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Dear Friends and Colleagues:

We can’t believe it’s been ten+ years since we opened the doors at Union Square Advisors. Having wisely launched our firm in 2007, we’ve experienced a global financial crisis and its dramatic recovery, as well as significant changes in the domestic and global political order. It certainly hasn’t been a boring decade . . .

Through it all, the technology sector has thrived and prospered, becoming increasingly important to the worldwide economy—in fact, today it represents fully one-quarter of the value of all public equity markets. We believe that we are at the very beginning of the Fourth Industrial Revolution, one that will witness technology becoming deeply ingrained into virtually every industrial sector. While the first, second and third revolutions brought sweeping change to our world—mechanization powered by water and steam, mass production enabled by electricity and the advent of the digital revolution—nothing compares to what’s happening now.

New platforms and approaches to delivering technology, such as the Internet of Things, blockchain, augmented / virtual reality, machine learning and enhanced natural language interfaces, will transform and pervade everything from transportation systems to manufacturing processes to energy production to healthcare delivery to financial services. Many of these technologies have been around for some time but are just coming into the mainstream. It is the next-generation approach to combining them with each other, and with the existing infrastructure, that represents such amazing potential for this latest Revolution.

Our original vision for Union Square Advisors—to support the best technology companies and investors in the world as the most knowledgeable and capable advisors on their most important strategic transactions—has not changed. Indeed, we believe it is more relevant with each passing day. From the start we have focused on building an investment bank with bankers who actually understand technology and technology companies, as well as the competitive and partnering ecosystems in which they operate. As a result, we are able to provide superior strategic advice the way it once was done—by working to build strong relationships
with our clients and delivering relevant advice and support for months, if not years, before an actual transaction occurs.

Our approach and our accomplishments speak for themselves; in our first ten years, we’ve completed more than 95 transactions representing $95+ billion in value. And we are just getting started. Given the nearly limitless pools of strategic and financial capital around the world that are focused on the tech space, and the strong drivers making technology more relevant and more pervasive in a wide range of industries, we believe the next ten years are even more promising than the first ten have been. These factors, and our continued immersion in the technology ecosystem, will enable us to play a prominent role as one of the leading investment banks for this Fourth Industrial Revolution.

We have been privileged to build great relationships with many of you—visionary thinkers, influential investors, leaders of groundbreaking businesses and extraordinary entrepreneurs. You have all enriched our thinking and helped make Union Square Advisors what it is today. We invite you to read ahead for our thoughts on several important trends in technology: convergence, connected technologies, cybersecurity and next-generation software, among others. We also share our thoughts on overall strategic trends and the current deal environment.

At this time, nothing seems impossible. We’d love to compare notes with you, and to have the opportunity to partner with you on your next great endeavor. Please be in touch and accept our best wishes for a transformative 2018.

Sincerely,

Carter McClelland
Co-Founder & Chairman

Ted Smith
Co-Founder & President
In early 2017, most professionals in the tech sector were expecting a lively year for both M&A and investments. While both the tech IPO and private placement markets recovered after multiple years of declines, tech M&A fell off significantly. There were 36 global tech IPOs for $12.4B of volume in 2017 vs. 21 for $3.5B in 2016. Additionally, according to Pitchbook, private placements in the U.S. grew by 17 percent to $84B in 2017 vs. $72B in 2016. However, according to The 451 Group, global tech M&A volume was $323B in 2017 vs $503B in 2016, down 36 percent. The biggest contributor to this decline was the comparative lack of large ($1B+) tech M&A transactions. However, there was a bright spot in the growth of mid-size transactions (deals up to $500MM in value) which totaled $61.6B of the total tech M&A volume and grew 9 percent year-over-year.

Despite early February’s market volatility, the overall strength of the equity markets and the fact that many valuation benchmarks remain near historical highs as well as increased corporate earnings continue to boost corporate buyer confidence. By the same token, smaller or mid-sized public companies may increasingly see the current environment as an attractive one in which to seek an exit via a sale, and many private companies are enjoying greater optionality with private financing, IPO or sale alternatives all on the table. In addition, tectonic shifts in the tech landscape will encourage more M&A driven by economies of scale - (e.g., in 2017, $13.7B Amazon / Wholefoods, $15.3B Intel / Mobileye and the pending $120B takeover attempt of Qualcomm by Broadcom).

While interest rates are likely to continue to rise in small increments over the course of this year, they remain near historic lows. Corporate buyers can leverage their access to still-inexpensive debt markets, as well as their significant cash reserves (both domestic and, now, foreign) and their strong stock currency to pay for M&A. Not to be outdone by corporate acquirers, private equity firms, sovereign wealth funds, family offices, VC firms and public equity investors all have sizeable pools of capital to put to work across the tech investment spectrum.

With technology increasingly permeating all industry sectors, we will continue to see a rise in acquisition activity from non-traditional buyers. From a regulatory standpoint, aside...
from growing CFIUS concerns for cross-border deals, HSR review should be more constructive for M&A under the current administration. We also note that activist hedge funds remain aggressive, having recently announced attacks on several prominent tech companies with market capitalizations in the billions; these processes often (though not always) lead to the sale of the targeted firms. With these various drivers providing a backdrop, we already have seen several large tech deals announced this year, including Blackstone’s majority stake acquisition of Thomson Reuters’ financial and risk unit valued at $20B, Fujifilm’s $6.1B acquisition of Xerox, SS&C’s $5.4B acquisition of DST Systems, Silver Lake and P2 Capital Partners’ $3.5B acquisition of Blackhawk Network Holdings Inc. and SAP’s $2.4B acquisition of Callidus.

**2018 Headwinds for Tech M&A and Investment**

Despite these strong market drivers, what could slow down the M&A market for tech? Some of the same concerns that existed last year will persist in 2018, including: the potential for interest rates to rise more rapidly than expected; increasing inflation fears; geopolitical risks such as North Korea, Iran and the ongoing rise of terrorism; renegotiation of trade agreements in the Americas and with China; and CFIUS concerns on cross-border M&A (especially involving China).

Increased market volatility (as seen in early February) driven by one or a combination of these factors could impact corporate confidence in M&A, valuation expectations, equity and debt funding for acquisition finance and the availability of investment capital for IPOs and private placements.

While we believe the market drivers supporting tech M&A and investment will outweigh these potential headwinds—as always, these factors and the overall health of the markets must be closely monitored. With higher valuation expectations and increased competition for assets, detailed scrutiny and analyses of business projections, investment scenarios, acquisition synergies and possible business risks will be the norm.

**What’s to Come**

We believe 2018 will showcase an active acquisition and financing environment, and competition for attractive assets will remain fierce.

The top five technology companies alone have an estimated $1.7 trillion in cash, and VC, private equity, sovereign wealth and family office funds are flush with capital to deploy. In addition, non-traditional tech buyers and investors are increasingly looking to buy and invest in tech. Continuing high valuations and February’s market volatility may lead some acquirers and investors seeking value plays to take a wait-and-see approach. Cash appears to be burning a hole in nearly everyone’s balance sheets, and the pursuit of innovation and next-generation technologies—whether through investment or acquisition—is unlikely to abate in 2018.

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New tax policy, continued corporate earnings growth and large strategic and private equity cash war chests should support a strong M&A market in 2018 for the technology sector.
The ongoing transition to cloud computing has created a massive opportunity for a reallocation of corporate IT budgets. As dollars chase this new computing paradigm, technology providers are disrupting the natural order of the ecosystem. This will have a massive, and long-lasting, impact on the industry.

That’s critical for businesses across the tech industry, whose futures now hinge on their ability to adapt to and participate in the massive cloud and cloud-infrastructure buildout now underway. It also opens up rich opportunities for investors.

Revenues for public and private cloud hardware, software and services amount to about $180 billion, or 16 percent of the $1.1 trillion enterprise IT industry, according to Bain. Through 2020, Bain projects cloud demand to account for 60 percent of related IT market growth.

To put that into perspective, $180 billion dollars is larger than the projected 2017 annual GDPs of Qatar and Algeria and greater than the annual GDPs of Puerto Rico and the Dominican Republic.

That’s a lot of growth potential and investors and corporates are paying attention.

As we’ve seen in recent years, and expect will continue in 2018 and beyond, cloud will underpin an active deal market. One major driver will be the convergence of once discrete network, compute and storage technologies.

We expect a second major driver will be the tech giants continuing to augment their existing solutions and capabilities with adjacent solutions and newer technologies in an effort to become a one-stop shop for IT procurement. Add on top of this emerging (and increasingly commercial) technologies such as artificial intelligence and blockchain and you have the ingredients in place for a massive consolidation opportunity.

Cooperation and Competition in the Cloud Battle

The continuing battle for cloud dominance among the tech behemoths will remain fierce in 2018. Amazon is at the forefront of this but others are playing catch-up at a feverish clip. And none of these vendors will be satisfied with only owning one fluffy piece of the cloud; rather, they will put their R&D budgets and extensive cash war chests to work to build out entire stack solutions, spanning the three traditional
components of the “cloud” (i.e., IaaS, PaaS and SaaS) as well as software for management, automation and orchestration, technologies for allowing application and networking visibility and monitoring and, of course, security.

Combined, Forrester predicts that Amazon Web Services, Google, and Microsoft will capture 76 percent of all cloud platform revenue in 2018, expanding to 80 percent by 2020.

A recent expanded partnership between Microsoft and SAP demonstrates just one route companies are taking to increase their market share—cooperation. As part of the deal, the companies will cross-promote each other’s products internally, while encouraging joint customers to run SAP software on Microsoft Azure.

The giant cloud corporates are also exploring other ways to grow their operations and build stickiness among customers. They are pursuing ways to help businesses of all sizes migrate to their platforms and, once there, help them to manage their workloads and data, and provide ongoing services.

Google, for example, has increased the number of managed service providers (MSPs) it is partnering with, including Accenture, Cloudreach and Rackspace and leading cloud provider AWS is on a continual search for employees with ProServ skill-sets. While partnering with MSPs isn’t a new trend, expect it to grow over the next several years.

**Strategics Return to Their Dominant M&A Position**

There will be no shortage of money from both the corporate and investing sides to fund the next generation of disruptors for the cloud. Following a modest year for M&A in 2017, we expect 2018 will be the year when money that was held back, as a result of high valuations and competition, will surge into the market. Virtually everyone is flush, including private equity, venture capital firms and, of course, the strategics. Private equity led the market in 2017 and its interest will not wane.

But, the large strategics will return to the market and become increasingly active in driving consolidation opportunities. This will augment their existing internal R&D efforts and accelerate the chess match that is well underway. How can it not? The market is too large and too important to sit idly by staring up.

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More Battlelines are Being Drawn

In the not so distant past The Big Four—Amazon, Apple, Facebook and Google—competed in distinct markets of ecommerce, computing, social networks and search. Those dynamics have increasingly changed over the last several years. While they may still partner in some instances (Apple offers Amazon Prime Video on Apple TV), they are increasingly competing across a broader landscape and are now clear frenemies. Expect that complicated relationship to accelerate in 2018 as they continue to expand in overlapping technology sub-sectors.

Areas of increasing overlap include digital media, the cloud, smart home, autonomous vehicles, alternative payments, advertising, OTTS and virtual and augmented reality, among others.

While 2017 was a relatively quiet year for mergers and acquisitions for Amazon, Apple, Facebook and Google, we could see an uptick in activity in 2018. Expect to see a focus on acquiring companies that are defined market leaders and profitable, high-growth businesses. Look for the internet giants to also bolster their businesses in ways that may seem surprising at first glance but are actually part of an overall strategy, such as Amazon buying Whole Foods.

Traditional Companies Becoming Major Tech Players

Traditional non-tech companies will continue to acquire and invest in the tech sector to address the threats that the big four present to their businesses. Last year, we saw Albertsons buy Plated, followed quickly by its acquisition of InstaCart.

Similarly, Ikea bought TaskRabbit in 2017, a deal that makes sense to anyone who has struggled to put together IKEA furniture. The acquisition came less than a year after IKEA partnered with TaskRabbit to become its official furniture assembler in London.

We have also seen the Big 3 auto companies make numerous acquisitions and investments in companies in the autonomous vehicle or ride-sharing sectors, such as GM investing in Lyft and acquiring Cruise Automation.

Other areas where we might see similar investments or acquisitions by traditional players include in IoT, the smart home or Over The Top Services (OTTS).
Markets Poised for More Action

There continues to be a huge amount of liquidity in the private capital space in search of alpha. From an investment perspective, the market has striated. Investors are surging into the middle market, where they are seeking well positioned companies with strong business models that are capital constrained. The strategy is to invest in those businesses and consolidate growth around them over a period of several years.

One recent deal—and an example of what’s to come—is the acquisition by Silver Lake and General Atlantic of A Place for Mom, a marketing and technology platform that connects families to a network of 18,500 senior living providers in the U.S. and Canada. A Place for Mom has ambitious growth plans, including potential acquisitions and expansion into adjacent businesses and into international markets.

In the next 12-24 months, expect to see steady deal activity by the sponsor and growth funds as well as continued activity in take privates, recaps, majority and minority capital investments and private company acquisitions. Look also for more activity in venture debt investments, spurred by the large number of companies experiencing rapid growth. In those cases, equity becomes just too valuable to give away.

Finally, foreign investors are stepping up their investments with the goal of being highly relevant in the U.S. market. China, for example, has been making significant investments in adtech and ecommerce companies. Powerful companies such as Alibaba and Tencent, which topped $500 billion in market cap at the end of 2017, are investing heavily in U.S. companies.

What’s to Come

Over the next 5–10 years, it will be particularly interesting to see what happens as Apple, Google, Facebook and Amazon continue to expand, overlap and encroach on one another’s markets. Many of the biggest shifts underway, from autonomous vehicles and the potential end of widespread car ownership, to “smart homes” and connected technology within the enterprise, will be driven by the investments and acquisitions made by the Fab Four.

More and more, the hypercompetitive tech world is characterized by overlapping frenemies. For the long-term, be prepared for relentless competition that will cause frenemies to shift inexorably to outright enemies, battling for domination and ubiquity in both the business and consumer arenas.
The rapid digitization of assets, workflows and processes within enterprises, especially ones operating in traditionally less tech-focused verticals such as retail, insurance, manufacturing and others, will continue to be a major theme in 2018. This, in turn, will generate significant new business opportunities for next-generation enterprise software companies.

A typical enterprise has vast amounts of critical information stored in a wide array of data stores, and these data stores often are unconnected to each other and/or unavailable to the end users that could best leverage them. Enterprises that embrace digital transformation will rely on new predictive applications built to be used by nearly everyone—not just a few data scientists and IT professionals—that can connect to, mine and analyze huge pools of data integrated from across the organization. The use of these applications will deliver deeper business insights, drive more revenue and boost profitability.

Technology companies that deploy artificial intelligence and machine learning (AI/ML) technologies in their solutions will separate themselves from the pack in 2018. Cloud-based delivery and subscription pricing models remain the hallmarks of these next-generation software providers, and investors will continue to be especially attracted to such businesses.

We will continue to see legacy software vendors’ operations significantly disrupted by these new players in 2018. Consolidators that are seeking growth, need to accelerate innovation and want to own more recurring revenue will be on the hunt for additional acquisitions in the coming year.

New User Interface and User Experience Models

User interface (UI) and user experience (UX) advances also will dominate 2018’s key business and investment themes. We already are seeing the impact of enterprise adoption of applications like Slack and Dropbox on the millennial workforce (and on their non-millennial counterparts), but 2018 will be a year of even more disruption in this area. With the ongoing consumerization of enterprise technology, workers expect engagement with applications via a UI/UX paradigm that is simple, intuitive and consistent across work and home.

Similarly, we can expect big advances in the use of augmented and virtual reality (AR/VR) in the workplace to further enhance the consumer-oriented experience around enterprise technologies. The next frontier for AR/VR is its combination with AI/ML, and we already are seeing companies working toward developing and adopting this combined approach.
Enterprises across multiple industries seeking deeper customer, employee and partner engagement are counting on AR/VR to help them achieve that, enhanced by the automation that AI/ML technologies can provide.

The pace of development around these technologies and their integration will continue to accelerate, and likely will be faster than many expect. We already have seen some meaningful M&A activity in the AR/VR space, and we expect its pace to ramp up further in 2018—especially from traditional enterprise software vendors seeking to add these capabilities.

The Intersection of Cybersecurity and New Technologies

The advent of disruptive technologies often means new security challenges for both businesses and consumers. The key question for security software providers and their investors remains: how will cybersecurity solutions evolve in 2018 to tackle ever-increasing online/digital threats? Individuals and organizations continue to grapple with the challenges involved in protecting their digital assets and identities, and soon all connected devices will require a secure identity as well. Security vendors who understand and get evolving identity issues right will have significant opportunities in 2018.

These issues become even more complex as we continue to integrate technologies such as connected homes and automobiles into the mix. The concept of the Internet of Things (IoT) has been around for years, and typically it is thought of as a business-driven paradigm. But connected “smart home” solutions that control locks, lights, garage doors, appliances and other devices also are part of the IoT model—and are just as susceptible to security breaches. Given that workplace technologies are increasingly interconnected with their home-based counterparts, it’s now all one, big vulnerable web.

One of the more promising approaches to tackling evolving security threats is through the use of blockchain, which incorporates a distributed ledger methodology for storing information. Blockchain is still in its early days, with many start-ups and established players still working to deliver commercially viable solutions, but it has gained meaningful traction in the development efforts of large enterprises such as IBM, Oracle, Walmart and others. Interestingly, venture capital interest in blockchain has been subdued since the technology first came on the scene, although investment levels now appear to be accelerating again.

We expect to see intense investment and M&A activity around cybersecurity in 2018. Companies that are truly innovative and disruptive will continue to attract capital and get acquired for rich valuations, while those that have fallen behind, either from a technology or go-to-market perspective, will get taken out for more modest outcomes. But overall activity levels will accelerate, as the crucial role played by cybersecurity continues to underpin the evolution of virtually all enterprise and consumer technologies.
Successful middle-to-late stage private technology companies can expect 2018 to be another year that offers a massive amount of available liquidity from VCs, PE firms, large corporate acquirers, minority investors and a wide array of traditional and non-traditional debt providers.

Given our more bullish outlook for 2018 M&A activity compared to IPO exits, we anticipate that many of these VC- and PE-owned companies will again choose to remain private and raise minority capital, with the objective of maximizing future valuations before considering an acquisition offer or an IPO exit.

This trend toward remaining private is well documented. While raised and invested VC and PE capital increased from 2016 to 2017, the number of deals closed decreased, suggesting that companies and their stakeholders were indeed choosing to remain private longer.

Beyond the Dual Options of Equity and Debt

What is less clear however, is how best to structure the capital raise; a decision that varies by company and stakeholders. Both equity and debt options have pros and cons. While a company does not need to repay equity capital raised, it is incurring its highest cost of capital. Additionally, from the perspective of the company’s stakeholders, raising new equity is dilutive, which can be contentious among stakeholders.

Debt, while less expensive and dilutive than equity, however, is most certainly expected to be fully repaid, and this requires a decision be made by stakeholders as to whether raising equity or debt is best for the company.

As companies weigh financing options, many are turning to an alternative—a hybrid minority capital raise. This middle-ground option is a combination of carefully structured equity and debt, which offers the opportunity to raise a targeted amount of capital, but with a lower combined cost of capital and less dilution.

In one example, we advised SpringCM, a leading cloud-based document and sales contract management software provider, on a $25 million capital raise. SpringCM received significant interest from a broad range of minority investors and chose to partner with Crestline Investors, a credit-focused institutional alternative asset manager that offered a compelling hybrid structure.

SpringCM was able to deploy the $25 million to fund rapid international growth and continued product development, directly increasing its value to a potential acquirer with minimum dilution. Crestline benefited by having made an attractive senior secured loan, and acquiring a minority equity stake in a growing company.

The conditions that give rise to companies remaining private will persist into 2018—investors awash in cash, high valuations that may or may not hold up in the public markets, and the sense among private company stakeholders that they can substantially increase value. Taken together, these conditions make the hybrid capital raise a compelling choice for companies and investors alike, spurring its increasing use in minority capital raises.

Trend of “Hybrid” Equity-Debt Capital Structures Attracts Growing Interest From Companies and Investors

Dean Riskas
Partner and Head of Capital Markets
Union Square Advisors
As educators, corporations, students and nonprofits turn increasingly to online education, expect momentum in the sector to increase. The global e-learning market is expected to reach ~$275.1 billion by 2022, growing at a CAGR of 7.5 percent from 2015-22, according to Stratistics MRC.

The evolution is expected to disrupt everything from what’s taught to how it’s taught, from online credentialing programs to gamification. The shift is being felt across virtually every segment of the education market.

Investors are taking notice. Dollars are not only pouring into the sector, the pace is accelerating. Of the more than $37.8 billion invested in education technology companies since 1997, 62 percent was invested between 2015 and 2017, according to Seattle-area market research firm Metaari.

U.S. companies lead the investment boom, accounting for over 58 percent of all learning technology funding in 2017.

There is increased activity among companies that produce educational content as well as those that develop the technology platforms that deliver the content. Entities from the largest universities to start-ups are reshaping the education sector, encompassing traditional K-12 and college offerings, as well as corporate training, professional training and credentialing.

Some, like the University of California, Los Angeles, are planning online education expansions that cross target markets. UCLA Global Online offers for-credit courses and programs, and certificate programs from the university’s extension arm.

Helping Learners Adapt to a Changing World

UCLA’s broad offering is one model that can be used to meet a growing imperative - to help learners of all ages adapt to a changing world. Automation, artificial intelligence, machine learning and other technologies are eliminating some jobs and changing the requirements and qualifications for many others. UCLA’s offerings will focus on Los Angeles’s largest industries such as entertainment, aerospace, health care and advanced manufacturing.

Investors have a number of avenues to pursue, with opportunity in learning management systems (LMS), mobile e-learning, simulation-based learning and gamification, among others.

Significant recent and forthcoming transactions that demonstrate the dynamism of the market include the late 2017 merger of Strayer Education Inc. with smaller peer Capella Education Co. in a $1.9 billion all-stock deal. The combined for-profit education company will offer doctoral, master’s and bachelor’s programs, mainly for working adults across the United States, and will serve about 80,000 students.

The potential for online education is virtually limitless—for students, the global workforce, private and public schools and universities and society—and investors are pursuing all kinds of education-focused, technology-enabled companies. An education revolution is underway, profoundly changing every aspect of how, where and why we learn.
Union Square Advisors LLC is a leading technology-focused investment bank that offers strategic mergers & acquisitions advice and execution, as well as agented private capital financing services. Founded in 2007, with offices in San Francisco and New York, Union Square Advisors works with leading public and private technology companies, venture capital and private equity firms across the technology landscape with a primary focus on Software, Software-Enabled Services, IT Infrastructure and Internet/Digital Media/Marketing Technology. Since its inception, the firm has completed more than 95 transactions representing $95+ billion in value.