



# Sectorwatch: Banking Technology

April 2018

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# Overview

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7MA provides Investment Banking & Advisory Services to the Business Services and Technology Industries globally. We advise on M&A and private capital transactions, and provide market assessments and benchmarking. As a close knit team with a long history together and a laser focus on our target markets, we help our clients sell their companies, raise capital, grow through acquisitions, and evaluate new markets. We publish our sectorwatch, a review of M&A and operational trends in the industries we focus.

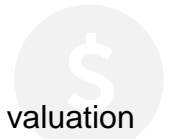
## Dashboard

- Summary metrics on the sector
- Commentary on market momentum by comparing the most recent 12-month performance against the last 3-year averages.



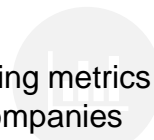
## Valuation Comparison

- Graphical, detailed comparison of valuation multiples for the public basket



## Public Basket Performance

- Summary valuation and operating metrics for a basket of comparable public companies



## Recent Deals

- The most recently announced deals in the sector



# Dashboard

## Revenue Growth Momentum

↓ -0.05

1 - year revenue growth compared to revenue growth average for last 3 years

Current revenue growth rate is less than the average of the last 3 years, indicating that the market may be flattening or declining

## Pricing / Gross Margin Momentum

↑ 1.0%

1 - year gross profit % compared to gross profit % average for last 3 years

Current gross profit margin exceeds the average of the last 3 years gross profit margin by this amount, indicating supplier pricing power

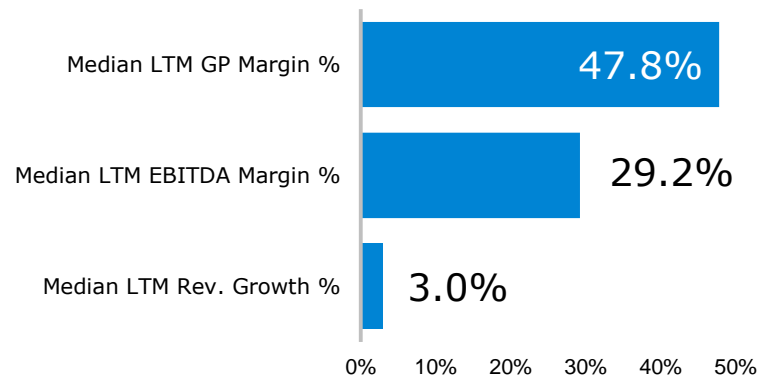
## Profitability Momentum

↑ 0.9%

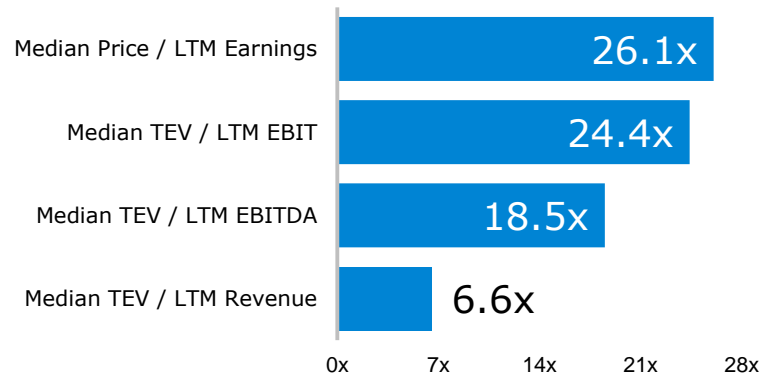
1 - year EBITDA % compared to EBITDA % average for last 3 years

Current EBITDA margin exceeds the average of the last 3 years EBITDA margin by this amount, a condition that may attract new entrants

## Operating Metrics



## Valuation



# Public Basket

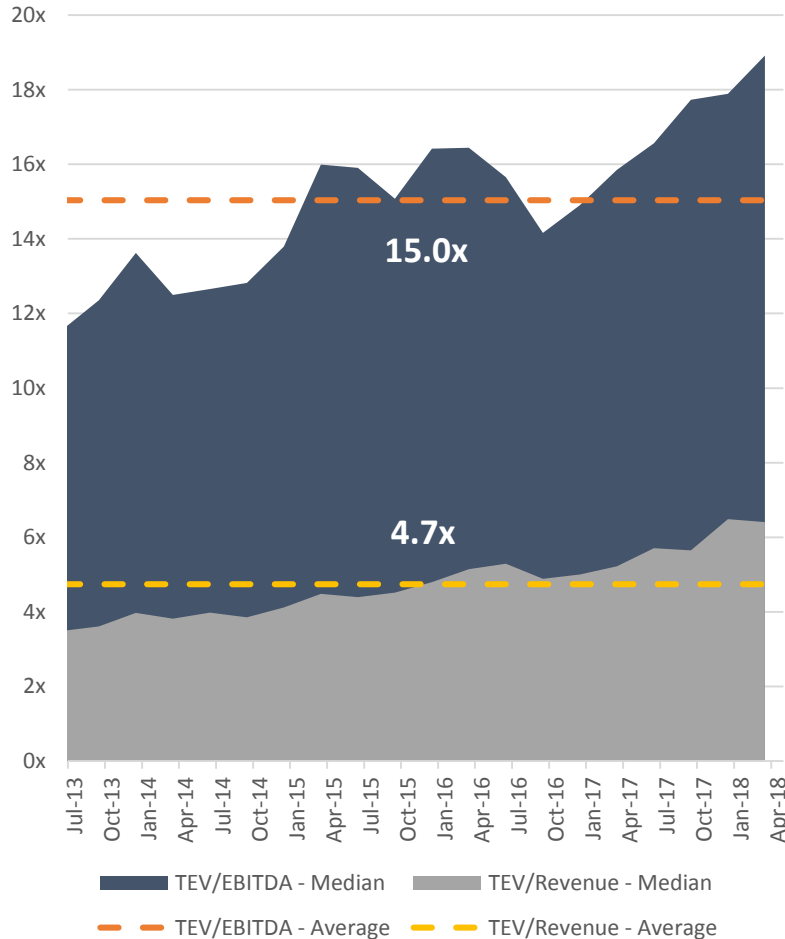


Company	TEV \$m	LTM Rev \$m	Rev Growth YoY	GP %	EBITDA %	TEV / Rev X	TEV / EBITDA X	# FTEs	Rev / FTE \$k
GFT Technologies SE	474	503	-1%	22%	9%	0.9	10.5	4,740	106
Alfa Financial Software Holdings PLC	1,486	119	20%	76%	39%	12.1	31.0	329	361
Q2 Holdings, Inc.	1,922	194	29%	49%	-8%	9.9	0.0	844	230
Ellie Mae, Inc.	2,830	417	16%	61%	17%	6.8	40.2	1,480	282
ACI Worldwide, Inc.	3,427	1,024	2%	56%	17%	3.3	19.2	3,979	257
Oracle Financial Services Software Limited	5,001	706	1%	54%	41%	7.4	18.1	8,818	80
Black Knight, Inc.	8,686	1,052	2%	47%	36%	8.3	23.1	4,430	237
Jack Henry & Associates, Inc.	9,366	1,472	6%	43%	31%	6.4	20.5	5,972	247
Fiserv, Inc.	33,727	5,696	3%	47%	31%	5.9	18.5	24,000	237
Fidelity National Information Services, Inc.	39,561	9,123	-1%	32%	27%	4.3	15.8	53,000	172
<b>Average</b>	10,648	2,031	8%	49%	24%	6.5	19.7	10,759	221
<b>Median</b>	4,214	865	3%	48%	29%	6.6	18.9	4,585	237

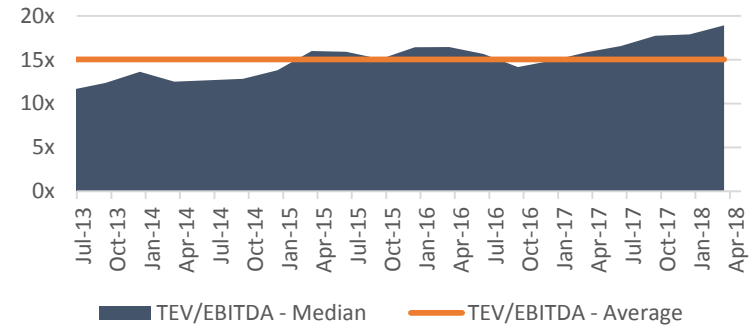
share price as of 25Apr18



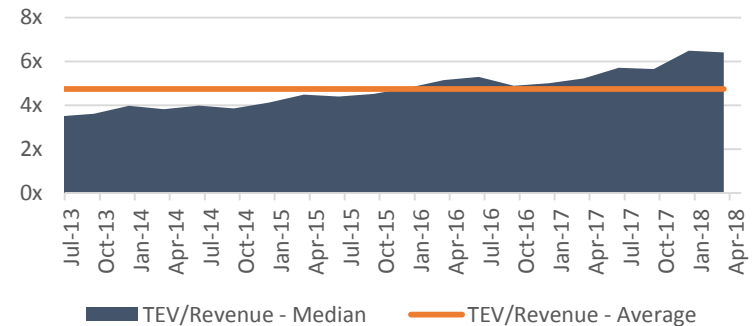
# Public Basket Valuation Trends



## Public EBITDA Multiples over Time



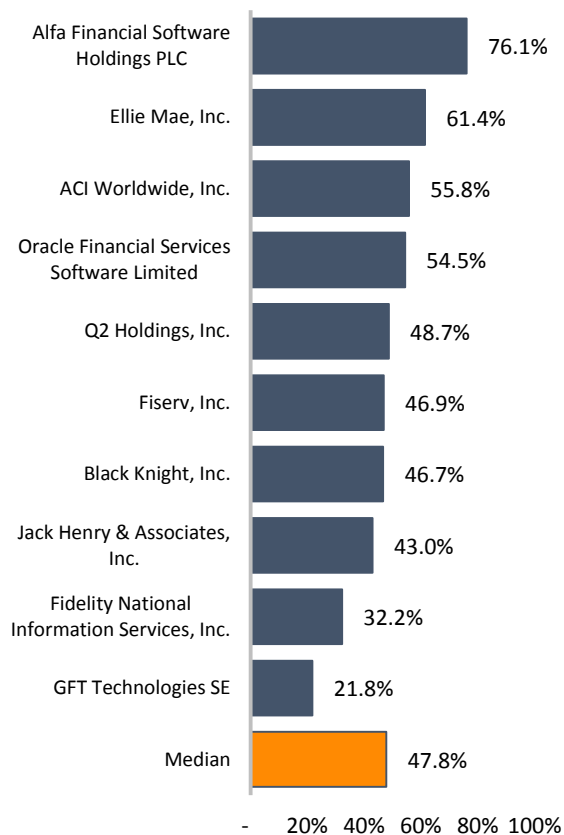
## Public Revenue Multiples over Time



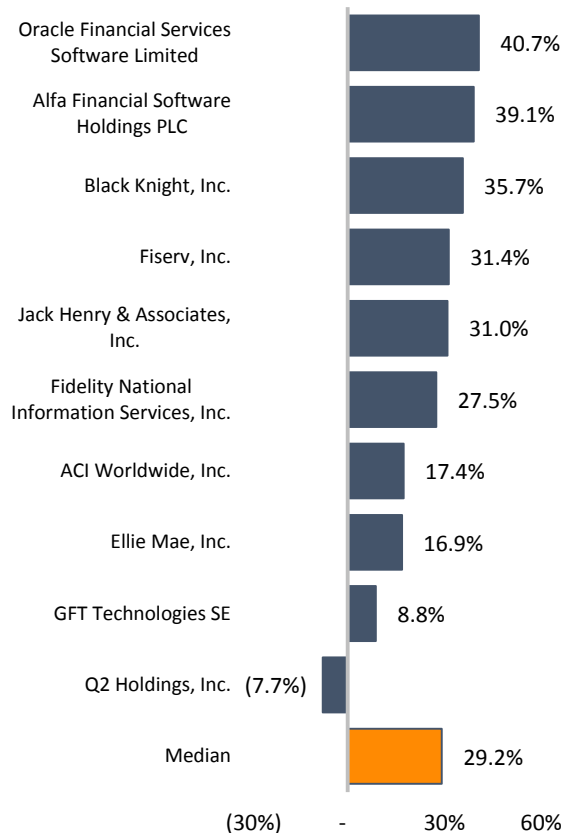
# Operational Metrics



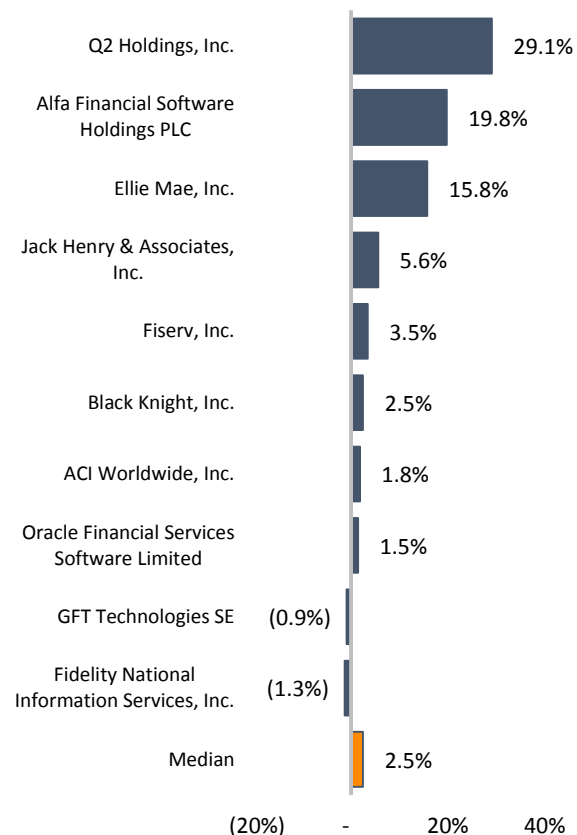
## LTM Gross Profit Margin %



## LTM EBITDA %



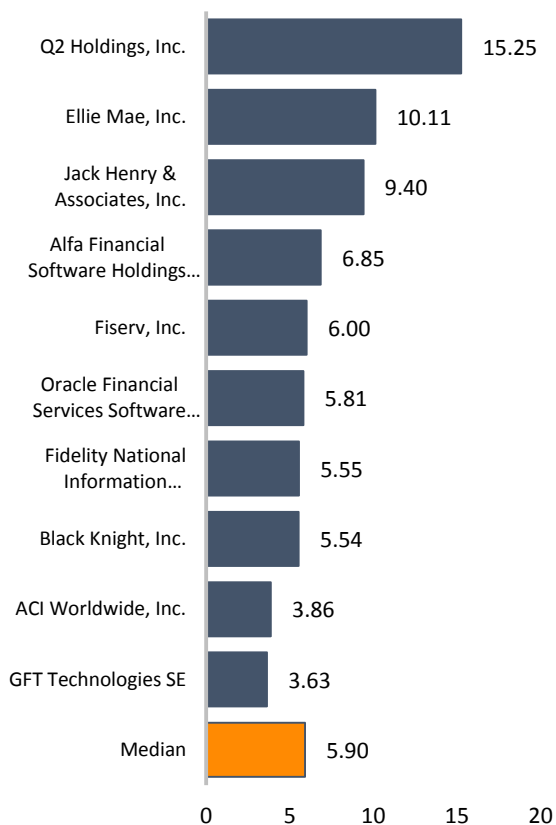
## LTM Revenue Growth %



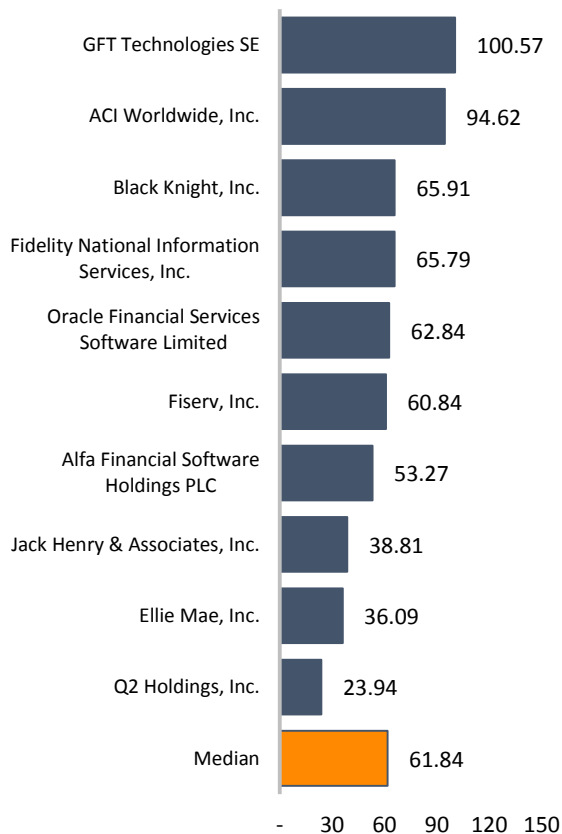
# Operational Metrics



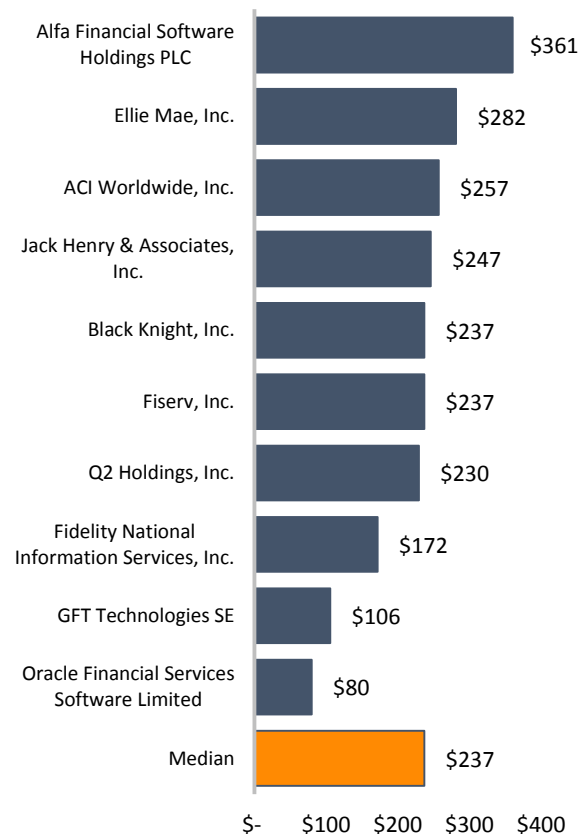
## Accounts Receivable Turnover



## Average Days Sales Outstanding



## LTM Revenue per Full Time Employee x 000's

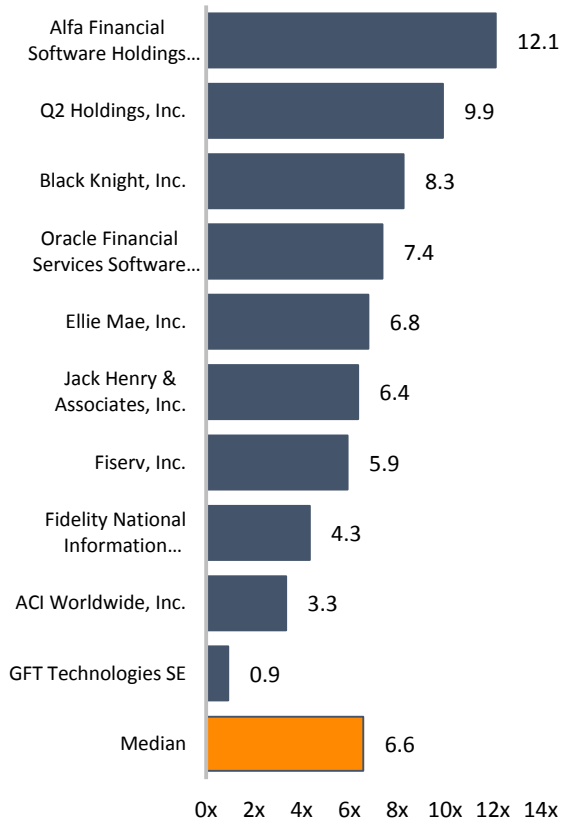




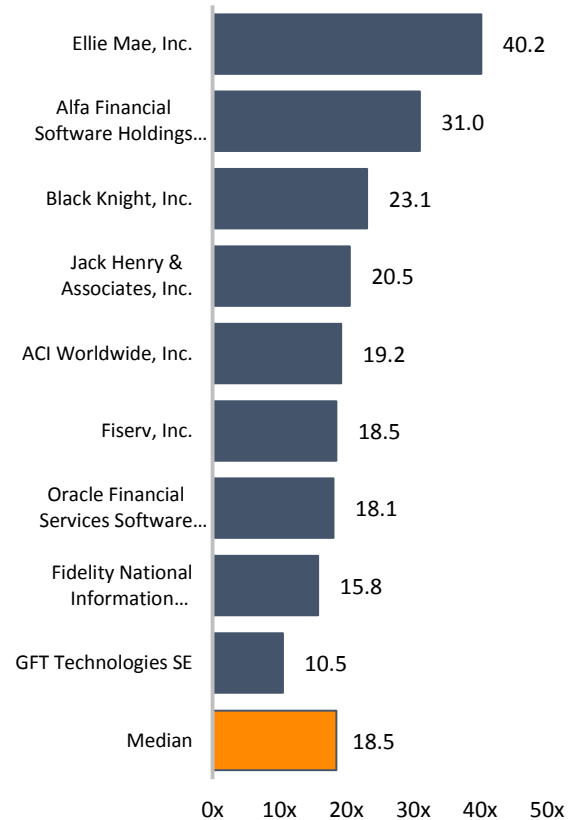
# Valuation



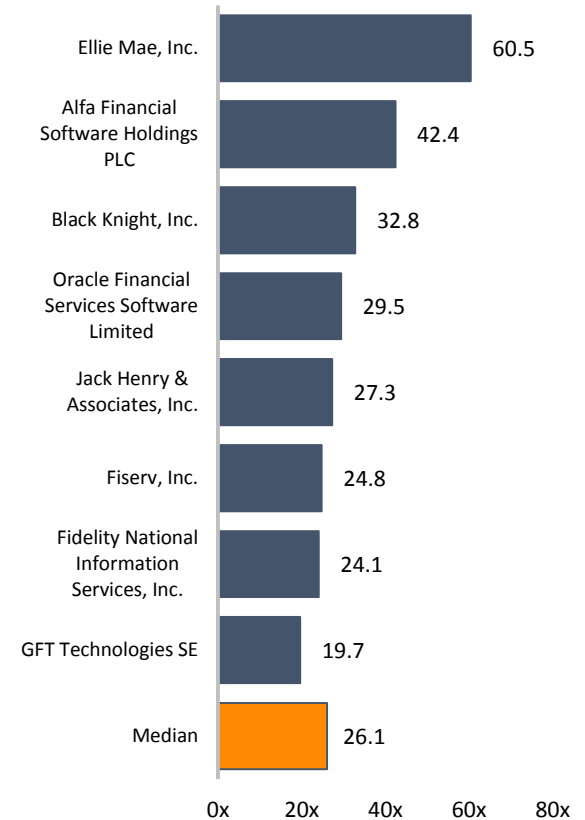
## TEV / LTM Revenue



## TEV / LTM EBITDA



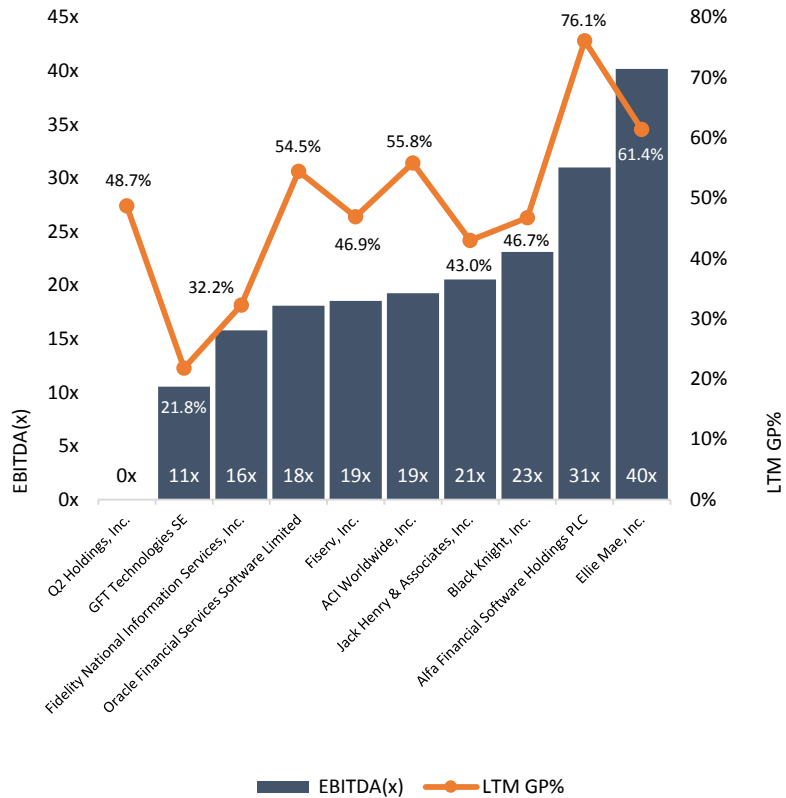
## Price / LTM Earnings



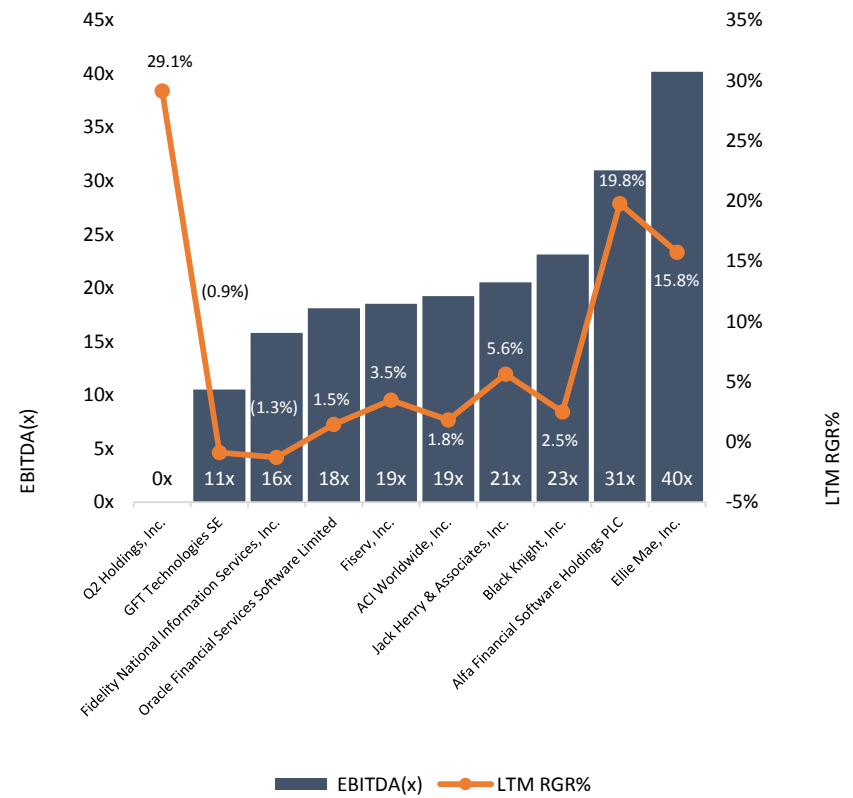
# Valuation



## Historical Valuation Multiples versus Gross Profit



## Historical Valuation Multiples versus Revenue Growth Rate



# Recent Transactions



Date	Target	Buyer / Investor	Total Transaction Value	Target Revenue	TEV / Revenue	TEV / EBITDA
5Apr18	MainStreet Technologies, Inc.	Banker's Toolbox, Inc.	-	-	-	-
4Apr18	WorkFusion, Inc.	iNovia Capital; NGP Capital; Georgian Partners; Declaration Partners; Hawk Equity LLC	50.00	-	-	-
29Mar18	D3 Technology Inc.	-	-	-	-	-
27Mar18	Orchestrate, LLC	AppExtremes, LLC	-	-	-	-
21Mar18	LenderClose, LLC	-	1.32	-	-	-
6Mar18	Kensho Technologies, Inc.	S&P Global Inc.	550.00	20.00	-	-
16Feb18	Tlon Corporation	-	17.81	-	-	-
14Feb18	SafeChain, Inc.	NCT Ventures, LLC; Rev1 Ventures, Investment Arm; Social Capital; Aspect Ventures; Rise of the Rest; Precursor Ventures; LOUD Capital; Fintech 71; Rise Of The Rest Seed Fund, LP	3.00	-	-	-
7Feb18	Fiserv Solutions, LLC	Warburg Pincus LLC	395.00	-	-	-
5Feb18	Ohpen B.V.	Amerborgh International N.V.	31.04	-	-	-
5Feb18	Micronotes, Inc.	TTV Capital; Vestigo Ventures LLC	3.07	-	-	-
25Jan18	Digiliti Money, Inc.	FinTech Imaging Solutions, Inc.	2.62	-	-	-
18Jan18	Gecko Operating Ltd.	Cosimo Venture Partners	1.00	-	-	-
18Jan18	Railbank Technologies Ltd.	Lionsgold Limited	2.16	-	-	-
18Jan18	Applied Blockchain Ltd.	Shell Trading International Limited; Calibrate Partners	-	-	-	-
16Jan18	ACCEO Solutions Inc.	N. Harris Computer Corporation	201.44	-	-	-
12Jan18	M-BIRR Limited	European Investment Fund; Deutsche Investitions- und Entwicklungsgesellschaft mbH	8.51	-	-	-
11Jan18	Varo Money, Inc.	Warburg Pincus LLC; TPG Growth; TPG The Rise Fund	45.00	-	-	-
9Jan18	Innofis Esgm SL	CREALOGIX Holding AG	-	10.18	-	-
5Jan18	Shenzhen Kingdom Sci-Tech Co., Ltd	Bosera Asset Management Co., Ltd.; China Foreign Economy and Trade Trust Co., Ltd.; China Universal Asset Management Co., Ltd.; Taikang Asset Management Co., Ltd.; Caitong Fund Management Co., Ltd.	39.92	639.56	-	-
20Dec17	Lender Performance Group, LLC	Insight Venture Partners LLC; Georgian Partners	-	-	-	-
13Dec17	Insikt, Inc.	FirstMark Capital, L.L.C.; Colchis Capital Management, L.P.; Grupo Coppel S.A. de C.V.; Revolution Ventures	50.00	-	-	-
30Nov17	Deposit Solutions GmbH	e.ventures; FinLab AG; Greycroft; Valar Ventures LP	20.00	-	-	-
30Nov17	Shenzhen Infogem Technologies Co., Ltd.	-	66.57	163.77	-	-
28Nov17	Ensenta Corporation	Jack Henry & Associates, Inc.	130.00	27.00	4.8x	-
28Nov17	Core 10, Inc.	West Virginia Jobs Investment Trust Board; FINTOP Capital	3.50	-	-	-
16Nov17	Avalog group AG	Warburg Pincus LLC	-	-	-	-
14Nov17	Jwaala Inc.	Goldleaf Enterprise Payments (GEPI), Inc.	-	-	-	-
2Nov17	Klavis Inc.	Money Forward, Inc.	7.01	0.88	8.0x	NM
23Oct17	Zero Financial, Inc.	New Enterprise Associates; Lightbank LLC; ENIAC Ventures; Middleland Capital; Lightbank; Nyca Partners	8.50	-	-	-
17Oct17	Feedzai S.A.	Sapphire Ventures LLC	50.00	-	-	-
16Oct17	Digital Asset Holdings, LLC	Jefferson River Capital	40.00	-	-	-
11Oct17	Mioying Financial Technology (HK) Limited	Horizons Ventures Limited; ZhenFund	7.00	-	-	-

# Banking Technology

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## APPENDIX: Public Basket Constituents

# Public Basket



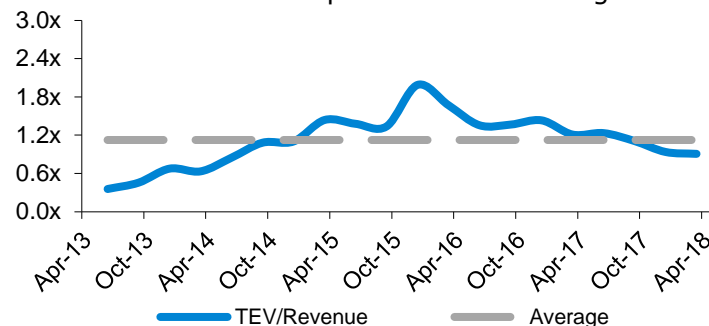
## GFT Technologies SE

GFT Technologies SE provides information technology (IT) consulting and solutions for retail and investment banking clients. The company's services include consulting on the development and realization of IT strategies, development of bespoke IT solutions, implementation of bank specific software, and maintenance and development of banking applications. It operates in the United Kingdom, the United States, Canada, Brazil, Costa Rica, Mexico, Germany, Italy, Poland, Switzerland, and Spain. The company was founded in 1987 and is headquartered in Stuttgart, Germany.

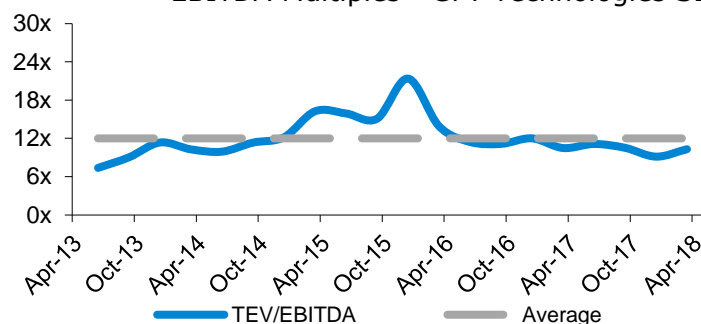
Date	Key Development Headline
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9/11/17	Continental Aktiengesellschaft (DB:CON) acquired Parkplatz-gesucht UG from Wayra Investigación y Desarrollo, S.L.U. and other shareholders.
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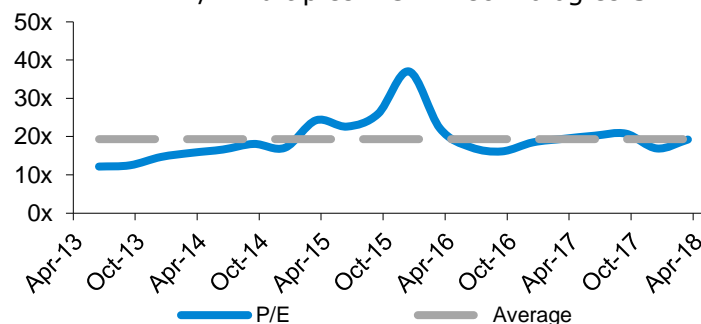
Revenue Multiples - GFT Technologies SE



EBITDA Multiples - GFT Technologies SE



P/E Multiples - GFT Technologies SE

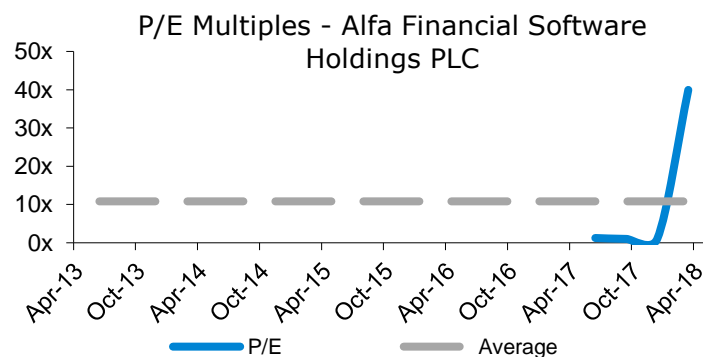
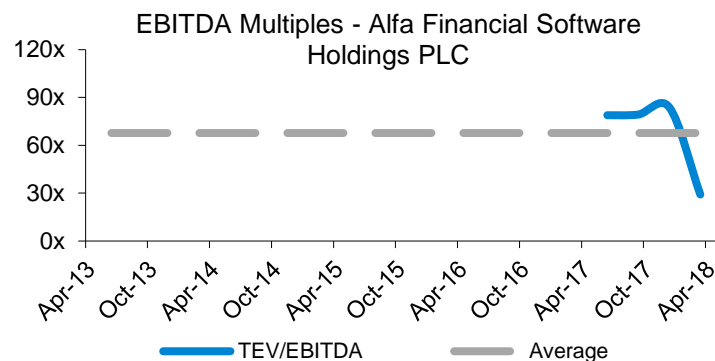
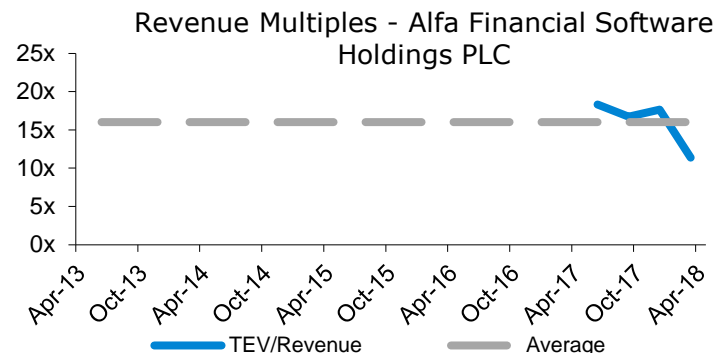


# Public Basket



## Alfa Financial Software Holdings PLC

Alfa Financial Software Holdings PLC, through its subsidiaries, provides software solutions and consultancy services to the asset finance industry in the United Kingdom, the United States of America, rest of Europe, and the Asia Pacific. Its solutions include point of sale, such as Web-based quotation, multiple channels, and templates and business rules; originations, including credit and document management, and workflow and business rules; contract management comprising leases and loans, reporting and business intelligence, customer, asset and contract management, and bad debt management; and wholesale consisting of dealer portal, audit, and entire unit lifecycle. The company also offers professional services, such as business process consultancy, UI design, cloud hosting, project management, and training consultancy. It primarily serves equipment and automotive finance markets. The company was founded in 1990 and is headquartered in London, the United Kingdom. Alfa Financial Software Holdings PLC is a subsidiary of CHP Software and Consulting Limited.

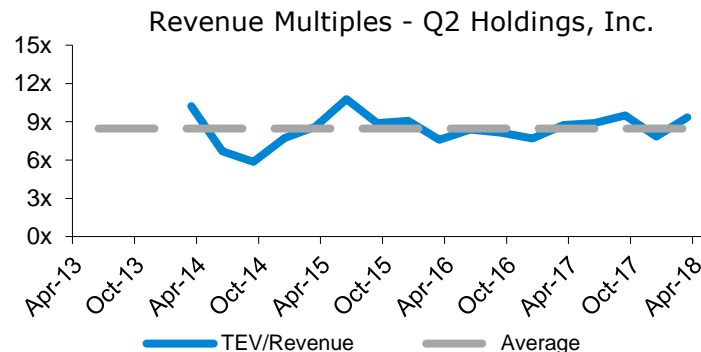


# Public Basket



## Q2 Holdings, Inc.

Q2 Holdings, Inc. provides cloud-based digital banking solutions to regional and community financial institutions (RCFIs) in the United States. It offers Q2online, a browser-based digital banking solution that delivers RCFI-branded digital banking capabilities; Q2 Sentinel, a security analytics solution; Q2 Corporate to support RCFIs to attract and retain larger commercial accounts; and Q2 SMART, a targeting and messaging platform. The company also provides Q2 Account Opening solution; Q2 Active/Active that operates various data centers; and Q2 Patrol, an event-driven validation product. In addition, it offers Q2mobility App, a mobile and tablet digital banking solution; Q2mobile Remote Deposit Capture, a partnered solution that allows remote check deposit capture; Q2 Person-to-Person Payments, a partnered secure and integrated person-to-person payments solution; Detection Monitoring Service, a security threat tracking solution; and Q2 CardSwap that allows account holders receiving newly issued cards to automatically change their payment information with existing subscription and digital point-of-sale services. Q2 Holdings, Inc. was founded in 2005 and is headquartered in Austin, Texas.



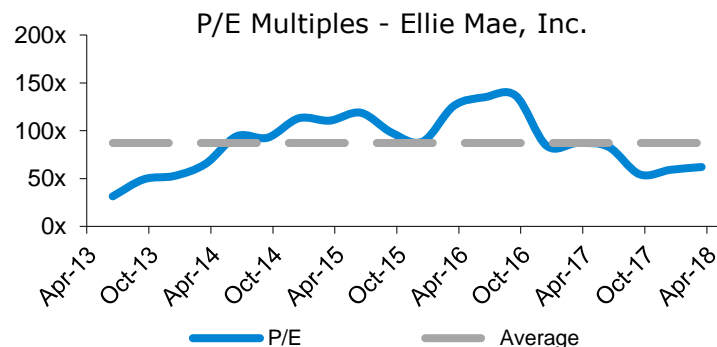
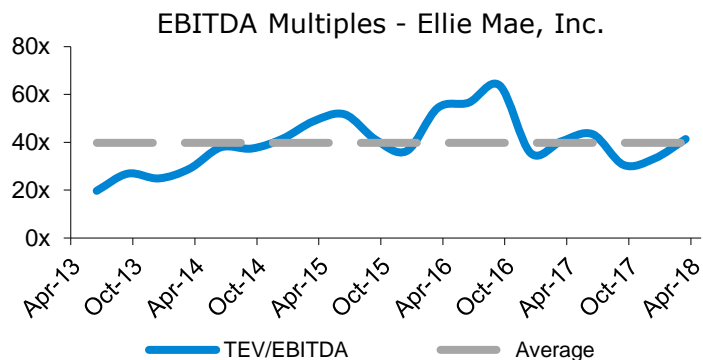
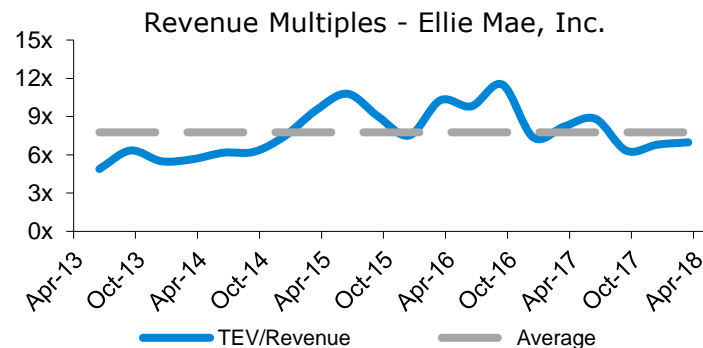
# Public Basket



## Ellie Mae, Inc.

Ellie Mae, Inc. provides cloud-based platform for the mortgage finance industry in the United States. The company provides Encompass, a proprietary software solution that combines lead management; loan origination and processing; underwriting; preparation of mortgage applications, disclosure agreements, and closing documents; loan funding and closing; compliance with regulatory and investor requirements; and enterprise management. Its platform also offers Encompass Lending Platform and Encompass Developer Connect Solution, and Encompass Data Connect; and sales and marketing solutions, such as Encompass CRM, Velocify, Encompass WebCenter, Encompass Consumer Connect, Encompass TPO WebCenter, Encompass TPO Connect, and Encompass Loan Officer Connect. Ellie Mae, Inc. was founded in 1997 and is headquartered in Pleasanton, California.

Date	Key Development Headline
11/9/17	Ellie Mae Mulls Acquisitions
10/1/17	Ellie Mae, Inc. (NYSE:ELLI) completed the acquisition of Velocify, Inc.
8/31/17	Ellie Mae, Inc., Velocify, Inc. - M&A Call
8/30/17	Ellie Mae, Inc. (NYSE:ELLI) signed a definitive agreement to acquire Velocify, Inc. for approximately \$130 million.
8/3/17	Ellie Mae Seeks Acquisitions





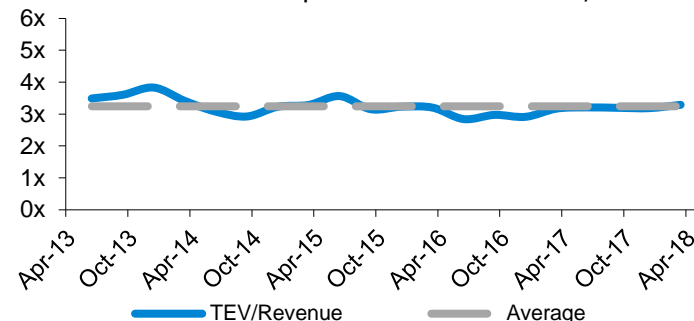
# Public Basket



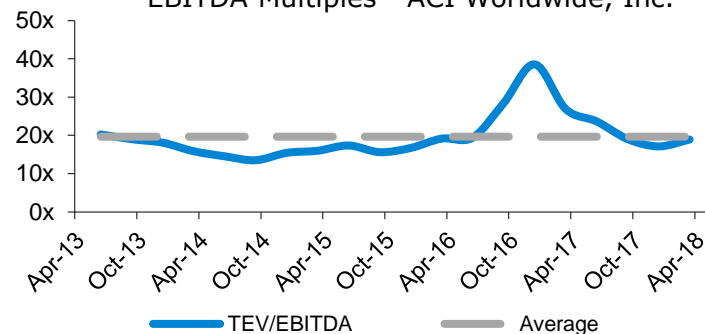
## ACI Worldwide, Inc.

ACI Worldwide, Inc. provides software products and services for facilitating electronic payments to banks, intermediaries, merchants, and corporates worldwide. It offers UP Retail Payments solution that enables banks to accept, authorize, route, and secure payment transactions; and ACI Card and Merchant Management solutions, including credit, debit, smart card, and prepaid card issuance. The company also provides UP Immediate Payments solution, which provides connectivity to country-level real-time payment schemes and create various products; and UP Real-Time Payments solution that allows banks to address RTGS, SWIFT messaging, and real-time faster payments. In addition, it offers Postilion; ACI PAY.ON Payments Gateway; ACI ReD Shield, a real-time fraud prevention solution, as well as UP eCommerce Payments solution; and UP Payments Risk Management solution and ACI Universal Online Banker platform. Further, the company provides UP Bill Payment solutions, which enable customers to present bills and collect payments from consumers electronically through a single and integrated platform that controls bill payments operation. ACI Worldwide, Inc. was founded in 1975 and is headquartered in Naples, Florida.

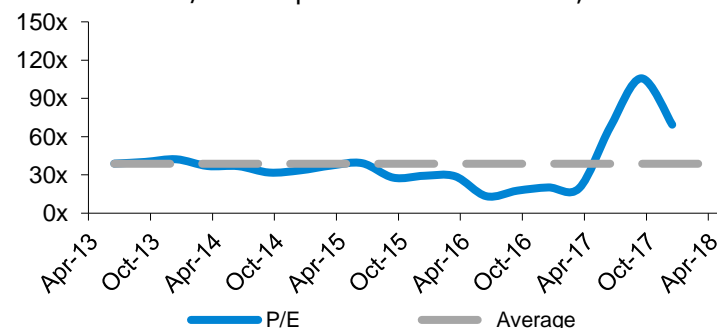
Revenue Multiples - ACI Worldwide, Inc.



EBITDA Multiples - ACI Worldwide, Inc.



P/E Multiples - ACI Worldwide, Inc.



Date	Key Development Headline
3/20/18	UnionPay International Announces Strategic Partnership with ACI Worldwide
5/4/17	ACI Worldwide Seeks Acquisitions

# Public Basket

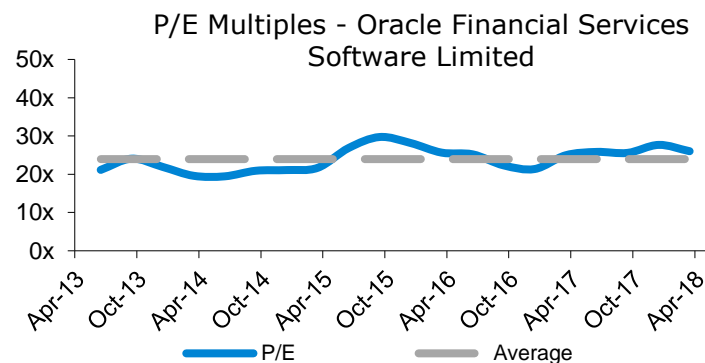
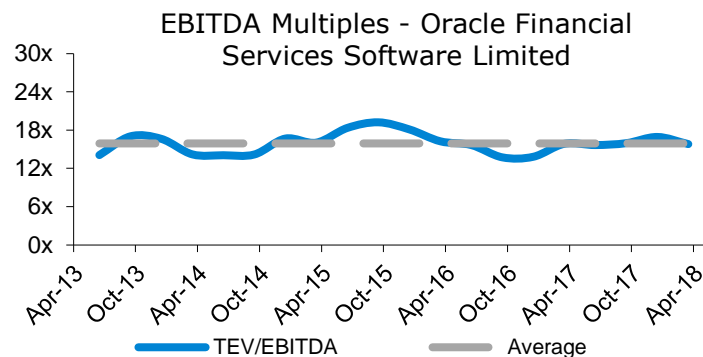
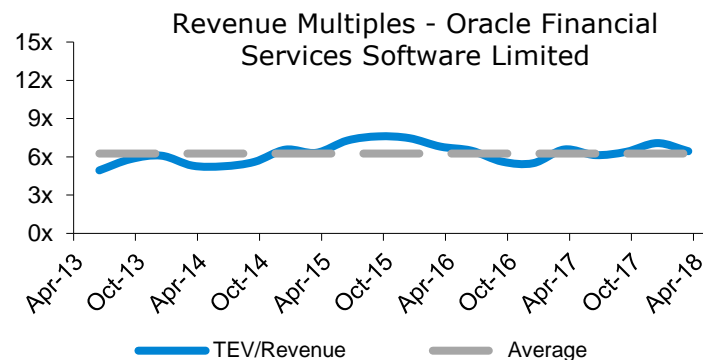


## Oracle Financial Services Software Limited

Oracle Financial Services Software Limited provides information technology (IT) solutions and business processing services to the financial services industry worldwide. The company offers Oracle Banking Digital Experience, a digital transformation providing digital account and loan origination, digital wallet, and mobile payments; Oracle Banking Platform, a suite of business applications for banks; Oracle FLEXCUBE, a banking product suite for consumer, corporate, investment, private wealth management, consumer lending, asset management, and investor servicing with payments; and Oracle FLEXCUBE Enterprise Limits and Collateral Management that enables centralized collateral management, limits definition, tracking, and exposure measuring. It also provides Oracle Financial Services Lending and Leasing Cloud, which supports consumer lending operations and life cycle processing; Oracle FLEXCUBE Investor Servicing that offers transfer agency and investor servicing solution; and Oracle Financial Services Analytical Applications for enterprise risk, performance management, regulatory compliance, and customer insight. Oracle Financial Services Software Limited is a subsidiary of Oracle Global (Mauritius) Limited.

### Date Key Development Headline

Date	Key Development Headline
7/9/17	Profile Systems & Software A.E. (ATSE:PROF) agreed to acquire Login S.A.

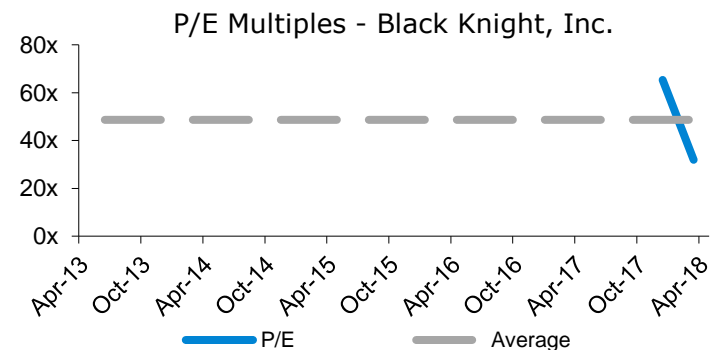
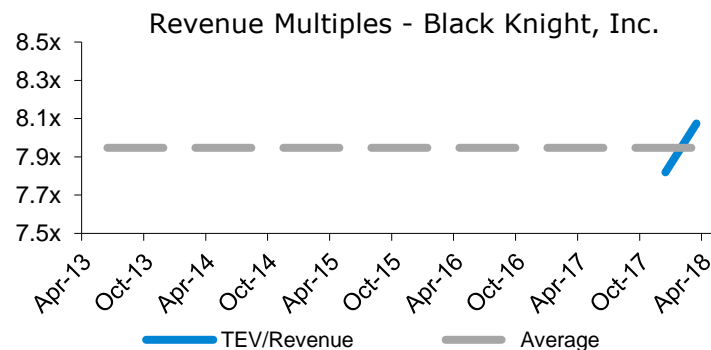


# Public Basket



## Black Knight, Inc.

Black Knight, Inc. provides software, data, and analytics solutions to the mortgage and consumer loan, real estate, and capital market verticals primarily in the United States. It operates through two segments, Software Solutions, and Data and Analytics. The Software Solutions segment offers software and hosting solutions, including LoanSphere mortgage servicing platform, a software as a service application that automates loan servicing to the secondary mortgage market and investor reporting; and LoanSphere Bankruptcy and LoanSphere Foreclosure solutions, which are Web-based workflow information systems for managing and automating a range of workflow processes involving non-performing loans. It also provides LoanSphere Invoicing to organize images of paper documents within a particular file, capture information from imaged documents, manage invoices, and offer various users access to data needed for monitoring and process management. Black Knight, Inc. was founded in 2013 and is headquartered in Jacksonville, Florida.



### Date Key Development Headline

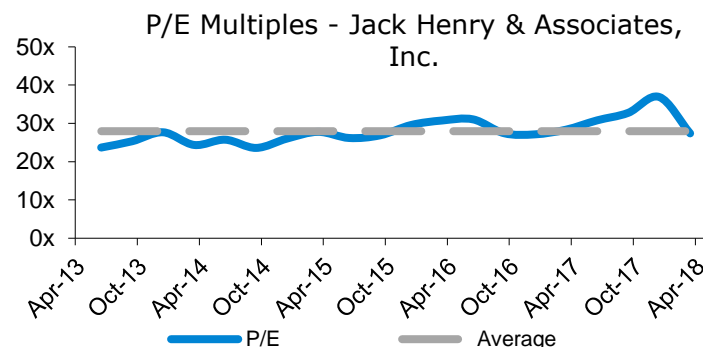
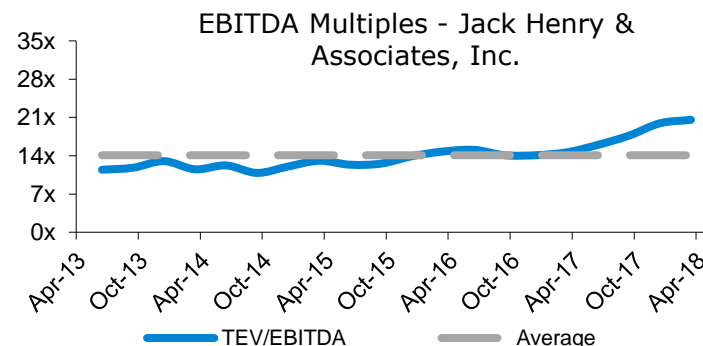
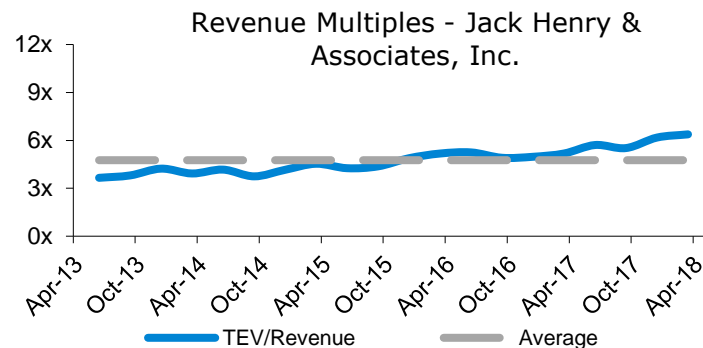
2/7/18	Black Knight Mulls Acquisitions
11/1/17	Black Knight Seeks Acquisitions
10/17/17	Black Knight and Homebot Announce Strategic Alliance to Deliver Powerful, Cutting-Edge Mobile Engagement Solution for the Real Estate Industry

# Public Basket



## Jack Henry & Associates, Inc.

Jack Henry & Associates, Inc. provides technology solutions and payment processing services primarily for financial services organizations in the United States. The company offers information and transaction processing solutions for banks ranging from community to multi-billion dollar institutions under the Jack Henry Banking brand; core data processing solutions for various credit unions under the Symitar brand; and specialized financial performance, imaging and payments processing, information security and risk management, retail delivery, and online and mobile solutions to financial institutions and corporate entities under the ProfitStars brand. Jack Henry & Associates, Inc. was founded in 1976 and is headquartered in Monett, Missouri.



Date	Key Development Headline
12/20/17	Jack Henry & Associates, Inc. (NasdaqGS:JKHY) completed the acquisition of Ensenta Corporation from Level Equity Management, LLC and other shareholders for approximately \$130 million.
11/27/17	Jack Henry & Associates, Inc. (NasdaqGS:JKHY) entered into a definitive agreement to acquire Ensenta Corporation from Level Equity Management, LLC and other shareholders.
11/8/17	Jack Henry & Associates Seeks Acquisitions
11/6/17	Kristopher James Company acquire jhaDirect product line of Jack Henry & Associates, Inc. (NasdaqGS:JKHY) for \$0.2 million.
5/8/17	Jack Henry Seeks Acquisitions

# Public Basket

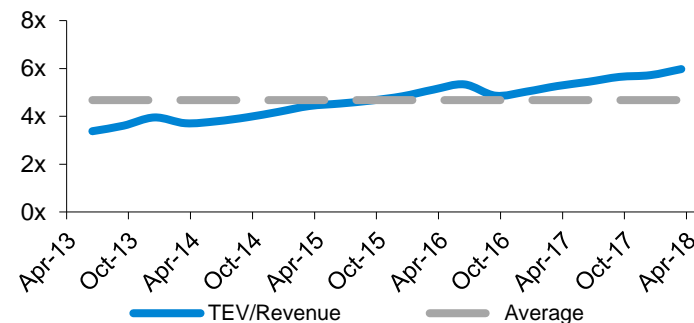


## Fiserv, Inc.

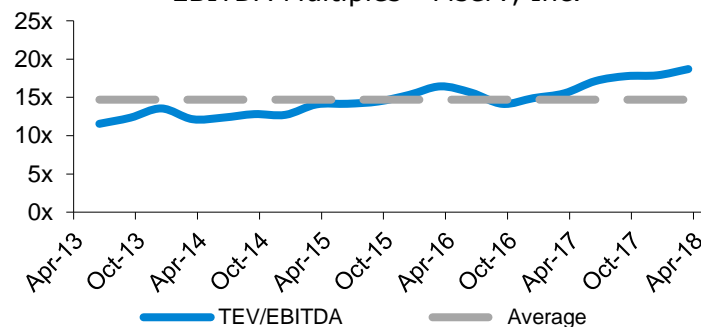
Fiserv, Inc., together with its subsidiaries, provides financial services technology worldwide. The company's Payments and Industry Products segment provides electronic bill payment and presentment services; mobile banking software and services; account-to-account transfers; person-to-person payment services; debit and credit card processing and services; payments infrastructure services; and other electronic payments software and services. This segment also offers card and print personalization services; investment account processing services for separately managed accounts; and fraud and risk management products and services. Its Financial Institution Services segment provides account processing services, source capture services, loan origination and servicing products, cash management and consulting services, and other products and services that support various types of financial transactions. The company was founded in 1984 and is headquartered in Brookfield, Wisconsin.

Date	Key Development Headline
2/6/18	Warburg Pincus LLC entered into a definitive agreement to acquire 55% stake in Fiserv Solutions, LLC from Fiserv, Inc. (NasdaqGS:FISV) for approximately \$400 million.
10/31/17	Fiserv Seeks Acquisitions
8/20/17	Fiserv, Inc. (NasdaqGS:FISV) acquired Dovetail Group Limited.
7/31/17	Fiserv, Inc. (NASDAQ:FISV) acquired the assets of PCLender, LLC.
6/20/17	Fiserv Mulls Acquisitions

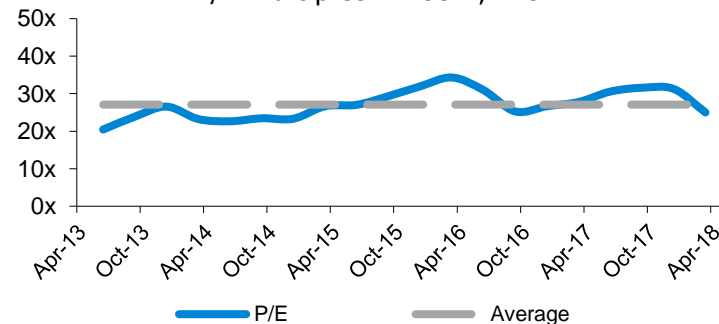
Revenue Multiples - Fiserv, Inc.



EBITDA Multiples - Fiserv, Inc.



P/E Multiples - Fiserv, Inc.



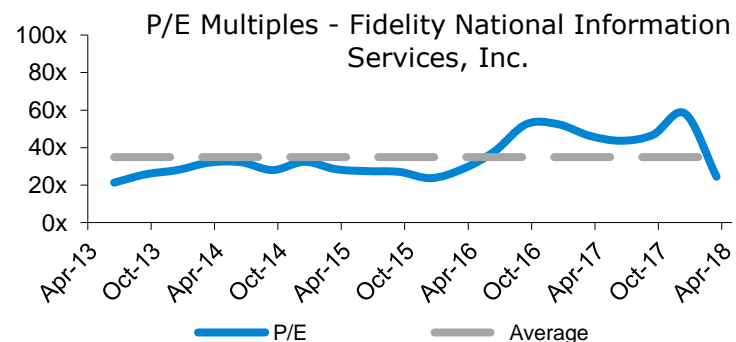
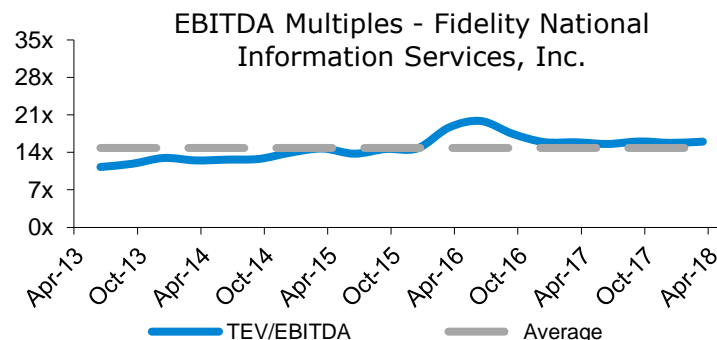
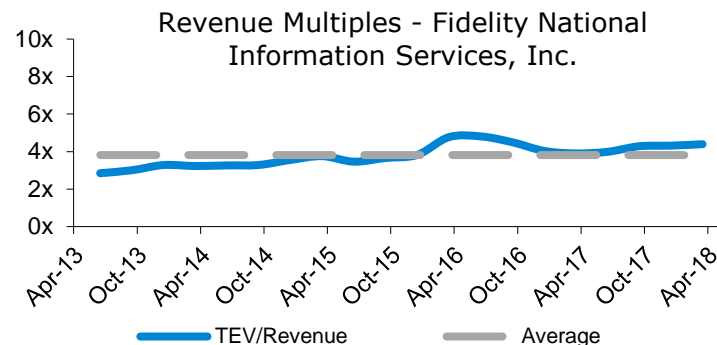
# Public Basket



## Fidelity National Information Services, Inc.

Fidelity National Information Services, Inc. operates as a financial services technology company in the United States and internationally. It operates through Integrated Financial Solutions and Global Financial Solutions segments. The Integrated Financial Solutions segment offers core processing and ancillary applications; digital solutions, including Internet, mobile, and e-banking; fraud, risk management, and compliance solutions; electronic funds transfer and network services; card and retail solutions; corporate liquidity and wealth management services; item processing and output services; government payments solutions; and e-payment solutions. The company was founded in 1968 and is headquartered in Jacksonville, Florida.

Date	Key Development Headline
11/15/17	Shanghai Zhongping Capital Co., Ltd. signed an agreement to acquire SunGard Kingstar Data System (China) Co., Ltd. from Fidelity National Information Services, Inc. (NYSE:FIS).
7/30/17	Clayton, Dubilier & Rice, Inc. completed the acquisition of 60% stake in The Capital Markets Company N.V. from Fidelity National Information Services, Inc. (NYSE:FIS).
5/22/17	Clayton, Dubilier & Rice, Inc. signed a definitive agreement to acquire 60% stake in The Capital Markets Company N.V. from Fidelity National Information Services, Inc. (NYSE:FIS) for approximately \$440 million.



# Contact Information

7MA provides Investment Banking & Advisory Services to the Business Services and Technology Industries globally. We advise on M&A and private capital transactions, and provide market assessments and benchmarking. As a close-knit team with a long history together and a laser focus on our target markets, we help our clients sell their companies, raise capital, grow through acquisitions, and evaluate new markets. Securities offered through 7M Securities LLC.

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