



The Quarterly Newsletter of Firsthand Technology Value Fund, Inc.

TAPAD

Oracle Partners With Tapad for Better Cross-Device Marketing



In October 2015, Tapad and Oracle announced that they were collaborating on Oracle Data Cloud, or what Oracle calls, “data as a service.” Under the expanded relationship between the two companies, Oracle will integrate Tapad’s cross-device data into Oracle Data Cloud, enhancing Oracle’s cross-device capabilities for marketers. Cross-device mar-

keting refers to the delivery of digital ads to a particular user, regardless of device: desktop, smartphone, tablet, etc.

Tapad’s Device Graph database uses a combination of deterministic and probabilistic data to connect users to their various devices. Deterministic is another name for identifiable data such as logins, e-mails, or mailing address that can be used to determine that a person is the same user on multiple devices. Probabilistic data is developed by aggregating non-identifiable data points (*i.e.*, IP address, browsing patterns, time-based clues) to predict which devices belong to a single user. Identifying users’ various devices allows marketers to plan cross-device campaigns that reach the intended user, regardless of device—a very important tool in a multi-device world.



Hiku Partners With Walmart

Hiku recently announced the second generation of its shopping button, which now allows customers to order groceries directly from Walmart’s online service as well as Peapod. As with Amazon’s Dash scanner, Hiku customers can speak or scan items they want to order, which are added to the customer’s shopping list on the mobile Hiku app, and order from Walmart or Peapod.

The Hiku shopping button and app are compatible with iOS and Android devices.

PORTFOLIO UPDATES

Study Shows Benefits of IntraOp Technology

Radiation Oncology published the results of a 5-year study done by Nagoya University and the Aichi Cancer Medical Hospital that reviewed electron-based intraoperative radiation therapy (“IORT”) to help treat breast cancer. The study, which followed 32 patients over a three-year period, showed no recurrence or metastasis in any patient. Other benefits included avoiding unnecessary radiation of vital organs, including the heart, lungs, and skin.

The electron IORT was delivered to the patients in the study using IntraOp’s Mobetron device. The Mobetron can deliver in a single, two-minute treatment, the equivalent of six weeks of conventional post-operative external beam x-ray radiation.

In October, IntraOp announced that more than 15,000 patients have been treated with the Mobetron. In November, the company announced its ninth installation in China, at Nanjing General Hospital.



Top Holdings As of 10/31/15*

Company	% Est. Net Assets
IntraOp Medical Corp.	15.1%
Pivotal Systems, Inc.	12.9%
Turn, Inc.	8.4%
QMAT, Inc.	8.3%
Wrightspeed, Inc.	7.3%

* Estimated net assets as of October 31, 2015 represent preliminary net assets of approximately \$177 million as of September 30, 2015 plus the net change in realized and unrealized gains/losses on publicly traded securities since September 30, 2015. For the purposes of calculating the percentage of net assets represented by each investment, the value of each holding is determined by the most recent of: (1) the purchase price, (2) the market value for public securities, less any discounts taken due to restrictions on the stock, or (3) the September 30, 2015 fair value of each security, as determined by our Board of Directors. Not all investments have been or will be as profitable as those discussed. Investing in SVVC's shares involve considerable risk of loss. Please carefully read SVVC's public filings before investing. The portfolio company news reported in this newsletter does not mean that SVVC's investments will be profitable or avoid a loss.

PORTFOLIO UPDATES



Pure Storage IPO

The Fund made a small investment in September in enterprise data flash storage company Pure Storage (PSTG), which was founded in 2009 and went public in October 2015. The company's FlashArray product uses multi-level cell flash memory, which offers a higher capacity than single-level cell memory, but at comparable prices.

FlashArray is used in data centers to speed up virtualization applications, databases, and cloud services.



Phunware Gets \$10 Million Investment

- Philippine Long Distance Telephone Company ("PLDT") is the largest telecommunications company in the Philippines. The company recently entered into a joint venture with Phunware, that will enable PLDT's subsidiary, ePLDT, to market and exclusively distribute Phunware's mobile applications and tools in Southeast Asia.
- PLDT has invested \$10 million into Phunware in connection with the agreement.



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Fast Growth for Pivotal Systems

Pivotal Systems, which provides monitoring and process control technology for the semiconductor industry, joined the ranks of the Inc. 5000—Inc. Magazine's list of the 5000 fastest-growing companies in the United States. Pivotal ranks 301st on the list (#1 among engineering firms), with a three-year growth figure of 1522%.

Another portfolio company, Phunware, came in at #522 on the list.



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STAGES OF INVESTMENT

The Fund invests in companies at various stages of maturity. As our portfolio companies mature, they move from the “early / development stage” to the “middle / revenue stage” and then to the “late stage.” We expect that this continuous progression may create a pipeline of potential exit opportunities through initial public offerings (IPOs) or acquisitions. Of course, some companies do not progress. This chart represents holdings as of 9/30/15.

Early Stage

Developing product or service for market, high level of research and development, little or no revenue.

Middle Stage

Established product, customers, business model; limited revenues.

Late Stage

Appreciable revenue; break-even or profitable; IPO or acquisition candidate.



Pure Storage went public in October 2015