2015

Industry Future Council

Capitalizing on Change

EQUIPMENT LEASING & FINANCE FOUNDATION
Your Eye on the Future

The Foundation is the only research organization dedicated solely to the equipment finance industry.

The Foundation accomplishes its mission through development of future-focused studies and reports identifying critical issues that could impact the industry.

The Foundation research is independent, predictive and peer-reviewed by industry experts. The Foundation is funded solely through contributions. Contributions to the Foundation are tax deductible.

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Capitalizing on Change

"A mistake is looking at the business we're in, and not at what is coming."

—IFC Member, Futurist Work Sessions

The Equipment Leasing & Finance Foundation expresses appreciation to the following companies for sponsoring the 2015 Industry Future Council and Report

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About the Industry Future Council Report

Each year, in support of our mission to be "your eye on the future," the Equipment Leasing & Finance Foundation brings together a group of industry executives to form the Industry Future Council. The IFC is tasked with exploring trends, challenges and opportunities, and evaluating how these issues may impact the equipment leasing and finance business for years to come.

The annual IFC Report summarizes these discussions and attempts to bring into focus matters that equipment leasing and finance firms may want to consider as they plan for future growth. It is the hope of the Foundation that readers will benefit from the insights of the IFC and use this report as a thought-provoking resource and planning tool.

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Executive Summary

The acceleration of change. It's a trend that threatens to leave many of us behind. If computer scientists are correct that processing power doubles every 18 to 24 months, then we can say with some certainty that the speed of change will continue to compound. As it does, equipment leasing and finance firms will vie to keep up or exceed that pace by modifying business models, products and services. Some firms will be more successful than others. But companies whose leaders look beyond the next several years and dare to contemplate a longer future will multiply the odds, not only for their survival, but for their growth and prosperity.

This is not to say industry leaders can predict the future with unerring accuracy. It is to say that examining current trends, selecting those critical to equipment finance, and projecting possible future outcomes relative to the industry can be an insightful exercise. This was the task set before 17 leaders from a cross-section of firms and generations in the equipment leasing and finance industry who convened at the Industry Future Council (IFC) Conference held by the Equipment Leasing & Finance Foundation for two days in January 2015 in Washington, D.C.

To readers, parts of the exercise engaged in by IFC Members might seem abstract. But the aim of the yearly Conference is to consider forces with the potential to shape our industry for years to come—well beyond our typical planning horizons. By identifying and exploring the potential impact these trends, developments and scenarios portend, we may be better able to prepare and influence their effects. What is now seen as peripheral could affect us sooner than we expect.

IFC Members examined five issues likely to affect equipment finance in the next 15 years: Cyber-threats and Cyber-security, Big Data, Regulation, Industry Disruptors, and Robotics. Each issue was analyzed within a framework of four archetypes of the future: Growth, Collapse, Constraint, and Transformation.

Members saw wide-ranging opportunity in each of these scenarios but recognized challenges as well.

- They agreed that a digital world with far less privacy than today's will exist and spawn huge efficiencies—but also heighten needs for cyber-security services to protect internal information.
- Big Data will create jobs and improve the classification of risk, but firms unable to analyze data to achieve their objectives will ultimately disappear.
- Leaps in technology will shorten replacement cycles for equipment and software, while Big Data may enhance transparency to the point that most information is publicly available.
- Regulation could grow, spreading to smaller businesses and closing many, while increased data transparency could actually lessen the need for regulation.
- A future of resource scarcity could spawn new conservation technologies and industries, enhance use efficiencies, and possibly lessen impacts of processes like desalinization.
- Use of robotics could offset shortages in resources and personnel and create new capital demand.
- Social changes could influence customer preferences, leading to a per-use milieu that aligns spending with revenues on all types of assets and requiring new business models and innovations.

The prevailing view of IFC Members is that a steepening curve of transformation will become reality. Change could occur so quickly by 2030 that we might struggle to keep up with forces that threaten to overtake our industry. But in the end, proactive and nimble leadership and entrepreneurship, strong risk-detection systems and implementation of contingency plans can mitigate many of the obstacles envisioned. By monitoring economic signals and harnessing advancing technology, equipment-finance firms can be ready to capitalize on change as it occurs, ensuring the industry's continued leadership and success in an evolving national and global economy.

Introduction

> **"There are many possibilities, and we can't control them. But we can decide we want a particular future, and work to get there. We can also build strategy that's robust *against* certain futures."**
> ***—Facilitator***

Failure to ask and answer the question, "What if?" has ruined many a company, as well as several civilizations. But equipment finance professionals specialize in asking this question and answering it by studying and classifying risk. The challenge for participants at the 35th annual meeting of the Industry Future Council, a gathering of specially selected leaders of the equipment leasing and finance industry, was to identify and drill deeply into trends that could significantly affect firms and/or the industry not three to five years from now, but 15 years from now, in 2030. This was the task set before 17 leaders from a cross-section of firms and generations who convened for two days in January 2015 in Washington, D.C. The rationale: the pace of change is accelerating, and planning for three to five years in the future is no longer sufficient for an industry that expects to continue its success.

For the second consecutive year, consultants Jennifer Jarratt and John Mahaffie, partners at Leading Futurists, LLC, a D.C.-based firm specializing in helping organizations imagine and prepare for their futures, led the Conference. What follows is a detailed report of the meeting and its conclusions.

Survey Results

> **"Human progress only comes from optimistic thinkers."**
> ***—Survey Respondent***

In preparation for this year's Conference, the Equipment Leasing & Finance Foundation surveyed a cross-section of industry leaders about the future EL&F landscape. The purpose: to reveal trends, challenges and opportunities facing the industry as perceived by Foundation donors who support the organization's future-focused research. Survey questions were as follows:

1. Please cast your thinking out to 2030. Are you optimistic or pessimistic about the equipment leasing and finance business in that future time?

2. Again, with your thinking focused out to 2030, consider the following issues in commerce. Please indicate if they will be, for EL&F, a challenge, an opportunity, or uncertain. You may choose more than one response for each. The choices:
   - Robotics and Automation
   - Generational Change with the Millennials
   - Crowdfunding
   - Aging Population

- Legacy Systems, difficult to replace
- Digitization, lowering entry barriers to doing business
- Sharing Economy
- Carbon Accounting
- On-Demand Production/3D Printing
- Competitors with a Better Grasp of Data and Analytics
- Overseas Competition
- Global Instability
- Sustainability
- New Regulation
- War for Talent
- Cloud-Storage Applications, and
- Other Issues, to be written in.

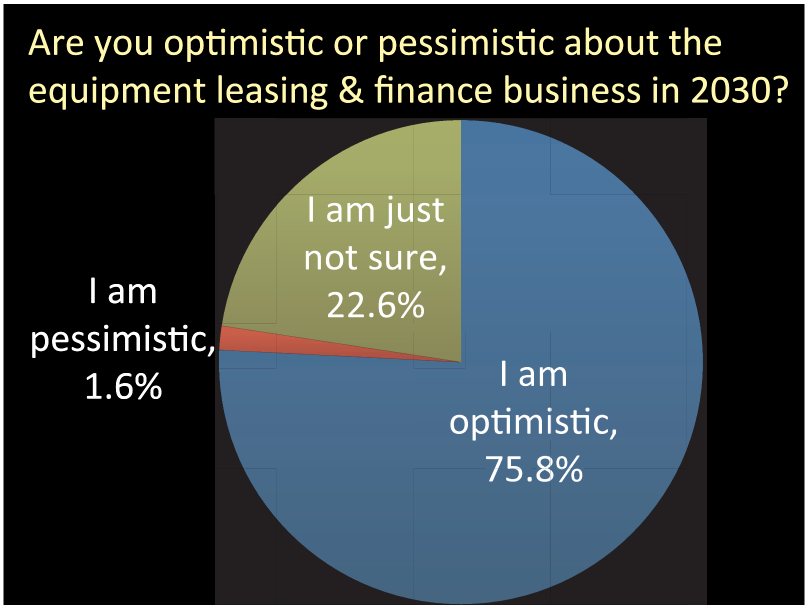
3. Futurists believe that by 2030 the pace of change will enable many new or emerging industries to be players in a transformed global economy. Candidates for new leading actors may come from:
   - Biotechnology
   - Bioengineering
   - New Materials
   - Nanotechnology
   - Personal and "Soft" Robotics
   - Wearable Technologies
   - Autonomous Vehicles
   - Mobile Devices
   - The Internet of Things
   - Green and Sustainable Techniques in Farm, Building and Home
   - Digital Cities and Governments
   - And More.

   Given these and other possibilities, what do you believe are the growth areas with the most potential for transforming business and society in 2030? Please suggest up to three.

4. Are any of these important future targets for EL&F? Which ones? Please suggest up to three.

5. Please share any other thoughts and insights that could be relevant.

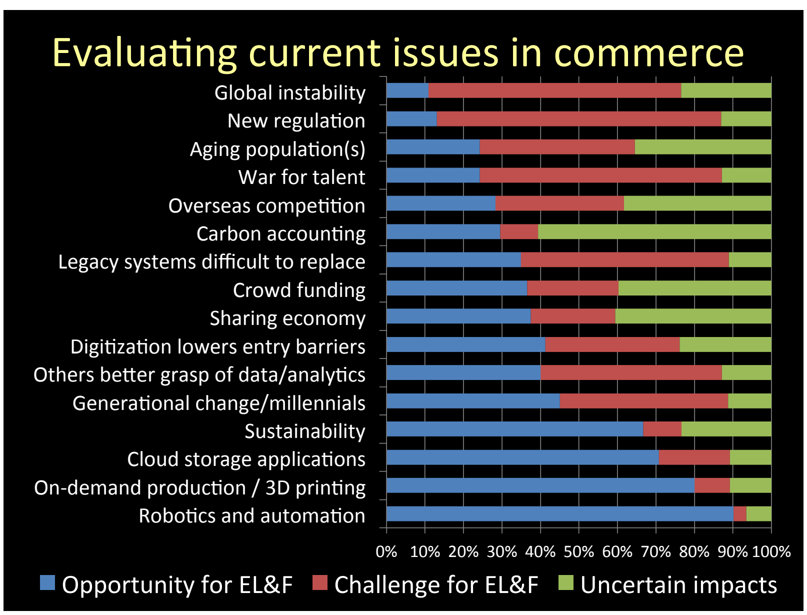
Results, Question 1:



Leading Futurists, LLC

We are an Industry of Optimists. Nearly 76% of survey participants were optimistic about the state of equipment leasing and finance in the year 2030. Roughly 23% were uncertain, and less than 2% were pessimistic. Responses were slightly different from participants in industries that suffered more than most businesses during the Great Recession, including manufacturing.

Results, Question 2:



Leading Futurists, LLC

All Issues are Opportunities. All issues were seen to an extent as potential business opportunities. More than 80% of respondents viewed robotics and the continuing development of automation as business opportunities for equipment-finance firms. Exactly 80% also saw on-demand production and 3D printing as opportunities. Other issues viewed by more than 50% of respondents as industry opportunities included biotechnology, cloud-storage applications, and environmental sustainability.

Ranking highest as having Uncertain Impacts were Carbon Accounting, Crowdfunding, a Sharing Economy, and Overseas Competition. Another issue seen as having uncertain impacts: Aging Populations.

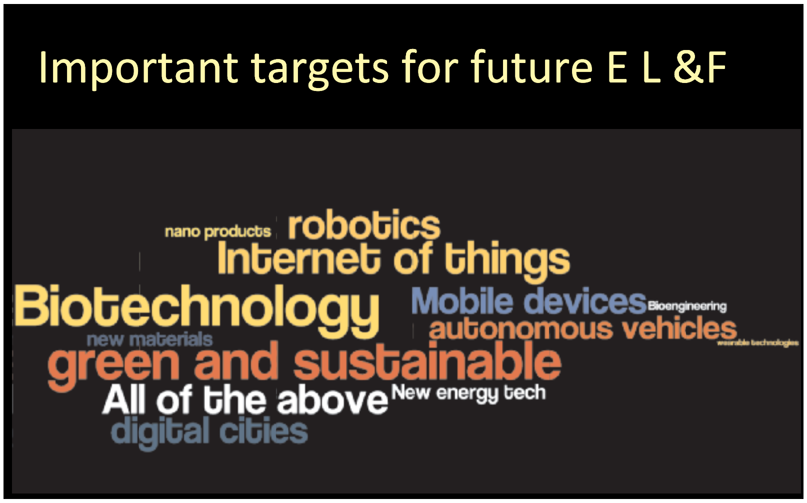
Receiving the most responses as industry challenges were, in order: Global Instability, New Regulation, the War for Talent, and Difficulty of Replacing Legacy Systems. Even so, as one IFC Member observed, the overall response to Question 2 was so positive that it could be summarized as, "We can finance anything. Tell us what you need."

Results, Question 3:

Leading Futurists, LLC

Survey respondents selected Biotechnology as a leading developer in a transformed global economy. Crude oil might be made from algae, solar and wind power were expected to broaden and grow in application, and micro-organisms might be manipulated to produce new antibiotics and hormones. Factories, office buildings and companies would almost certainly undergo changes to use less energy and become more sustainable, respondents thought, while transportation would become safer, thanks to autonomous vehicles. As the global economy matures and changes, equipment-finance firms will likely develop new business models to capitalize on these trends and penetrate new markets, respondents said.

Results, Question 4



Leading Futurists, LLC

Again, **Biotechnology** was most often selected by survey respondents as a critical path for development of new equipment and services to be financed. Discovery and development of new materials will probably enhance technology and further hasten the pace of change, respondents said, while at the same time, uncertainty about which technologies to embrace will breed short-term demand for some equipment and services. Technology could marginalize many business models, but respondents thought the equipment finance industry would continue its tradition of creativity by devising new models that will allow businesses to acquire and/or use the equipment, software and services they need to succeed.

Issues, Opportunities and Threats

Fear of the unknown can run rampant when considering the future—but this was not the case at the 2015 IFC Conference. Almost all issues and threats discussed were ultimately viewed as opportunities for equipment leasing and finance companies—not at the behest of Conference Facilitators, but at the suggestion of IFC Members, because equipment finance is an industry of optimists.

Nonetheless, after considerable discussion Members selected five critical-change topics as potential issues in 2030 that warranted further exploration via the development of specific future scenarios. These topics were:

- ❖ Cyber-threats and Cyber-security
- ❖ Big Data: Management and Competition
- ❖ Regulation
- ❖ Industry Disrupters, and
- ❖ Robotics.

A discussion of each follows.

Cyber-threats and Cyber-security

> **“Cyber-risk may be a game-changer, but we’ll always have game-changers that we can hedge with other risks.”**
>
> ***—IFC Member***

As the world embraces digital technology, IFC Members expect businesses and consumers to move more fully into an electronic environment, creating new levels of cyber-risk. Growing cyber-threats will present both challenge and opportunity to equipment-finance firms, Members agreed. “We’ll become much more protectionist because of threats around the world, and we’ll do much more remotely,” said one. “Our lives will be run digitally.” Said another, “We’ll have to create mechanisms and policy for data oversight. We’ll need to protect our own data and that of our customers, but we’ll also have new opportunities to lease and finance soft technology as protection for businesses.”

“Technology and soft products already account for more than 50% of goods and services being leased,” said one Member. But new business opportunities could be compromised by cyber-threats that may escalate risk to the point that protecting equipment-finance firms against hacking and fraud requires significant resources and vigilance. But the issue gains perspective when cyber-threats are assessed, similar to other risks assumed by equipment-finance firms. “There will always be risk; it’s about how you manage it,” said a Member. “Cyber-risk may be a game-changer, but we’ll always have game-changers that we can hedge as we do with other risks.”

Big Data: Management and Competition

> **"Millennials' decision on whether to buy or finance is completely different from others', and with commoditization, they can compare lenders immediately on their devices. They're not going to talk to people or send in their financials."**
>
> ***—IFC Member***

The manner in which equipment-finance firms adjudicate credit in the future is yet to be seen. But early efforts to collect data, harness predictive information from numerous sources including social media, and use analytics rather than historical information to predict the performance of portfolios as well as individual credits suggests that Big Data will lead the industry down a new path extending well beyond credit adjudication. "Big Data will affect our industry, there's no question," said an IFC Member. "And some companies will use it better than others, creating competitive advantages."

With Big Data come challenges to use it legally, ethically and effectively to help guide companies' strategic planning, marketing and growth. But if every business uses Big Data, from whence will come the added value, Members asked themselves. The added value, said one, will result from Big Data "Unicorns," computer scientists with deep programming experience who have a good understanding of the business domain and are specialists in distributed-systems software development. The problem is that in Big Data, just as in fantasy, unicorns are rare. But their expertise is crucial—in tandem with lending expertise—for choosing data to be collected and determining the information for which it will be analyzed.

Another potential aspect of competition via the use of Big Data: building structure that creates more benefits to borrowers. "Millennials' decision on whether to buy or finance is completely different from others', and with commoditization, they can compare lenders immediately on their devices," said a Member. "They're not going to talk to people or send their financials in."

Regulation and the Cost of Compliance

> **"Commercial and consumer transactions could be blurred as business becomes more digitalized, and governments could be slow to react, making the situation worse."**
>
> ***—IFC Member***

"Everyone says regulation is our biggest threat, and that we're in a period when regulation is intense. It's a mindset in our world today, but will it still be, 15 years from now?" Posed by an IFC Member, the question is vital to the industry's future, because the cost of regulatory compliance is enormous. How can technology address compliance more effectively, and will regulation continue at its current pace?

"I'd argue that regulation and the cost of compliance create new sources of competitive advantage that can manage this most efficiently and effectively," said a Member. "Regulation also helps create new industries, such as emissions control, carbon accounting, and desalinization."

Opportunities for equipment finance down the road include financing new plants, rehabilitating and rebuilding factories and office buildings, and supporting what amounts to a sustainability revolution.

Industry Disrupters

> **"Disrupters have access to capital. There's plenty of money looking to find its way to attractive, risk-adjusted returns."**
>
> ***—IFC Member***

Disrupters offer new ways of doing things that are cheaper, more efficient, superior to older methods, or a combination of these. Disrupters can make people move in a new direction by offering alternatives that a percentage of customers prefer.

In equipment finance, crowdfunders and other alternative finance entities are widely viewed as potential disrupters to the industry. Growing in number and sophistication, crowdfunders like Funding Club, Prosper and Kabbage have access to bank funding because banks are investing in their originations. "These alternative funders have become origination engines, and banks that want to play are becoming institutional investors," said an IFC Member, adding, "There's plenty of capital now looking to find its way to attractive, risk-adjusted returns."

A recent report issued by the Equipment Leasing & Finance Foundation found that alternative finance firms' disruption to the market place was nominal, with less than $1.5 billion loaned. But at what point might alternative finance reach critical mass? "This issue may be like a car mirror, in that objects are closer than they appear," observed one Member. "If you can see traction building, then I think the threat is real."

Crowdfunding changes the playing field, another Member observed, because these entities aren't legally prohibited from collecting assets and distributing them to individual investors. Will crowdfunding become a reliable way to finance equipment? If it does, will equipment-finance firms participate?

The Uber Effect

Uber is an app-based transportation network and taxi company headquartered in San Francisco. But it's much more than that: Uber is a major disrupter of the traditional taxicab business. The company uses a smartphone application to receive ride requests and then sends these requests to their drivers. Customers use the app to request rides and track their reserved vehicle's location. Wikipedia reports that as of mid-December 2014, Uber was available in 53 countries and more than 200 cities worldwide and was valued at more than $40 billion.

The subject of ongoing protests from taxi drivers, taxi companies, and governments that believe that it is an illegal taxicab operation engaging in unfair business practices and compromising passenger safety, Uber was banned last December in Spain and two cities in India. Because of Uber, however, some taxicab commissions, including that of the District of Columbia, are developing mobile apps.

Uber changes things. "The excitement around hailing a cab with a smart phone overwhelms the risks of using Uber," observed an IFC Facilitator. "People decide not to worry whether the vehicle that arrives looks like a cab or is a cab." As such, the Uber example is a good tool to test out thinking about what matters. Is it the asset or the service? "Get a taxi, private car or rideshare from your mobile phone," Uber urges on its web site. "Uber connects you with a driver in minutes. Use our app in cities around the world."

"At our company, we talk about how we can 'Uberize' things to make them faster, easier and better," said an IFC Member. "We're becoming less about leasing and more about finance, and the asset no longer matters as long as we're paid back. Structuring to recapture investment is what it's all about, and that's the challenge."

Robotics and Artificial Intelligence

"If artificial intelligence can call your customers, ask questions and synthesize data, will it lead to the commoditization of risk management?"

—IFC Member

The U.S. Navy is currently testing two "exoskeletons" that help human workers use and move heavy equipment. Designed by Lockheed-Martin and made of anodized aluminum and carbon fiber, the robotics are worn by workers who are subsequently able to move sand-blasters, riveters, metal-grinders and other heavy equipment. The goal is to lighten workers' loads, lessening injuries and ultimately making them more productive and skilled at their jobs. *Wired* Magazine reports that early tests show exoskeletons increasing human productivity anywhere from two to 27 times, depending on the task.

Exoskeletons and other robotics are evolving equipment that lend themselves to financing. The same can be said of Artificial Intelligence, or AI, which is likely to replace humans in entire categories of customer service jobs. IBM's "Watson" is cognitive technology, or AI, that can read and understand natural language, which is important in analyzing the unstructured data that makes up as much as 80% of data today. When asked a question, Watson "relies on hypothesis generation and evaluation to rapidly parse relevant evidence and evaluate responses from relevant data," according to information on an IBM website. Watson gets "smarter" with repeated use, IBM claims, by tracking feedback from users and learning from successes and failures.

Watson is already being used to examine medical health records and provide data. Thus, IFC Members thought it reasonable that AI could be used to interview future equipment-finance customers and analyze risk. Said a Member, "Maybe in 15 years we won't be able to tell the difference between people and robots—at least in remote conversation."

Archetypes of the Future

Thinking about issues discussed and the equipment-finance industry in the year 2030, Members analyzed each issue within the framework of four archetypes of the future: growth, constraint, collapse and transformation. The goal was to uncover future scenarios likely to happen, for which equipment-finance firms could begin planning today. How might the industry compete and flourish in a growth economy? How might it survive and thrive during conditions of economic decline or environmental constraint? How will our companies do business amid resource shortages or new regulation? How will our businesses carry on if governments shift or systems change? By considering these possibilities and economic demands that could accompany them, it's possible to envision new ways of doing business, reshaping our industry and increasing our relevance and value. Accordingly, IFC Members pondered their industry in each of these scenarios and developed plausible outcomes.

Madison Marquette

> **"Current jobs in customer service may go away, but in the same breath, new jobs in cybersecurity will be created."**
>
> ***—IFC Member***

Growth as defined by Conference Facilitators is a future in which current key conditions persist, including continued exponential growth in certain domains such as economics, science and technology, and cultural complexity.

IFC Members projecting a growth scenario in 2030 envisioned a digital world with much less privacy than today's—and thus, enormous needs for data protection. "There will be two types of companies," concluded one Member, "those getting hacked, and those doing the hacking."

How do we as an industry protect our data as we move further into a digital world? Members felt that electronic documents, storage in the cloud and data analytics all present substantial risks that our companies must learn to manage. Yet, cyber-risk will also create opportunities for firms possessing the expertise to manage this risk and minimize it for themselves and others, Members agreed, and cyber-risk management services will be almost certainly be available for financing.

Members also thought an offshoot growth area might be services that help equipment-finance firms manage cyber-threats to their customers. “There will be more soft costs, so the business models we lease to will be more vulnerable to threats,” said one Member. “Customers will have their own software and their own cyber-security, so we’ll need to ensure that they and we are not at risk.” Observed another, “Current jobs in customer service may go away (e.g., due to self- service), but in the same breath, new jobs in cyber-security will be created.”

“Expect increased regulation on this,” responded a third Member. “Customer demand is growing for the federal government to look more closely at this and require companies to be secure in this space. More regulation in this area will create more opportunity.”

But laws to safeguard information will likely spread to small firms, Members agreed, increasing their costs of doing business. Corporate business models will also change quickly, challenging local, state and federal governments to keep up.

As data becomes increasingly accessible, Members said they expect to see larger transactions involving more entities and legal complexities. “For businesses to work in this world, they’ll need to be taxed on a similar basis,” said one Member. Both governments and businesses will see a rising need for “uniform taxation laws that make nations more inviting to business.”

Continuing development of Big Data will likely create major opportunities for those who can perform the analytics necessary to determine how companies are performing in chosen markets. Use of Big Data will also be expected to improve the classification of risk, potentially creating even higher categories of risk than are classified today, Members said. At the same time, however, misfortune will befall equipment-finance firms that fail to use Big Data effectively, creating costs that remove them from the playing field. Said one Member, “We’ll have all of this data, but those without the ability to analyze it effectively will fail.”

In place of failed businesses will come new enterprises, bringing with them new opportunities for equipment finance.

Cool Vibe

> **"Economic collapse would be most relevant to our industry, because all other forms of collapse could be viewed as opportunities."**
>
> ***—IFC Member***

Collapse envisions a future in which some conditions deteriorate from their present favorable levels, and some critical systems fail, due to a confluence of probable, possible, and wildcard factors. A future of collapse could be riddled with bank failures or scandals, disruption from new technology or new business models, recession, failures of the Internet, or other systemic breakdowns.

IFC Members studying this archetype as it could affect the equipment-finance industry observed that collapse could have many causes, ranging from natural disaster to war, terrorism or economic failure. Consequently, Members focused on economic collapse as most relevant to the industry and most challenging, since all other situations could be viewed as opportunities. War, for example, would likely create a war economy in which goods were produced at home and governments spent money to boost national economies. A natural disaster, on the other hand, would create a need to rebuild, while terrorism would compromise cyber-security, generating need for new, more robust security systems.

Economic collapse could occur if the U.S. defaults on its debt, Members surmised, setting in motion hyperinflation, bank failures and loss of access to capital. Demand would also collapse as unemployment skyrocketed and equipment bartering became the norm, at least temporarily.

Members discussed how, as a leveraged industry, to prepare for a future economic collapse. Strong leadership, girded with sound strategic planning that includes continual attention to economic indicators and contingency plans, was thought the best solution. "Leadership that is nimble and works together can solve these problems," Members said. "Our contingency plans should include a plan for alternative funding, in case traditional funding breaks down." We can look back to the Great Recession to see how the industry responded then in the face of such challenges. Are we better prepared today?

U.S. Dept. of Energy Solar Decathlon

> **"If we look at the history of our business, we see that periods of constraint are usually dealt with in an efficient fashion that creates opportunities."**
>
> ***—IFC Member***

Constraint presumes a future in which society encounters resource-based limits to growth. A sustainability regime emerges, Facilitators suggested, slowing previous growth. Constraint might include climatic activity, such as rising sea levels, or political change, such as new taxes and regulations requiring carbon accounting. Business adaptability would be tested, with the rise of new businesses based on changed conditions.

IFC Members contemplating the Constraint scenario found it difficult to imagine a future in which equipment finance would not play a pivotal role. An example: shortages of fresh water could be remedied with desalinization plants, and pipelines could be built to move desalinated water to remote locations.

As the pace of changes increases, however, governments could have difficulty keeping up. "In my state, we tax organizations based on a system of commerce that existed in the 1800s—and it doesn't work in the new millennium," said a Member, adding, "Governments will have to find ways to change how they do business, or they will become more of a hindrance than a help."

Application of robotics could solve constraints in personnel and human physical limitations, and help elderly people continue to live at home, Members theorized. Robotics could also be financed for government agencies and other organizations promoting their use.

Constraints of capital, in contrast, could be disruptive to the equipment-finance industry. But this would be temporary, until new forms of capital develop. "If banks call your loan, other capital will work its way in," said one. "Constraint weeds out weaker companies, allows others to thrive, and prompts new ones to appear." Said another, "Short-term problems become longer-term opportunities."

James Clyne

> **"Everyone from now on is born digital. Everything that can be digital will be, and should be. We're embracing it in a big way."**
>
> ***—Facilitator***

Transformation imagines a future of disruptive emergence, dominated by high technology and characterized by the end of some current patterns and/or values and the development of new ones, rather than a return to older ones. "This is a transition to an innovation-based regime of new and even steeper growth," a Facilitator said. "This archetype anticipates increasing complexity and possible skill shortages."

IFC Members strongly believed that Transformation will bring with it "a drastic barometer" because change will happen so quickly—perhaps five times as quickly as it occurs now, if computer scientists are correct that processing power now doubles every 18 to 24 months. "In 2030, the workforce would be required to be highly receptive to rapid change in organizations and in jobs," said a Member. "Individual roles would probably be more dynamic and less task-oriented" as companies rely more heavily on automation and robotics. Rapid changes to technology would shorten equipment replacement cycles and revolutionize delivery. Business models will be nearly as dynamic, Members thought, changing often to meet evolving needs.

Members also thought that in a Transformation scenario, Artificial Intelligence would synthesize Big Data to help humanity as well as business. “IBM already uses its ‘Watson’ AI to examine electronic health records and provide more data than any team of physicians could,” said a Member. “Perhaps in our industry, credit and risk management will be performed by AI, which will contact applicants, ask appropriate follow-up questions, and then make perfect decisions.”

But others would have access to AI as well, creating more risk and competition. Risk management as a sustainable, competitive advantage might no longer exist and the industry’s credit-risk specialties could go away if perfect data is available to use in making risk decisions. Yet, because it’s conceivable that every equipment-finance firm will have evolved into a financial technology company by 2030, future competition might focus more on the client experience, including simplicity and digital delivery.

Regulation, meanwhile, could diminish due to increased access to information. “To the extent that regulations currently exist to keep irresponsible companies from cutting corners and putting us all at risk, we wouldn’t need armies of compliance personnel because regulators would have direct access to our information,” said a Member. “Stress testing for risk would happen in real time.” The upshot: Compliance as a function could become as anachronistic as Y2K and Six Sigma departments.

Interest rates in a future marked by transformation will probably remain low due to gains in productivity. Goods will become cheaper, causing deflationary impacts, resulting in shorter deal tenors and lower residuals. At the same time, used goods will see lessened demand as companies and consumers simply wait for the next product upgrade. In a related trend, IFC Members thought most businesses would operate in a per-use environment, spurning the risks and costs of ownership, and keeping spending closely aligned with revenues.

Additional Future Concerns

Although IFC Members chose five major issues to analyze for future development and action, they also listed two smaller but important matters that merited discussion. These were as follows:

Hiring and Retaining Millennials

> **"To keep them, you have to organize your business more like Google than like Bank of America."**
> ***— IFC Member***

Millennials are looking for lifestyle balance, for ways to avoid spending most of their lives in the office, Members said. "They're looking for a lot more balance than we were, and it's a good thing," said an IFC Member. "But it's hard taking the current management generation and making sure they know how to motivate these people."

"Walking around an office of Millennials is a little surreal," said another member. "No one's sitting at desks; they're moving around, huddling around things, sitting on the floor talking with each other in the break room. But they spend an average of 12 hours a day at work."

For Millennials, work is less about the office environment and more about the power and effectiveness of small teams, Members agreed. "We'll hire a team of college graduates who'll work together, socialize together and often stay together for much of their careers," said one Member. "You can't just put a ping pong table in a bank and have it change things."

Despite major differences between Millennials and professionals of other generations, IFC Members don't expect future leadership to be a problem. "Leaders will emerge in each company," a Member said. "They'll get involved, and the cream will rise to the top. It's more about transferring knowledge and experience to a new generation, and whether we're doing a good job with that."

Another Member wasn't as confident. He expressed concern that the industry could be ripening for takeover by another industry. "A lot of young, entrepreneurial minds are trying to figure out how to give people what they want," he said. "Some may enter our industry and be leaders, but others might try to figure out how to emulate what we do and compete against us."

Paying to Use, Not to Own

> ***"You don't need to own the things you use."***
> ***—IFC Member***

Thinking about the challenge of recapturing investment, an IFC Member asked if equipment-finance firms should perhaps approach the situation from the opposite direction, not by owning assets themselves, but by using them. "I see start-up companies that don't want to own anything," the Member said. "They would prefer to outsource everything." Said another, citing an extreme example, "I know people who even lease their clothes."

"You don't need to own the things you use," agreed a third Member. "By tying together complex pieces of the supply chain and connecting them with financial arrangements, you can focus on your core competencies: what makes your company and product faster, easier and better."

If indeed more customers want to make payments based on usage instead of on possession, could equipment-finance firms use Big Data to assess the risk? The question is important because we know that Millennials shop, analyze and acquire goods and services differently than do other generations.

The trend to pay for usage instead of ownership or even possession does not signal the death of risk, only the change of risk, Members agreed. "There is no bad risk as long as you price it properly," said one. "Not everyone can do this, because not everyone can price well. But this is a matter of creativity, and we will adapt by figuring out which data to collect and analyze to assess usage risk and price for it."

> **"Before, you could lease an asset, but now people want to make a payment based on usage. Will we use Big Data to determine the risk in that?"**
>
> ***—IFC Member***

An Issues Management Tool

Issues Management is a process for anticipating the emergence and effects of an issue, and exploring an organization's options in the face of it. An issue is a moral, political, scientific, technological, cultural, medical, values, organizational, or religious divide with no easy resolution. Unlike a problem, an issue has no simple answer or solution, and there is controversy about what should be done. IFC Facilitators defined two important types of issues: *Emerging Issues,* which are concerns about which most people and governments have not yet taken sides, and *Weak Signals,* potential emerging issues that are not yet framed, and with which most people are not yet familiar.

The ability to anticipate issues is critical to foresight in business, especially as the pace of change accelerates. By identifying weak signals and emerging issues, equipment-finance firms and the industry as a whole have time to monitor, analyze, plan for, and respond to situations before they become full-blown and opportunities to influence them lessen.

To examine an issue and determine whether or not it merits a response, industry leaders should answer the following questions:

- Is this a true issue, or is it a solvable problem? (Some issues are actually problems that don't yet have a clear solution.)
- As an issue, how will or could this impact the future of our company and its interests? Consider the following:
    - ❍ Economic Pressures
    - ❍ New Regulatory Moves
    - ❍ Public Involvement in the Issue
    - ❍ Opposition Groups
    - ❍ Champions
- What parts of the system does the issue impact most forcefully?
- What key trends does it interact with?
- Can we as a company or industry do more to shape the issue and/or mitigate those impacts?

By being aware of weak signals, industry leaders can think about them as emerging issues to be monitored. Awareness also creates time to think about what a company or industry might say collectively. "Time of influence is important in issues management," said a Facilitator, "because the advantage goes to the individual or group who can define what something means before someone else defines it, and puts others in a position where they have to react."

The Internet quickens the amount of time it takes for a matter to move from a weak signal to a full-blown issue. The "Internet Effect" also shrinks the window of opportunity to do something to influence the issue.

How Issues Can Grow and Develop

Issues can grow through vague concerns expressed in media, in obscure sources or through faint indications that two or more events could come together. Events bring a stronger focus to issues when data gathered about an issue, such as the effects of concussion in older football players, is given new or increased exposure that drives new health concerns for current players.

Threats to certain groups, such as the young, the elderly or the disabled, make more people pay attention to an issue. Publication of relevant information, including blogs, tweets and Facebook posts, can also increase exposure and strengthen an issue. Additional exposure can occur when an individual or organization begins to frame the issue by asking, "Would you let your child/spouse/partner play football, knowing what we now know?"

Issues can also grow when opinion leaders take notice and agitate to legislate for or against a newly framed issue. When this happens, actions are sought, new studies may be funded, lawmakers, organizations and individuals take up positions, and those thought to be responsible for the issue are castigated and regulation or legislation ensues. Eventually, interest in the issue declines, except for scholarly studies of what happened, and the matter slowly disappears from the public agenda.

Potential Weak Signals in Equipment Leasing and Finance

These may include problems and opportunities discussed in this forum or others, like lack of employee diversity. "We're not saying we won't let someone in, but I think we can be more proactive about it," said a Member. Is lack of diversity in the industry a weak signal? "I believe each company has to do something about it," said another. "Each one should examine their human resources policies and determine what to do."

At this point, lack of diversity is an early concern, a third Member suggested. "But is the industry sending the right message? That's the question."

Weak signals and emerging issues can prompt a company or an industry to begin thinking about how to respond. Early issues can and should make their way into strategic planning, Members agreed, so they can be managed to shape the future rather than react to it—and that is the point of thinking seriously about the future to begin with.

Conclusions

Dangers of Complacency

As an industry, equipment-finance firms are optimistic about the future and confident about dealing with change in nearly any scenario. But at what point does confidence become overconfidence and complacency? At what point are signals of coming problems downplayed or ignored? Continually asking what might have been missed in the business, legislative or economic environments, and monitoring each of these areas for weak signals and emerging issues, will be paramount to the industry's continued viability.

The Data Dichotomy

The explosion of data and its increasing accessibility were recurring themes throughout Conference discussion. IFC Members felt strongly that a combination of factors, including advancing technology, popular demand and new regulation, would work together by 2030 to greatly increase corporate transparency across U.S. businesses.

Such transparency might lessen other types of regulation, Members theorized, due to governments' ability to monitor companies in real time through access to their transactions and financial data. On the other hand, Members expressed concern that some types of data would require a great deal of protection to preserve capitalism and competition. Cyber-security will become big business, Members agreed, as organizations strive to protect information still allowed to remain private. Even so, firms will probably benefit from sharing certain data across industries, market segments or company to company.

"There is a dichotomy between the concepts of accessing and sharing information, and protecting information we don't want to share," said one Member. Reconciling this dichotomy may require considerable public dialogue and legislative trials and errors.

Regulation and Opportunity

Industries could experience less regulation—or regulation that is more narrowly focused—if governments have access to transactional and financial data, IFC Members suggested. Although ramifications of this possibility are numerous, one positive development could be the opportunity to finance new monitoring equipment, software and services. Legislated carbon accounting, for example, could require technology that monitors and reports carbon output, uptake and residual. Similarly, cyber-security measures taken by various organizations could require monitoring to ensure that the proprietary data of other firms is not compromised. Future opportunities to finance new business tools, Members agreed, hinge partly on future regulation.

Disintermediation

Equipment-finance firms act as intermediaries in a world characterized by change and consolidation. How to ensure that the industry remains viable as technology shifts increasingly toward do-it-yourself options? IFC Members saw creativity as key, helping firms reshape themselves to provide new business models and solutions. "Pay-per-use, the ability to let companies out of contracts under certain circumstances, and knowledge of market niches: these are all creative functions that machines won't be able to do," said one Member. "There will always be secret sauces," said another. "That's the nature of our business."

The Resilience of Risk

Members strongly believed that the steepening curve of transformation will be part of any future. "It won't be business as usual," said one. "Technology will do a lot to affect how our business works, but it could also be the best path for getting things done."

Use of Big Data will help companies and individuals make better decisions and do things differently. But risk will always be part of the equation, Members said, requiring evaluation, pricing, structuring and monitoring. At the end of the day, equipment-finance firms could choose between fully automated scoring and human credit management, and between automated documents and those that are highly negotiated. But trained professionals will still be necessary for devising and structuring complex transactions and shepherding them to closing—and customers are likely to pay willingly for the service.

In the end, we are an industry of optimists who have shown tremendous resilience through economic cycles, social evolution, and technology transformations over many decades. If past performance is our guide, we will remain vigilant of our dynamic environment, and our future is indeed bright.

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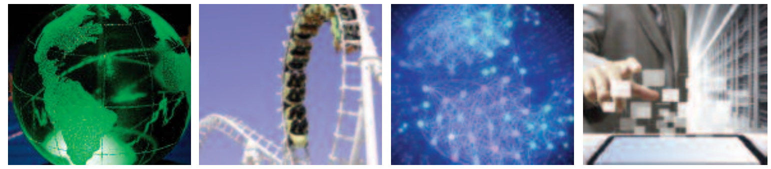

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The Equipment Leasing & Finance Foundation

Established in 1989, the Equipment Leasing & Finance Foundation is a 501c3 non-profit organization dedicated to providing future-oriented, in-depth, independent research for and about the $903 billion equipment finance industry.

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Equipment Leasing & Finance U.S. Economic Outlook

This comprehensive report analyzes global and domestic trends impacting capital spending and economic growth in the coming year. It identifies key signposts specific to the equipment finance industry and features Momentum Monitors that identify turning points for 12 verticals in their respective investment cycles. The outlooks are updated quarterly.
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Monthly Confidence Index

Through a monthly survey of the industry's executive leadership, we've established a confidence index related to the equipment finance sector and the U.S. economy. The results provide greater understanding of prevailing business conditions and expectations for the future.
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Journal of Equipment Lease Financing

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Is risk avoidance critical
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