



COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Public Investment Memorandum

Insight Venture Partners X, L.P.

Venture Capital Fund Commitment

Luke M. Jacobs, CFA
Manager, Private Markets

November 30, 2017



Recommendation:

Staff, together with Hamilton Lane, recommends to the Board a commitment of up to \$100 million to Insight Venture Partners X, L.P., ("Insight X" or the "Fund").

Founded in 1995 and based in New York, Insight Venture Management, LLC ("Insight" or the "Firm") is an investment manager of private investment funds, which focus primarily on investing in growth-stage software, software-enabled services, and Internet businesses. Since inception in 1995, Insight has organized fourteen Insight Venture Funds with aggregate capital commitments to date of approximately \$18 billion, and has invested in over 300 companies. Insight has established this Fund (together with its parallel partnerships) with a target of \$5 billion in capital commitments.

Firm Overview:

Insight's investment team is comprised of three groups: the deal team, the Onsite team and the senior members of Insight's operations team. The professionals on these teams have significant experience and skill in private equity/venture capital investing, deal origination, operations, strategy, and technology.

Insight has been investing in the "growth stage" software space since 1995. Since that time, they have raised approximately \$18B in capital and have made over 300 investments, which has led to \$9 billion of realizations, and 37 IPO's. Insight stands out among venture firms, as a highly flexible investor with differentiated deal flow. They also have a very experienced, stable leadership team.

Fund Size:

Fund X is seeking equity commitments of up to \$5.0 billion, with a hard cap of \$5.5 billion.

Investment Strategy:

Insight's investment strategy with respect to the Fund has three core elements:

- Strong Sector Focus
- Proprietary Deal Sourcing Engine
- Value-Add Onsite Team

Together, Insight believes these elements create a differentiated strategy for generating attractive returns.

Strong Sector Focus - Insight primarily focuses on growth-stage software, software-enabled services and Internet companies. Growth-stage companies are companies that have significant opportunities to expand, either organically or through acquisition, and have potential for growth in either revenue, operating profits or, frequently, both. Insight seeks to operate as management's primary financial/strategic partner and is a flexible source of capital for these companies. The firm has the ability to execute both minority and majority investments. Insight invests in companies that apply technology to solve business and consumer problems, typically through software. Insight also makes investments in companies in sectors outside of its primary focus for which the Internet is an important part of the business model.

Since its inception, Insight has invested primarily in software, software-enabled and Internet businesses. Insight believes this distinct focus gives it a clear advantage over many of its peers in identifying and winning high-quality transactions, providing strategic and operational value-add to its portfolio, and successfully exiting investments. All of these areas of expertise can enhance the value of Insight's portfolio, while making Insight a preferred source of capital for managers and entrepreneurs.



Proprietary Deal Sourcing Engine - A primary challenge of Insight's style of growth equity investing is identification of companies that fit its criteria and are available at attractive valuations. The market for such companies is relatively inefficient because information about these businesses is not readily available. Typical growth-stage investors rely on relationships with early-stage investors or intermediaries for investment opportunities. Insight seeks to work outside this conventional mechanism by leveraging a dedicated, outbound calling team, which Insight believes is one of the largest in its target sector. Over 20 full-time employees make direct contacts with known and new companies every year, entering the information they collect into a proprietary database that now contains profiles of over 92,000 companies around the world. Insight believes that an outbound approach to deal sourcing is a critical enabler of success in the growth-stage sector.

Value-Add Onsite Team - A significant percentage of Insight's professional staff is dedicated to improving the strategy and execution of portfolio companies. The value and assistance delivered to a portfolio company by the Insight onsite team is core to Insight's differentiation as an investor. The Onsite team has approximately 25 professionals with expertise in strategy, technology and operations, and has worked with numerous portfolio companies since the group's inception in 2000. The Managing Director that leads the Insight Onsite team co-founded the group in 2000 and has a background in industry and management consulting.

Insight's Onsite team typically becomes involved with a potential investment at one of two points in the deal process: 1) pre-term sheet to help Insight win competitive deals by demonstrating operational expertise, and 2) at the beginning of full business diligence. Pre-term sheet, the Insight Onsite team works with the rest of the investment team to identify operational areas where an entrepreneur needs the most advice to successfully grow their business. The team then brings together case studies, benchmarks, and subject matter experts to sell Insight's expertise and strength as a partner. Insight believes that this is a significant factor in winning competitive deals.

Investment Team:

Insight's Team is comprised of ten Managing Directors, three Principals, and four Vice Presidents. It is supported by the Deal Sourcing, Onsite and Capital Markets teams. Below is a list of the Managing Directors:

Name	Title	Yrs. Experience Firm	Prior Experience
Jeffrey Horing	Managing Director	22	Warburg, Pincus & Co.
Deven Parekh	Managing Director	17	Berenson Minella & Co.
Peter Sobiloff	Managing Director	19	i2 Technologies.
Jeffrey Lieberman	Managing Director	19	McKinsey & Co.
Michal Triplett	Managing Director	19	Summit Partners
Ryan Hinkle	Managing Director	14	Morgan Stanley
Nikitas Koutoupes	Managing Director	16	CTspace
Stu Phillips	Managing Director	1	US Venture Partners
Bradley Twohig	Managing Director	12	Yahoo!
Richard Wells	Managing Director	12	Technology Crossover Ventures

Investment Instruments:

Private equity investments in growth-stage as well as more mature software, software-enabled services and Internet companies.



Market Opportunity:

Insight believes there is and will continue to be a significant flow of high-quality companies serving the information technology sector, and that many of these companies will present Insight with compelling investment opportunities. Insight is primarily focused on four sectors of the software industry:

1. Horizontal Software as a Service (SaaS) – companies that provide functionally specific or enterprise wide software solutions that can be used by business across various industries. Examples include software solutions such as marketing automation, sales productivity and enablement, human resources and supply chain management. Examples from recent Insight Venture Funds include Hootsuite (marketing automation), Conga (sales productivity), Workforce Software (human resources) and e2Open (supply chain management).

2. Vertical Software as a Service (SaaS) – companies that provide software solutions that are focused on businesses in specific industries such as financial services, healthcare, energy, retail, transportation, hospitality and education. Examples from recent Insight Venture Funds include Fenergo (financial services), Kinnser (healthcare), Fourth Hospitality (hospitality) and Frontline (education).

3. Infrastructure Software – companies that provide software that automates and protects IT infrastructure and is primarily deployed within datacenters. Examples include software solutions in areas such as security, identity management, IT service management and data backup and recovery. Examples from recent Insight Venture Funds include Checkmarx (security), Cherwell (IT service management) and Unitrends (data backup and recovery).

4. Internet services – companies that provide an online service for businesses and consumers, primarily in the form of online market places that exhibit strong repeat customer behaviors. Examples include consumer services marketplaces in areas such as food delivery and specialized goods such as antiques or watches. Examples from recent Insight Venture Funds include Delivery Hero (consumer-focused food delivery marketplace), Ezcater (business-focused catering delivery marketplace) and 1stdibs (listings website and marketplace for antique furniture).

Insight has invested over \$5 billion in the SaaS sector and a majority of Fund VIII and Fund IX has been invested in SaaS businesses. This sector, and its subscription based business model, is the fastest growing sector of the software market and Insight believes that in the long term a majority of the \$400 billion-plus software industry will be comprised of SaaS solutions. While the level of competition for software companies within the private equity industry has increased over the last 10 years, Insight believes valuations, particularly within the SaaS sector, remain reasonable and offers the opportunity for attractive returns.

Investment Highlights:

Proven Strategy
Since its founding, Insight has been an investor with a strong focus on growth stage software companies. They have one of the largest network and company datasets in the growth equity space, which has led them to invest in over 300 companies.
Experienced Team
Insight's investment team is comprised of three groups: the deal team, the Onsite team and the senior members of Insight's operations team. The professionals on these teams have significant experience and skill in private equity/venture capital investing, deal origination, operations, strategy, and technology.
Attractive Performance
Insight has raised ten funds all focused on growth-stage software businesses (plus four co-investment funds). We believe that its focused investment strategy, proprietary deal sourcing engine, institutionalized value-add Onsite team, and quality of personnel and leadership provide a strong platform for the Fund X.



Investment/Risk Considerations:

Investment Team Being Able to Create Value
Insight generally does not use “rotating” operating executives in the management of portfolio companies, but instead seeks to hire senior employees to manage the company. Insight Onsite seeks to enable Insight to add value to a portfolio company in a similar way to a strategic investor and operational expertise is an important part of this strategy. While Insight believes that it can provide value to portfolio companies, there can be no assurance that they will be able to accomplish the operational improvements that they intend.
Risks of Market Dynamics
Investments in portfolio companies subject the Fund to the general risks associated with the underlying businesses, including but not limited to market conditions, changes in regulatory requirements, reliance on management at the company level, interest rate and currency fluctuations, general economic downturns, domestic and foreign political situations and other factors.

PSERS History & Performance:

This will be PSERS’ first commitment to an Insight venture fund.

Portfolio Fit:

A commitment to Fund X will give PSERS’ Private Markets portfolio, specifically in the venture space, exposure to the software industry. As this industry has grown the amount of private equity activity and the number of private equity firms in the sector has expanded. Insight believes that its exclusive focus on the industry and over 20 years of experience investing in software provides the firm with a significant competitive advantage. Insight is one of the largest growth equity firms in private equity and is the largest focused exclusively on the software industry. A commitment to Insight X will be allocated to the Venture Capital sleeve of PSERS’ Private Markets portfolio. The table below summarizes PSERS’ projected Private Markets exposure inclusive of a recommended \$100 million commitment to the Fund:

Investment Type (\$M)	Market Value	%	Unfunded ¹	%	Total Exposure ¹	%
Private Equity	\$ 5,400.4	67.2%	\$ 3,885.1	71.8%	\$ 9,285.5	69.0%
Special Situations	1,049.2	13.1%	791.7	14.6%	1,840.9	13.7%
Venture Capital	996.1	12.4%	674.8	12.5%	1,670.9	12.4%
PE Internal	592.8	7.4%	61.5	1.1%	654.4	4.9%
Total	\$ 8,038.5	100.0%	\$ 5,413.2	100.0%	\$ 13,451.7	100.0%

(1) As of June 30, 2017. Includes post Q2 2017 pending/closed commitments.



Investment Committee Disclosure:

Relationship with Hamilton Lane:	No
Placement Agent:	No
PA Political Contributions:	None Disclosed
PA Presence:	No
Conflicts:	None Disclosed
History with PSERS:	No
PSERS AIC Meeting Approval:	November 30, 2017

Oversight Responsibility:

Investment Office:	Charles J. Spiller Deputy CIO, Non-Traditional Investments Luke M. Jacobs, CFA Manager
External Consultant:	Hamilton Lane



Hamilton Lane

November 16, 2017

Board of Trustees
Commonwealth of Pennsylvania
Public School Employees' Retirement System
5 North 5th Street
Harrisburg, PA 17101

Re: Insight Venture Partners X, L.P.

Dear Trustees:

Insight Venture Management (“Insight”) was founded in 1995 and has focused on investing in venture and growth-stage software, software-enabled services and internet businesses since inception. Insight has consistently grown its investment and portfolio operations teams through promotions and external hires, on pace with growth in assets under management; in aggregate, Insight employs 46 investment professionals, 31 operating professionals and 20 back-office support professionals. Deal teams consist of one managing director, one principal or vice president, two associates or analysts and one or two operating professionals to create a team-based, collaborative culture. The General Partner maintains a large deal sourcing team and robust CRM system, allowing it to manage relationships over time and understand competitive landscapes. Insight is targeting \$5 billion in commitments from limited partners for its tenth growth equity fund, Insight Venture Partners X, L.P. (the “Fund”). Insight held a first close in June 2017 and has held subsequent closes, totaling \$4.6 billion of committed capital. The General Partner will commit at least 3% of commitments to invest in or alongside the Fund.

The Fund will target investments both venture and growth stage software companies as a minority or majority investor. Insight has historically focused on minority investments but has increasingly taken control positions in response to maturation of the software market. The General Partner’s roots as a venture and growth-stage investor in the software sector have allowed it to develop intimate knowledge of its target markets, enabling it to actively drive value, particularly as it increasingly takes majority positions. Insight is differentiated from its growth-stage peers by its scale and operating platform, which enable it to write large checks and drive value from a control position; Insight is differentiated from traditional buyout peers as it focuses on driving top-line growth as opposed to expanding EBITDA margins through cost-cutting initiatives, and by its venture capital perspective, which leads to a different view on growth pathways. The General Partner focuses on creating value through organic and add-on revenue growth, and through multiple expansion as it diversifies revenue streams and stabilizes businesses. The Fund will primarily target equity investments in the range of \$10 million to \$150 million. Insight estimates that the Fund will make 40 to 50 investments. Insight has demonstrated an ability to deliver attractive returns and preserve capital across market cycles and transaction types; Insight has generated attractive performance across business cycles with a low loss ratio.

Insight Venture Partners X’s investment thesis can be summarized as follows:

- Insight has a differentiated platform resulting from sector focus, market positioning and operating resources
- The General Partner has increased flexibility as a minority and majority investor that enable it to be well-equipped to drive value



Hamilton Lane

- Insight has generated attractive returns and capital preservation across market cycles and transaction types

Hamilton Lane's recommendation is based upon the following analytical factors and is made within the context of Commonwealth of Pennsylvania, Public School Employees' Retirement System's ("PSERS") investment guidelines.

- Detailed due diligence, including interviews with industry peers and private equity professionals. The initial review was completed February 13, 2017; the on-site due diligence was conducted March 31, 2017; the fund was approved by Hamilton Lane's Investment Committee on April 24, 2017 and the recommendation to PSERS was issued November 16, 2017.
- Evaluation of the composition of the investment team, how they work together, compensation structure and other factors that help determine whether a group is likely to be able to replicate past successes as currently configured.
- Detailed Operational Due Diligence, including interviews with Insight's back office team to review the controls and processes surrounding the firm's finance, fund administration, tax, legal, compliance, IT, HR, and accounting functions.
- Evaluation of the Fund's proposed investment strategy within the context of the current investment environment.
- The strategy proposed for the Fund is appropriate for the Private Equity Partnership component of the portfolio.

The individuals at Hamilton Lane who were involved in the due diligence process for the Fund are:

Michael Kelly – Managing Director, Bala Cynwyd Office

Julia Butz – Analyst, Bala Cynwyd Office

Tim Delaney – Analyst, Bala Cynwyd Office

Based on the above, Hamilton Lane recommends that PSERS commit up to \$100 million in Insight Venture Partners X, L.P. Hamilton Lane makes this recommendation considering the General Partner's qualifications and PSERS' overall investment guidelines.

This recommendation is given solely for the benefit of PSERS and cannot be relied upon by other investors, considering an investment in the Fund, since their needs, objectives and circumstances may not be identical to those of PSERS. The scope of this recommendation is limited to the investment merits of the Fund. Hamilton Lane does not provide legal or other non-investment-related advice.

Sincerely,

Michael Koenig,
Managing Director

Corina English,
Principal