow solution providers to offer better services to their clients.

We believe that one of the next big technological trends in the equipment finance space will be the continued expansion of more streamlined and efficient movement of data. We are very much just in the infancy of this trend. As an example, the continued proliferation of the cloud and interconnectedness of systems will take a very burdensome and labor-intensive process in the purchase and servicing of equipment finance transactions and create an environment where the movement of transactions and information between systems is easily accessible. This will promote much more efficiency in the flow of and accessibility to capital while bringing tremendous transparency to all stakeholders in a given transaction, no matter the system used. m