



The experts:

Digital disruption in the middle market

Technology's impact on M&A



Digitization is rapidly changing the business landscape. What effect is this having on the middle market in particular? Five experts discuss the implications for M&A and private equity.

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Which non-tech sectors in the mid-market do you think are being most affected by digital disruption? Which sectors would you say need to play catch up most to stay competitive?

S. Barth, Foley & Lardner

Healthcare, insurance, and financial services are certainly at the top of the list of sectors being dramatically impacted by digitization. We are seeing a lot of money being plunged into Internet of Things (IoT) and big data technologies in these industries in order to drive more efficiency and enhance the targeting of customers. Fascinating work is being done in the insurance industry as old-line property and casualty companies try to get better data to lower their loss ratios and improve the behavior of their insurance customers.

The way in which insurance companies are fueling this innovation is interesting as well. In the past, insurers mostly invested their holdings in blue-chip stocks or the bond market, and maybe allocated a little bit to private equity. But now, a number of old-line insurance companies have said, "Look, we not only want to invest as part of our investment strategy but as part of our business strategy. We need to invest in more start-up, early-stage,

- 1. Steven Barth Partner Foley & Lardner
- 2. James Cassel Chairman & Co-founder Cassel Salpeter & Co.

3. Bryan Jaffe Managing Director Cascadia Capital

4. Joe Manning Partner Riverside Company

5. Philo Tran Director Clearsight Advisors high-tech companies that will help us drive better operational results and better portfolio results from our standard-line policies." So they're melding both strategies together.

J. Cassel, Cassel Salpeter & Co

Business transformation is a constant process. At our firm we have three main verticals, which are technology, healthcare, and aviation, as well as a general practice, and healthcare and retail are two areas that are being dramatically transformed by digital disruption. On the retail side, take a business like Blockbuster Video. If you were a Blockbuster franchisee and you sold your business 10 years ago, you would've made a moderate return on your investment. If you held onto it until five years ago, you would've been on the verge of extinction. And today, I'm not sure that a single Blockbuster franchisee remains. What changed was the rise of services like Netflix and on-demand video technology-based innovations that have destroyed that old business model.

P. Tran, Clearsight <u>Advi</u>sors

We are certainly seeing many companies think about how to use leading-edge technologies – such as IoT, virtual and augmented reality, mobile technologies, advanced analytics, and artificial intelligence – to transform their businesses. Digital technologies alter business processes but also create opportunities to develop new business models and new revenue streams. It's not only about efficiency.

I've seen the most interesting applications of digital technologies from low-tech industries. Augmented reality is used in manufacturing environments to guide humans assembling parts in a way that virtually eliminates errors. The system tells the person which parts to connect and where, and if it sees the wrong part being used it will send a warning signal to the assembler. Connected aircraft engines are telling airlines when a part is about to fail and, thanks to the cloud, the system can

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> Philo Tran, Clearsight Advisors

find the closest supplier of that part and order a replacement. If you own a pool, your pool pump can detect when electricity rates are too high and shut off temporarily and your pool can even selfbalance the pH level without any human intervention.

B. Jaffe, Cascadia Capital

Every sector is impacted by digital disruption, just as Philo said. Among those most impacted is brickand-mortar retail: whether it's grocery, specialty, mass, or discount, as a class of competitors, they are all being disrupted by technology. And it is observable through a variety of metrics – for instance, ecommerce sales relative to retail sales, or stock prices of traditional retailers versus those dominating the ecommerce landscape.

When you look at ecommerce sales as a percentage of total retail sales, the share of ecommerce sales is expected to grow on average at about 6% over the next five years, and that should continue for the foreseeable future. Additionally, if you look at Amazon's stock price, which we consider to be the ecommerce bellwether, versus that of Walmart, the return scale is striking. Over the last five years, Amazon's stock price is up close to 350%. In contrast, Walmart's stock price is up 15% over that same period. This demonstrates how technology is not only disrupting a category but also shifting where value is created among classes of competitors.

J. Manning, Riverside Company

I would agree with Philo and Bryan – it's tough to find an industry that is not being impacted by new business models that have some sort of software or digital component. For example, Riverside's portfolio company Soothe is revolutionizing the massage industry via transforming how consumers hire and receive massages. Consumers can book massages through a smartphone app or website and receive a licensed massage therapist at their door in as little as 60 minutes.

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P. Tran, Clearsight Advisors

8.8% Increase in private equity deal value globally in Q1 2017 to US\$78.4bn

24%

market M&A volume globally in Q1 2017 to 1,363 deals

J. Manning, Riverside Company The private equity industry is known for being on the cutting edge. How are technology considerations affecting the strategies of PE buyers? Have you observed a special emphasis by PE firms on seeking targets with strong tech assets?

I would say technology and intellectual property have always been an attractive area for a certain sub-set of private equity firms. So I'm not sure that we've seen an increasing focus on it. But what we have seen in the digital space is that transformation doesn't just mean implementing a technology – it means thinking about how it affects your business overall. I call it a "digital journey."

We do a lot of deals for professional services companies. There is increasing demand for technology-enabled consultancies with deep strategy, design, and technical capabilities. In the beginning, they could conduct a one-day strategy session where they evaluate how the company interacts with customers, its suppliers, employees, and think about the ways that they could do it differently. Then they can figure out which technologies will enable what they need, rather than saying "Okay, let's implement cloud but for what end purpose?" So there has been a lot of interest in companies that are able to guide clients through the entire digital journey, from strategy and ideation through execution and postimplementation support.

One type of technology, software as a service (SaaS), has become a very hot term within the M&A industry, and many business owners and investment bankers are marketing any company with a software component as being a SaaS company. In many instances, the companies are not really SaaS. The private equity community is now very well versed on SaaS from both a revenue and technology model perspective. Having just a recurring revenue model

Source: Mergermarket

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We believe that private equity is in the early stages of determining the potential for their target companies B. Jaffe, Cascadia Capital to digitize their products and operations. It is an area they are increasingly addressing.

Bryan Jaffe, Cascadia Capital

> S. Barth, Foley & Lardner

does not mean the company is SaaS. A true SaaS technology architecture or a clear roadmap for how to get there is critically important. That's particularly true if the private equity firm plans to use the business as a platform investment for add-ons, or intends to scale the product across a large number of new customers.

PE firms have three main levers to drive shareholder value. They can accelerate growth; expand margins; and increase capital efficiency. In our view, technology can influence each of those levers. For example, there are many digital solutions that help with new customer acquisition at a lower cost, thereby accelerating growth. We also see technology in the form of automation, which can improve margins by reducing the labor component in production. There are real-time data solutions, which enable traditional businesses to optimize production runs and inventory levels, helping them reduce working capital requirements. We believe that private equity is in the early stages of determining the potential for their target companies to digitize their products and operations. It is an area they are increasingly addressing and one that will become more topical over time.

This is an interesting issue, because there are PE firms on both sides of this. Many PE firms love buying into industrial or manufacturing companies that haven't done much from a technology advancement or robotics perspective, because that's an area where they can drive increased productivity and therefore higher margins, as Bryan said. They can take a company and apply their expertise inside a plant or facility, generating larger EBITDA margins. And not only do they get the benefit of the higher margins, but they can also probably get another turn when they exit because they've implemented these tech solutions.

So I would say what they're really trying to do is to bring their tech expertise to make, for example, an old-line manufacturing company more competitive and more productive. They want to realize the benefits of providing that expertise and technology for their portfolio company, so that they can benefit on the sell-side and not have to pay up for it on the buy-side. I think the PE firms that have that type of expertise are really going to benefit when they ultimately go to sell a company or take it public.

J. Cassel, Cassel Salpeter & Co

I've seen PE firms say, "Well, if we own this business, we're going to have to pay another \$200,000 because the accounting department is deficient and needs more people," and so on about various aspects of the company. And certainly technology is another area like this, as Bryan and Steve have pointed out. What's interesting about technology is that the costs for it have come down quite a bit over the years. It used to be that technology was very, very expensive on a relative basis, and now some solutions can be brought in for less capital.

I would also say that financial buyers often look to put together synergistic companies, and in some cases that has to do with technology. As part of their investment thesis, pretty much every private equity firm we run into asks themselves, "What is the universe of potential add-on acquisitions?" If you look at those potential acquisitions on a concentric circle basis, there are direct competitors that might be in that middle circle and then as you move out there may be companies with a useful tech capability.

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Mid-market companies are increasingly being forced to compete with venture-backed high-tech start-ups. How are mid-market firms responding to this new form of competition? Are you seeing companies invest in digital growth to compete, or are many being left behind? What's interesting about technology is that the costs have come down quite a bit. It used to be that technology was very expensive on a relative basis.

> James Cassel, Cassel Salpeter & Co.

We are absolutely seeing companies in the midmarket who are struggling to adapt. In examining digital growth and strategies that companies use to catch up, I think about what a company is trying to accomplish relative to the product layer. Let's say you have a company making a product — in terms of structure, you have concentric circles that move out from there, with the customer in the outermost circle. In between those layers are suppliers, partners, service providers, and so on.

Within that framework, you can look at companies' strategies relative to their proximity to the product layer. Companies that need to innovate at the innermost product layer are doing so in-house. They are adopting technologies like 3D printers to quickly prototype new solutions or they're hiring people with digital expertise. These activities ultimately reside on their income statement and impact profitability.

As you move further out, towards partners and customers, that's where companies rely more on outsourced solutions, such as consulting and package software. Adopting the right strategy depends on where, relative to the core product, you're trying to drive digital growth. The closer you get to your core IP, the more you must take on internally. If you need a better set of products, you may have to go buy a better set of products, and that's where M&A comes into play.

S. Barth, Foley & Lardner

I would say that the smart mid-market companies are focused on adapting to digital disruption. Generally speaking, I'd say that they are behind the curve, and here's where I think a disconnect exists between mid-market and larger companies that clearly see and have the resources to get better, smarter, and faster in digitization. What I have personally seen is that at large industrials, their corporate development teams used to be focused almost exclusively on traditional M&A. Now, more



and more of those resources, including personnel, are being dedicated to corporate venture capital. They believe that if the company can integrate smart new ideas and people and put some of their thoughts into their engineering group, this is a beautiful thing.

On the flip side, there's no question that some of the more traditional mid-market firms are being left behind. It's a real challenge for them, because digitization takes expertise that they generally don't have. They've got to go hire for it, and of course they're concerned about spending the money to do that. A lot of old-line mid-market companies also haven't bought into the idea yet – they don't really see the future there. It's hard for them to see that this is the wave of the future and they really do have to spend capital to stay competitive.

J. Cassel, Cassel Salpeter & Co

I would say it really depends on where a company is in its life cycle. I do see companies that will spend money to further their technology where they can. Unfortunately, I think it's sometimes easier to raise money on a standalone basis than not. If you've got a legacy company that decides it wants to build some kind of technology product, sometimes you see them go off balance sheet and raise money separately, because someone doesn't want to have to deal with the legacy business, and maybe a new product has greater potential. You also see people leave companies to start up separate businesses. of course.

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Steven Barth, Foley & Lardner

Whether you're thinking about sensors or cloud storage, everything is becoming cheaper.

Philo Tran, Clearsight Advisors

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J. Manning, Riverside Company

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I think companies that view their future as a problem will try to figure out how to use internally generated money to upgrade and develop technology. Or they'll use consulting firms on the outside to help them develop or beef up however they need to.

What I've seen is that there are numerous technology options out there now, and the costs are generally going down. If a manufacturing plant wanted to connect their machinery on the floor, there are many different IoT platforms on the market to choose from. So whether you're thinking about sensors or cloud storage, everything is becoming cheaper. I think what that does for mid-market companies is that digitizing their business is a lot more tangible than in the past. Whereas a project may have cost a million dollars five years ago, it could be easily half that price now.

As a growth-oriented investor, Riverside is always focused on product development and innovation for its software and tech-enabled investments. We are a very ROI-focused investor, so we work with management teams to identify, quantify and expand high-ROI growth opportunities. This often involves new product development, sales team expansion, and digital marketing and lead generation. Digital marketing has become much more sophisticated and competitive during the last five years as companies moved from basic SEO and pay-per-click advertising to omni-channel lead generation and leadnurturing initiatives.

As technology has become crucial across sectors, cybersecurity due diligence has become a key part of the deal process. What factors shape this in the middle market? Is it challenging to get deals done when wthere are security shortcomings at legacy businesses? J. Cassel, Cassel Salpeter & Co

Internet security has become extremely important and that fact has been underlined by things like the email leaks in the recent presidential election. If you take private equity buyers as an example, their diligence checklist used to include just financial due diligence, quality of earnings, possibly some insurance work, and an environmental evaluation if there was a real estate component. Today, they have certainly added cybersecurity to that list.

Perhaps the most dramatic example of something going wrong with cybersecurity diligence took place with Yahoo!, which of course had a couple of big "glitches" during their sale process. And if that could happen to a company like Yahoo!, it could certainly happen to other businesses, because you would think that Yahoo! would be cutting edge in that area. The PR around breaches is fairly ugly, so buyers have become very careful. We're seeing more and more time and energy spent examining what security systems are in place, whether the company has been breached, and whether there are major concerns or holes. Another important thing is whether companies are spending enough money on it, because if you're spending a minimum amount of money but you need a major upgrade, the buyer will need to bake that into their decision on pricing.

S. Barth, Foley & Lardner

I would say different mid-market firms prioritize cybersecurity differently depending on the industry. If you're an old-line industrial B-to-B business, I think it's out there as a concern but it's not the raging top-shelf concern that it is in a retail-type business that deals with consumers. For those companies, whether a tech firm like Yahoo! or a financial services business, cybersecurity has become the number one area of diligence.

We know that if we're on the sell side, buyers are going to be asking about it and we better have made sure that we have all kinds of good policies and procedures in place, and we feel highly

\$350m

The amount that Verizon pared off its deal for Yahoo! after the internet company reported a series of data breaches

54m

The average number of cybersecurity events experienced by IBM X-Force clients in 2016

> Source: Bloomberg, IBM X-Force

confident that we can give very extensive reps on cybersecurity. The buy side is the opposite situation – we're going to dive in to see what type of policies, processes and procedures a potential acquisition has in place, what type of data they have, and how secure it is.

I think there are shortcomings in almost every mid-market company's cybersecurity policies at this point. It's really stunning how far behind the curve most companies are, even if they're in businesses that deal with personal information. I think folks are scrambling to catch up and put into place protections. Jim mentioned Yahoo!, and we point to examples like that all the time to try to bring this to light with our clients.

B. Jaffe, Cascadia Capital

When evaluating the risk associated with an asset today, buyers assess technology and data risk as part of their standard due diligence process. They tend to focus on three questions: What is your technology stack? What are the vulnerabilities associated with it? And then, what is the data you're aggregating and how are you storing and securing it? Obviously, if a company has had a data breach, it could influence whether a buyer is interested and could impact valuation as well. We are increasingly seeing significant data risks uncovered through due diligence and some of them are resulting in broken deals.

All buyers, and private equity firms in particular, try hard to avoid catastrophic risks. To drive a favorable "cash-on-cash" return and IRR, you need to come out of the gate in the first 12 months and generate growth. However, if you spend the first 12 months overcoming the impact of a data breach, it's hard to generate the return you're seeking, unless you extend the time horizon.

At the same time, vulnerabilities can often be overcome before a transaction closes – I'll give



you a prime example. We sold an online retailer that should have been collecting sales tax in certain jurisdictions but didn't have the software necessary to identify those transactions and the associated amounts they should have been charging customers at the time of their order. So prior to closing, the company implemented software that retroactively analyzed all of its interactions. The buyer identified the amount they were likely going to have to pay in back taxes, and then set aside an escrow to assuage that obligation.

J. Manning, Riverside Company

I can also give you a recent example of a recent potential deal we were involved in. In this case, the company we were evaluating lost its largest and most prestigious customer due to a cybersecurity and HIPPA compliance issue that the customer discovered via a consultant they hired. This customer loss put the deal on hold while the management team dealt with a major customer loss that had severe potential PR repercussions. It is becoming more common for large corporate and government customers to hire third parties to conduct IT security and compliance checks on their software vendors prior to or right after making a purchase. Companies need to be prepared for this type of IT auditing so that they know in advance what red flags may arise during the evaluation.

P. Tran, Clearsight Advisors

Cybersecurity is definitely a topic that everyone talks about. With more and more data moved to the cloud, it means more exposure. However, unless you're in one of those highly sensitive, regulated areas like financial services or healthcare, we're not seeing a particular emphasis on cybersecurity due diligence with the companies that we work with. The issue is talked about, but little action is taken. That said, cybersecurity consulting and technology companies with an innovative and effective mouse trap will command a very attractive multiple in the market.

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> Joe Manning, Riverside Company



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