

6 November 2018

**First Derivatives plc**  
**("FD", the "Company" or the "Group")**

**Interim results for the six months ended 31 August 2018**

FD (AIM:FDP.L, ESM:FDP.I) today announces its unaudited results for the six months ended 31 August 2018.

**Financial Highlights**

Revenue £105.6m (H1 2018: £87.8m)	+20%
Gross profit £43.9m (H1 2018: 36.3m)	+21%
Adjusted EBITDA* £18.1m (H1 2018: £16.1m)	+12%
Profit** before tax £7.6m (H1 2018: £6.3m)	+20%
Adjusted*** profit after tax £10.6m (H1 2018: £9.2m)	+15%
Adjusted*** fully diluted EPS 38.7p (H1 2018: 34.4p)	+13%
Reported diluted EPS 21.7p (H1 2018: 17.1p)	+27%
Interim dividend 7.7p per share (H1 2018: 7.0p)	+10%
Net debt £24.2m (FY 2018: £16.2m)	

\*Adjusted for share-based payments and acquisition costs

\*\*Includes foreign currency translation effect and deferred consideration on prior acquisitions

\*\*\*Adjusted for amortisation of acquired intangibles, share-based payments, acquisition costs, foreign currency translation effect, share of loss on associate and exceptional taxation

**Business Highlights**

- Strong growth in software revenue, up 21%, with license revenue up 39% driven by increased demand for Kx technology across our client base
- Continued strong demand within our managed services and consulting activities resulting in revenue growth of 19%
- Accelerated investment across the business in R&D, sales and marketing and software delivery in response to growth in the Kx sales pipeline across multiple industries
- FinTech revenue up 24% to £82.7m (H1 2018: £66.8m), driven by growth in software revenue and an expansion of services provided to clients
- MarTech revenue up 8% to £19.8m (H1 2018: £18.3m), driven by 42% growth in subscriptions for our Marketing Cloud platform, powered by Kx
- Line of business gross profit reported for the first time, with the highlights being an increase in software license gross margin to 84% (H1 2018: 76%) and a 31% increase in total software gross profit to £34.7m (H1 2018: £26.6m)
- High-profile new client wins including Fingrid, the Canadian Securities Administrators and, post the period end, BISTel and Survalent
- Increased our addressable market following the launch of kdb+ 3.6, which supports rapid analysis of unstructured data, and integration with Python, the most widely used AI programming language
- Agreement to acquire the minority shareholdings in Kx Systems, taking 100% ownership by end June 2019

**Seamus Keating, Chairman of FD, commented:** “Our confidence in the growth prospects and the long-term potential of FD continues to increase, underpinned by demand for our Kx technology across multiple industries and our domain knowledge and growing reputation in managed services and consulting. This confidence drove an acceleration of our investment plans in H1, in response to new opportunities across the business. While the benefits from this investment will be received in future periods, the Group has delivered a strong first half.

The pace of major contract wins across the business, together with our high levels of repeat and recurring revenue provide confidence and position the group well to continue achieving strong growth. We expect to deliver revenue and adjusted EBITDA slightly ahead of consensus forecasts\* for the year to 28 February 2019.”

\*The Group believes consensus revenue and adjusted EBITDA forecasts to be £213.0m and £38.5m respectively.

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**About FD**

FD is a global technology provider with 20 years of experience working with some of the world’s largest finance, technology, retail, pharma, manufacturing and energy institutions. The Group’s Kx technology, incorporating the kdb+ time-series database, is a leader in high-performance, in-memory computing, streaming analytics and operational intelligence. Kx delivers the best possible performance and flexibility for high-volume, data-intensive analytics and applications across multiple industries. FD operates from 14 offices across Europe, North America and Asia Pacific, including its headquarters in Newry, and employs more than 2,400 people worldwide.

For further information, please visit [www.firstderivatives.com](http://www.firstderivatives.com) and [www.kx.com](http://www.kx.com)

## **Business Review**

The first half of our financial year was another period of good progress across the business with the delivery of revenue growth of 20% to £106m and adjusted EBITDA growth of 12% to £18m.

Our technology consists of a single, unified platform which provides leading edge capability in fast data, AI and machine learning with open interfaces to the technology industry's leading development tools. Its small footprint and horizontal scalability means that deployment options range from the edge, to on-premise, cloud and hybrid architectures. As the volume and velocity of sensor and other data increases, we see many industry disruptors turning to Kx for their predictive analytics, AI and cybersecurity requirements. Our technology is cost effective, fast to develop and deploy and efficient to execute.

Our H1 results reflect our stated objective to continue to invest in the business in response to multiple growth opportunities across both our software and managed services and consulting (MSC) business lines, while retaining our financial discipline during this investment phase. Our gross profit margins are in the process of transitioning higher, allowing us to invest even more as revenue grows, while still generating profitable growth. During the period our gross profit increased by 21% and this has enabled reinvestment with a focus on additional client-facing sales and marketing support for the business.

We have a diverse, talented pool of nearly 1,700 data scientists, R&D engineers and domain experts which we are continuing to grow. Our investment in R&D grew again this period and we are developing exciting new intellectual property, including domain-specific vertical applications which are typically sold on a subscription basis, often deployed on the cloud. Our data scientists are also working with some of the world's leading companies to build mission-critical solutions that have the potential to provide them with significant competitive advantage and operational efficiency. Our large, growing pool of talented data scientists with domain and cloud expertise is a valuable asset as the cloud becomes ubiquitous and the trend towards Software as a Service (SaaS) and managed services gains momentum.

In addition to expanding our capabilities and offerings in our more established markets of FinTech and MarTech, a core element of our strategy is to seek to capitalise on opportunities across other verticals such as the Industrial Internet of Things, utilities, automotive, telecoms, healthcare and many others. The building of solutions either internally or with partners with domain expertise is made easier by the pre-assembled components in our platform which reduces the timeline to minimum viable products and allows us to be 'quick to fail'. Our business model in these sectors is to seek "Kx Inside" OEM or revenue share agreements where high margin revenue builds over time, rather than large upfront license and implementation deals. We strongly believe this approach will result in a long-term royalty income stream that will benefit the Group for many years.

The size of our total addressable market gives us unlimited growth potential and we are tremendously excited by the opportunities in our pipeline, which has never been as healthy or as diversified.

## **Software**

Our platform, branded as Kx technology (Kx), sets performance benchmarks for the analysis of vast quantities of data, both real-time and historic. Kx comprises the kdb+ database, with its highly-efficient 500kb footprint, and an enterprise layer designed to maximise analytic performance while providing vital functions such as security, control and visualisation. Some of the key benefits to customers resulting from our performance capabilities are efficiency (including lower hardware costs) and the ability to handle the most demanding data challenges within acceptable timeframes, which are typically orders of magnitude faster than our competitors.

The market opportunity for our platform and applications is extensive. According to IDC's August 2018 Big Data and Analytics Spending Guide, the market will reach \$260 billion in 2022, up from \$166 billion in 2018. IDC expects data volume growth to be led by structured data, where Kx is the market leader.

## Research and Development

During the period we continued to build and strengthen our R&D team with external hires and by redeploying senior engineers who had been working on client engagements for many years. Redeploying these engineers incurs a considerable opportunity cost as they are able to attract high charge out rates on client engagements. One significant initiative was the formation of a dedicated machine learning team to complement our partnership with Brainpool – a network of 300 top level AI and machine learning experts. We have also formed new teams dedicated to cybersecurity and telecoms solutions, as well as increasing the number of engineers working on our existing solutions such as MRP Prelytix.

During the period we launched version 3.6 of our software. This release included the ability to support unstructured data through the introduction of anymap, which makes it easier to combine structured and unstructured data and analyse them both with the record-breaking speed that we are known for. Support for unstructured data broadens the appeal of Kx, increasing the number of use cases for our technology. Interest in this new capability is strong and we already have our first customer live.

AI and machine learning continues to be a major theme within our development efforts, particularly in regard to Python, by far the most popular AI programming language. We embedded Python within Kx so that machine learning algorithms are instantly available to Kx developers, and in parallel released PyQ, an interface that provides seamless Kx integration to Python programmers. This, together with our support for unstructured data, is an important step in our drive to make Kx a default data science platform for any AI project that deals with vast quantities of data, particularly streaming data.

We continue to make it easier for existing and new customers to adopt Kx. Our software is now available on a subscription basis, license or on-demand. During the period we worked closely with a number of public cloud providers, launching Kx-on-demand on Google Cloud Platform Marketplace to enable instant, scalable access to our software. We also have a range of free download options which allow prospective customers to become familiar with our technology.

Combined, these initiatives are helping to increase our total addressable market and ease the adoption and integration of Kx within our clients' technology infrastructure.

## Sales

### *FinTech*

Our business in FinTech continued to deliver strong growth, with software revenue up by 29% to £40.3m and our managed services and consulting accelerating with revenue up by 19% to £42.5m. Our sustained track record of growth in our core market points to the underlying value FD provides to its FinTech clients.

Software demand continues to be driven by Kx technology's unrivalled ability to analyse the vast quantities of streaming and historical data for purposes such as regulatory and risk reporting, market surveillance and trading analytics. We now have an extensive client base, including the top 20 global investment banks and numerous regulators and exchanges, and see considerable scope for growth within new as well as existing clients.

We continue to innovate to broaden the range of software solutions we provide for our clients, all built on top of our platform. For example, during the period we worked in partnership with a number of clients on projects, such as Consolidated Audit Trail reporting in North America, which could ultimately develop into applications applicable across our FinTech client base, a number of which involved the use of AI. As our technology grows within our client base we are also seeing particular interest in the provision of managed services support for our own technology and product applications. Interest ranges from providing this service on site or under an embassy model, where this support is operated remotely from our offices.

## *MarTech*

Revenue from MarTech increased by 8% to £19.8m with 49% of this revenue derived from subscription contracts (H1 2018: 38%). Our solution, powered by Kx and branded as MRP Prelytix, is a full B2B Account-Based Marketing (ABM) solution, using predictive analytics across billions of data points, ingested in real-time. This real-time intelligence can be integrated with industry-standard marketing automation and CRM systems, allowing our clients to action the intelligence within their own infrastructure. Many clients also use our concierge service – ABM Managed Services – to engage, nurture and qualify the targets identified by MRP Prelytix, providing a compelling return on investment.

We continue to develop the solution, with the latest release adding new AI capabilities that allow subscribers to target potential customers with customised content and tactics based on specific product interest and stage of the buying process. This constant technical innovation, built on the power of Kx, was a driving factor in a recent report by industry analyst Forrester that named MRP as a leader in the ABM market and as the best solution for ‘marketers pursuing a long-term vision of machine-driven marketing’.

While MRP is compliant with the GDPR regime introduced during H1, a number of our clients slowed their entire marketing services spend while they evaluated the impact of GDPR. This impact was felt mostly within our services revenue, mainly in Europe, which fell by 12% year-on-year. We believe this was a temporary effect and a number of large deals have closed since the end of H1 signalling that clients are investing again in marketing within the EU through their trusted, compliant partners.

While technology companies continue to form the core of our client base in MarTech, our platform is applicable to a wide range of industries and we continue to expand its target client base. For example, during H1 we signed deals with companies operating in financial services, media, healthcare and online education.

We have built a strong product offering in MarTech that is increasingly being recognised for the high return on investment it generates for clients. Our global footprint and strong technology background differentiates us from competitors and further strengthens our position within a large addressable market.

## *Other Markets*

A key element of our strategy is to establish Kx in other markets in areas that are challenged by data volumes and velocity and where our technology is able to demonstrate superior performance and higher return on investment. During the period, revenue from these other markets increased by 12% to £3.1m. The majority of our license agreements are OEM based and we believe revenue will begin to flow in earnest in the next financial year. Our success is further evidenced by the new contract wins we secured which included:

- *Sensor analytics* – We signed an OEM agreement with Survalent, one of the world’s leading providers of SCADA control systems to utilities. This will see Kx embedded in Survalent’s product and provide the ability for its customers to access advanced analytics on sensor data, and is expected to be launched in the first half of 2019.
- *Utilities* – We announced that, working alongside our partner CGI, Kx had been selected to deliver a next-generation electricity information exchange for Fingrid, the transmission system operator for Finland. This contract win opens opportunities to showcase the power of Kx at a time when numerous utility market participants are seeking to upgrade their systems to cope with more demanding regulations and provide additional services. This project will be implemented over a two year period.
- *Smart manufacturing* – We announced an OEM agreement with BISTel, a leading South Korean provider of smart manufacturing solutions, for the use of Kx for Sensors and kdb+ in its product line. The first deployments are expected in the first half of 2019 and this agreement is also expected to facilitate direct discussions regarding licensing Kx with a number of the world’s leading manufacturers.

We continue to progress opportunities across a spectrum of markets from connected cars to healthcare. These opportunities include a number of high value potential contracts where the sales cycle is lengthy and which require the deployment of considerable resource by the Group at an early stage to demonstrate the potential and power of Kx on the

data under review, increasingly leading to proofs of concept (POCs). Our confidence in this area is bolstered by the results we are able to demonstrate in the POC studies we have conducted to date.

We are also investing in opportunities that span vertical markets, such as blockchain, AI and cybersecurity. Conversations with clients have convinced us that Kx will play an increasingly important role in these areas by helping companies to generate revenue and improve efficiency where the analysis of large volumes of data is a pre-requisite.

### Business Development – Kx Ventures

In recent periods we have introduced a range of initiatives to promote awareness of Kx technology at grassroots developer level, to improve mindshare in the tech community and to raise awareness of the disruptive power of our technology by collaborating with innovators in different fields of scientific endeavour. The overarching aim is to drive long-term, high margin software revenues by promoting Kx as a disruptive technology across multiple industries.

There are four prongs to the Kx Ventures initiative;

#### *Academic and Research partnerships*

This consists of a range of initiatives designed to showcase our technology. We operate an academic license programme and work with universities such as Princeton and Berkeley in the U.S. to assist their students to use the power of Kx to drive innovation. For example, we recently assisted MIT Motorsports to use Kx to monitor vehicle telemetry systems in real-time. We have collaborated with NASA FDL (space weather and discovering exoplanets), the Earlham Institute (crop research) and, as mentioned, we are working with Brainpool in the area of machine learning. We work with chip providers such as Dell, EMC and Intel, storage providers such as Samsung and cloud providers such as Google to help showcase our respective technologies.

#### *OEM agreements*

We are building strong alliances with key industry players through OEM agreements that allow us to leverage their brand and their global sales reach. We have been working with Thomson Reuters for a number of years in FinTech, and we have extended this approach to other markets with OEM partners such as Utilismart in smart meter data management and BISTel, Survalent and a Fortune 500 company in the management of sensor data within precision manufacturing and utilities.

#### *Joint Ventures*

We are working in partnership with leading organisations to provide innovative new commercial services and products. For example we worked closely with CGI in winning an energy market contract with Fingrid. We are now jointly pitching this solution in other energy markets around the world. Another example is Airbus – we are building IP to monetise the vast quantities of satellite imagery data they hold and there are a number of deals in the pipeline.

#### *Tech/Domain Partnerships*

Many inbound enquiries for the use of our technology come from innovative start-up and scale-up businesses. In February 2017 we formally launched an initiative to license our technology to these firms on a revenue share basis. In some cases we inject seed capital to help launch the business and to allow us to work closely with the domain experts in these companies to bring solutions to market quickly, rather than having them forfeit valuable time raising capital. This allows FD to enter new markets much more rapidly than through building teams of domain experts in areas such as neurological science. Should these companies be successful, this showcases our technology in new verticals. Our work with our cybersecurity partners for example is reaping dividends as we are currently undertaking POCs with some established industry players.

During the period under review, four venture agreements have been added, bringing the total of Kx Venture agreements to 13, including companies operating in areas as diverse as 3D Earth Observation, detection of cognitive diseases, quantum computing and cybersecurity. The majority of our investment to date has been in three companies using Kx for the following purposes:

- *Cobalt* – a company providing post-trade FX settlement services using blockchain as part of their offering. The company has won industry awards and Citi and SGX have participated in follow-on funding rounds.
- *RxDataScience* – founded by an experienced team of pharma professionals, RxDataScience provides an open analytics healthcare platform, used by a number of large pharma clients.
- *Quantile Technologies* – Quantile provides a range of services to the leading global banks using Kx technology to help them reduce their counterparty risk and capital requirements. Quantile was the first firm in almost a decade to be granted ‘Approved Compression Service Provider’ status at LCH.

We have a pipeline of exciting opportunities in this area and continue to believe that this route to market will produce strong returns for shareholders and that the use of external domain expertise will help promote the adoption of Kx technology more quickly and effectively than solely organic development. The potential return from these investments can be gauged from the fact that three companies using Kx as their core technology have achieved valuations of \$500m - \$3bn – Appian, 1010Data and BitMEX.

We believe that these initiatives under the Kx Ventures banner are helping to establish Kx as a disruptive technology, creating innovative IP in new markets and will provide FD with significant long term royalty revenue streams.

### **Managed Services and Consulting**

Our services are unified by a common thread of deep domain knowledge and high levels of technology expertise, developed through our award-winning training programme, primarily in the financial services arena. Primary business drivers include the provision of support for mission-critical systems, assisting clients with regulatory change initiatives and continued demand for both “run-the-bank” and “change-the-bank” projects across our client base.

A key enabler of our success has been the increasingly strategic nature of our engagements resulting from our focus on building strong relationships within key clients, enabling positive strategic conversations with them regarding their future requirements. This has developed from our key account management approach which has also increased our ability to cross sell our capabilities and has resulted in increasing numbers of contract wins within our global investment bank clients that encompass our own software as well as managed services and consulting. We see opportunities to extend this client-centric approach beyond our financial services clients into other sectors as we scale our operations within them.

Many of our customers are in the process of planning to move significant parts of their infrastructure and software applications to the cloud – of which their Kx implementation is a core element. This provides a once in a generation opportunity to overhaul their operating model, by reducing fixed costs, moving to a SaaS model and outsourcing functions such as support to managed services providers. We are in talks with some of the major cloud providers with a view to helping them with this “lift and shift” process across our common customer base, bearing in mind that they do not have the critical mass of domain expertise in capital markets to execute this themselves.

We recorded a number of implementation and upgrade wins for mission-critical systems, as well as ongoing demand for application development, support and testing. Example wins included:

1. A Tier 1 US bank has contracted FD to assist in meeting its reporting responsibilities within Europe for certain market regulations
2. A European financial services client has contracted us to support and manage its trade and other financial data
3. Major expansion within a large investment bank client to assist with mission-critical system support and regulatory compliance across its global operations

Our revenue growth benefited from the investment in the graduates we recruited last year, with strong demand for our staff as they complete the initial phase of their training. This fresh intake of talent enables us to develop data scientists with expertise in the most in-demand skill sets and adds to our ability to present teams of diverse experience levels across the landscape of business and technology.

We continue to grow the proportion of our revenues that are performed remotely, from our near-shore centres and particularly our headquarters in Northern Ireland. We have extended our near-shore capabilities with the addition of new offices that will accommodate up to 400 new staff to facilitate the expansion of our managed services.

## **Personnel**

The Group now employs more than 2,400 people, up from over 2,000 at the same time last year. Our award-winning graduate recruitment and training programme continues to be the driver that provides new talent for the Group and we continue to expand our reach into leading universities around the world to attract ambitious graduates. We have enrolled hundreds of our data scientists in machine learning nano degrees and have partnered with the University of Ulster to launch a four year distance learning Masters In Capital Markets for our staff. We believe our success to date and future ability to realise the opportunities across our software and managed services and consulting businesses will be led by our investment in talent. A measure of the success of the programme can be seen from the increasing number of staff who have been promoted to senior positions within FD and are helping to drive growth.

## **Corporate Governance**

FD is committed to ensuring the highest standards of corporate governance and recognises the need to demonstrate that by adhering to an effective governance framework, to provide stakeholders such as the investors, employees and suppliers, the confidence that the business is being managed effectively and responsibly. In September 2018 the Group adopted the UK Corporate Governance Code as its recognised corporate governance framework.

## **Current Trading and Outlook**

We entered the second half of our financial year with strong momentum across the Group. The pace of major contract wins across the business, together with our high levels of repeat and recurring revenue provide confidence and position the Group well to continue achieving strong growth. We expect to deliver revenue and EBITDA slightly ahead of consensus forecasts for the year to 28 February 2019.



## Financial Review

The table below highlights the components of revenue growth across the group along with an analysis of gross profit. The analysis also shows our revenue and growth by vertical market. All figures are rounded to the nearest £0.1m and may not sum to total due to rounding. All percentage movements are calculated on actual figures.

### Revenue and Gross Margin Analysis (£m)

H1 2019	H1 2018	Growth	H1 2019	H1 2018	Growth	H1 2019	H1 2018	Growth		H1 2019	H1 2018	Growth	
<b>Software by Sector</b>									<b>Total Software</b>				
<b>FinTech Revenue</b>			<b>MarTech Revenue</b>			<b>Other Revenue</b>							
6.3	2.1	↑ 200%	-	-	-	0.3	0.2	↑ 50%	Perpetual	6.6	2.3	↑ 185%	
13.3	12.2	↑ 9%	9.8	6.9	↑ 42%	0.7	0.5	↑ 30%	Recurring	23.8	19.6	↑ 21%	
19.6	14.3	↑ 37%	9.8	6.9	↑ 42%	1.1	0.8	↑ 36%	Licenses	30.4	21.9	↑ 39%	
									Cost of sales	(5.0)	(5.3)	(5%)	
									Gross profit	25.4	16.7	↑ 52%	
									Gross margin	84%	76%	↑ 8%	
20.7	16.9	↑ 22%	10.0	11.4	↓ (12%)	2.0	2.0	↑ 3%	Services	32.7	30.3	↑ 8%	
									Cost of sales	(23.4)	(20.3)	15%	
									Gross profit	9.3	9.9	↑ (6%)	
									Gross margin	28%	33%	↓ (5%)	
40.3	31.2	↑ 29%	19.8	18.3	↑ 8%	3.1	2.7	↑ 12%	Revenue	63.1	52.2	↑ 21%	
									Cost of sales	(28.4)	(25.6)	11%	
									Gross profit	34.7	26.6	↑ 31%	
									Gross margin	55%	51%	↑ 4%	
<b>Managed Services and Consulting by Sector</b>									<b>Total Managed Services and Consulting</b>				
<b>FinTech Revenue</b>			<b>MarTech Revenue</b>			<b>Other Revenue</b>							
42.5	35.6	↑ 19%	-	-	-	-	-	-	Revenue	42.5	35.6	↑ 19%	
									Cost of sales	(33.3)	(25.9)	29%	
									Gross profit	9.2	9.7	↓ (6%)	
									Gross margin	22%	27%	↓ (5%)	
<b>Sector Totals</b>													
<b>FinTech Revenue</b>			<b>MarTech Revenue</b>			<b>Other Revenue</b>							
82.7	66.8	↑ 24%	19.8	18.3	↑ 8%	3.1	2.7	↑ 12%	Revenue	105.6	87.8	↑ 20%	
									Cost of sales	(61.7)	(51.5)	20%	
									Gross profit	43.9	36.3	↑ 21%	
									Gross margin	42%	41%	1%	
									R&D	(4.9)	(4.3)	↑ 14%	
									Sales expense	(15.8)	(12.0)	↑ 32%	
									Admin expense	(9.0)	(7.7)	↑ 16%	
										14.2	12.3	↑ 15%	
									Capitalised	3.8	3.8	2%	
									<b>EBITDA</b>	<b>18.1</b>	<b>16.1</b>	<b>↑ 12%</b>	
										17%	18%	↓ (1%)	

## Revenue and Margins

Group revenue increased organically by 20% to £105.6m (H1 2018: £87.8m) driven by continued strong growth in software license sales, up 39% in the period. This strong performance has allowed FD to grow its gross margin to 42% (H1 2018: 41%) while investing in its resources, delivery capability and expertise. This ability to maintain fiscal discipline while continuing to deliver on strategic objectives, developing products and solutions that transform the way organisations across industries collect, integrate and analyse their data to deliver operational intelligence, is indicative of the strength of the organisation.

Our growth in gross profit has enabled us to deliver growth in profitability while reinvesting in the Group's operations. During H1 sales and marketing costs increased by 32%, building on the 63% increase seen in FY 2018, as we added new sales and pre-sales staff to the team to expand our market reach. Research and development costs increased by 14%, in line with recent periods, as we continued to deliver improvements in our software's performance and interoperability for the benefit of our growing client base. General and administration costs increased by 16% as additional premises and staff were required to manage the Group's growing scale.

### Software

Total software revenues increased by 21% to £63.1m and now represent 60% of total Group revenue (H1 2018: 59%) driven by the 39% increase in software license revenue, tempered by 8% growth in services revenue.

Software revenue from FinTech increased by 29% to £40.3m, driven by a 37% growth in license revenue as Kx continues to win market share in our largest market. A higher than typical number of clients have elected to contract under a perpetual license model (H1 2019: £6.3m, H1 2018: £2.1m) as they recognise that our Kx platform is a key component of their long-term IT architecture; the wider adoption of the Kx platform within these clients as their core data system will enable opportunities for recurring license growth from our vertical platform solutions in future periods.

Total revenue from MarTech was £19.8m, up by 8% driven by the continued strong increase in subscription revenue, which was up by 42% to £9.8m, offset by a reduction in services revenue. The impact of GDPR saw a slowdown in MarTech services revenue in Europe which we believe to have been temporary, as evidenced by increased client activity post the period end. Recent wins should see services revenue return to double digit growth in H2.

Software revenue from other markets increased by 12% to £3.1m. As outlined in the Business Review our approach of obtaining OEM / revenue share license agreements, while slower to generate revenue in early periods, will result in larger ongoing royalty style payments to the Group in future periods as products and solutions with 'Kx Inside' are brought to market by our clients/partners.

Overall software gross margin increased to 55% from 51% driven by the growth in license revenue against its relatively fixed cost base – relating mainly to data centre, infrastructure, data collection and support costs. Cost control was further assisted through the continued development of our platform where we were able to deliver a number of efficiencies around data collection and management costs in MarTech, to offset increments in other line items. Software license gross margin increased to 84% (H1 2018: 76%).

Software services gross margin was 28% (H1 2018: 33%) as we increased the Kx services team to support the expansion of Kx within our core markets and other verticals. While this has caused a drag to profitability in the short term this investment allows us to meet the growing needs of existing clients as well as the delivery demands of new clients. Gross margins were also impacted by the lower level of MarTech services revenue.

## Managed Services and Consulting

Managed services and consulting revenue increased by 19% to £42.5m with gross margins of 22%. While gross margins of up to 27% have been achieved in recent periods, this is dependent on utilisation, the level of investment in personnel and the timing of projects commencing with our clients. In the period, we experienced a drag effect from the record graduate intake last year. We also invested to meet client demand in our vendor managed services practice in North America, growing our core capabilities in the region to allow the Group to successfully deliver two large assignments. We expect managed services and consulting margins to move up the range in H2.

## Deferred Revenue

Deferred revenue at the period end was up 30% at £16.1m (H1 2018: £12.4m). The majority of the Group's FinTech recurring revenue is on annual or multi-year contracts although payment terms are typically for shorter terms. In MarTech, billing is typically in arrears based on usage of the platform.

## **Profit before tax**

Adjusted profit before tax increased by 10% to £12.6m (H1 2018: £11.4m) the calculation of which has been detailed below:

	<b>H1 2019</b>	<b>H1 2018</b>
	<b>£m</b>	<b>£m</b>
Reported profit before tax	7.6	6.3
Adjustments for:		
Amortisation of acquired intangibles	1.8	2.3
Share-based payment and related costs	1.5	1.0
Acquisition costs, associate disposal costs and changes in contingent purchase consideration	1.6	1.4
Loss/(gain) on foreign currency translation	-	0.4
Share of loss of associate	-	-
	<hr/>	<hr/>
Adjusted profit before tax	12.6	11.4
	<hr/>	<hr/>

By way of note, other income which has been separately identified in previous periods, fell by £0.2m in this period. This is employment and training incentive grants that have been winding down year-on-year and were £0.4m (H1 2018: £0.6m) in the period. Other income has been included within administrative expenses in the income statement.

As previously noted, the Group continued to invest in research and development to maintain its technology lead, with total R&D up 14% to £4.9m. The net effect of capitalised R&D was down 22% in the period as detailed below:

	<b>H1 2019</b>	<b>H1 2018</b>	<b>Increase</b>
	<b>£m</b>	<b>£m</b>	
Research and development costs:			
Expensed during the period	1.1	0.5	<i>102%</i>
Capitalisation of product development costs	3.8	3.8	<i>2%</i>
	<hr/>	<hr/>	
Total research and development	4.9	4.3	<i>14%</i>
	<hr/>	<hr/>	
Amortisation of R&D	(3.3)	(3.1)	<i>7%</i>
Net capitalisation of R&D	0.6	0.7	<i>(22%)</i>

### **Earnings per share**

The adjusted profit after tax for the period of £10.6m (H1 2018: £9.2m) represented growth of 15%. The Group's effective tax rate was 22% (H1 2018: 27%), the reduction being predominantly attributable to U.S. tax reforms.

The calculation of adjusted profit after tax is detailed below:

	<b>H1 2019</b>	<b>H1 2018</b>
	<b>£m</b>	<b>£m</b>
Reported profit after tax	5.9	4.6
Adjustments from profit before tax	5.0	5.1
Tax effect of adjustments	(0.4)	(0.5)
	<hr/>	<hr/>
Adjusted profit after tax	10.6	9.2
	<hr/>	<hr/>
Weighted average number of ordinary shares (diluted)	27.3m	26.8m
Adjusted EPS (fully diluted)	38.7p	34.4p

The fully diluted average number of shares in issue increased to 27.3m (H1 2018: 26.8m) as additional existing share options were exercised. This resulted in adjusted fully diluted earnings per share of 38.7p, representing growth of 13% for the period (H1 2018: 34.4p).

### **Cash generation and net debt**

The Group generated £13.5m of cash from operating activities before taxation payments (H1 2018: £13.0m), representing a 74% conversion of adjusted EBITDA (H1 2018: 81%). Working capital continued to drag cash conversion as revenue continued to scale. Debtor days remained relatively constant at 80 days (H1 2018: 85 days).

At the period end, net debt was £24.2m (H1 2018: £13.1m). The factors impacting the movement in net debt are summarised in the table below:

	H1 2019 £m	H1 2018 £m
Opening net debt	(16.2)	(13.5)
Operating cash flow	13.5	13.0
Taxes paid	(3.7)	(3.5)
Dividends paid	(4.3)	(3.0)
Capital expenditure: property, plant and equipment	(2.5)	(1.4)
Capital expenditure: intangible assets	(3.8)	(3.8)
Deferred consideration	(4.1)	(1.2)
Venture investment	(3.3)	(3.1)
Issue of new shares	2.6	3.3
FX and other	(2.3)	0.1
	<hr/>	<hr/>
Closing net debt	(24.2)	(13.1)
	<hr/>	<hr/>

Deferred consideration payments relate to payments made for prior period acquisitions as contracted earn out targets are met. These payments predominantly relate to payments made for Affinity Systems Inc. and Prelytix Inc. in 2015. The integration of these entities' domain expertise has been instrumental in our successful push into the Industrial IoT market and MarTech market respectively. Ventures investment payments relate to the entry of Kx technology into other markets where we are signing OEM or revenue share agreements as we seek to capitalise on external knowledge and domain expertise.

The table below summarises the investments made in venture companies to date as well as the maximum future commitment and the revenue generated for the Group to date. Future commitments are typically payable only if certain pre-determined challenging performance milestones are achieved by the venture. The figures reflect the change of approach taken in 2017 to bring in external providers of finance for venture companies, with the four new ventures in H1 2019 having received £0.5m in equity and loans with a maximum further commitment of up to £0.4m.

	H1 2019	H1 2018	Total to date
<b>Number of ventures</b>	<b>4</b>	<b>4</b>	<b>13</b>
Equity and loans invested (£m)	3.3	3.1	15.3
Outstanding commitment (£m)	2.7	2.6	2.7
<b>Revenue share agreements</b>	<b>4</b>	<b>3</b>	<b>11</b>
Revenue recognised for software services (£m)	0.9	0.9	3.9
Licenses recognised under revenue share agreements (£m)	0.0	0.2	0.3

As noted in the announcement of 2 July 2018 regarding the acquisition of the minority shareholding interest in Kx Systems, due to complete by 29 June 2019, the aggregate consideration of \$53.8m will be financed from available debt facilities.

### Dividend

The Board has declared an interim dividend of 7.7p per share (H1 2018: 7.00p per share) which will be paid on 6 December 2018 to those shareholders on the register on 16 November 2018.

### Consolidated statement of comprehensive income (unaudited)

## Six months ended 31 August

	<i>Note</i> <b>2</b>	<b>2018</b> <b>£'000</b>	2017 £'000
<b>Revenue:</b>			
Software licenses and services		<b>63,111</b>	52,201
Managed services and consulting		<b>42,463</b>	35,636
<b>Total revenue</b>		<b>105,574</b>	87,837
<b>Cost of revenue</b>			
Software licenses and services		<b>(28,399)</b>	(25,609)
Managed services and consulting		<b>(33,293)</b>	(25,891)
<b>Total cost of revenue</b>		<b>(61,692)</b>	(51,500)
<b>Gross profit</b>		<b>43,882</b>	36,337
Operating costs			
Research and development costs		<b>(4,883)</b>	(4,285)
Of which capitalised		<b>3,833</b>	3,766
Sales and marketing costs		<b>(15,785)</b>	(11,973)
Administrative expenses		<b>(18,724)</b>	(16,658)
<b>Operating profit</b>		<b>8,323</b>	7,187
Acquisition costs and changes in contingent purchase consideration			
		<b>1,582</b>	1,364
Share-based payment and related costs			
		<b>1,543</b>	1,006
Depreciation and amortisation			
		<b>4,774</b>	4,218
Amortisation of acquired intangible assets			
		<b>1,846</b>	2,335
<b>Adjusted EBITDA</b>		<b>18,068</b>	16,110
Finance income			
		<b>1</b>	1
Finance expense			
		<b>(714)</b>	(490)
Loss on foreign currency translation			
		<b>(46)</b>	(350)
<b>Net finance costs</b>		<b>(759)</b>	(839)
Share of loss of associate, net of tax			
		<b>(6)</b>	(41)
<b>Profit before taxation</b>		<b>7,558</b>	6,307
Income tax expense			
		<b>(1,626)</b>	(1,729)
<b>Profit for the year</b>		<b>5,932</b>	4,578
<b>Pence</b>			
Earnings per share			
	<b>4</b>	<b>23.0</b>	18.2
Basic		<b>21.7</b>	17.1
Diluted			

**Consolidated statement of changes in equity (unaudited)**

**Six months ended 31 August 2018**

	Share capital	Share premium	Share option reserve	Currency translation adjustment	Retained earnings	Total equity
	£'000	£'000	£'000	£'000	£'000	£'000
<b>Balance at 1 March 2018</b>	128	81,286	14,341	(6,874)	49,218	138,099
<b>Total comprehensive income for the period</b>						
Profit for the period	-	-	-	-	5,932	5,932
<b>Other comprehensive income</b>						
Net gain on net investment in foreign subsidiary and associate	-	-	-	6,076	-	6,076
Net profit on hedge of movement in foreign subsidiary and associate	-	-	-	(1,588)	-	(1,588)
<b>Total comprehensive income for the period</b>	-	-	-	4,488	5,932	10,420
<b>Transactions with owners, recorded directly in equity</b>						
Income tax on share options	-	-	1,307	-	-	1,307
Exercise or issue of shares	2	2,565	-	-	-	2,567
Change in value of NCI Put	-	-	-	-	(9,346)	(9,346)
Share-based payment charge	-	-	645	-	-	645
Dividends to equity holders	-	-	-	-	(4,383)	(4,383)
<b>Balance at 31 August 2018</b>	<b>130</b>	<b>83,851</b>	<b>16,293</b>	<b>(2,386)</b>	<b>41,421</b>	<b>139,309</b>

**Consolidated statement of changes in equity (unaudited)**

**Six months ended 31 August 2017**

	Share capital	Share premium	Share option reserve	Currency translation adjustment	Retained earnings	Total equity
	£'000	£'000	£'000	£'000	£'000	£'000
<b>Balance at 1 March 2017</b>	124	72,275	10,225	8,335	40,772	131,731
<b>Total comprehensive income for the period</b>						
Profit for the period	-	-	-	-	4,578	4,578
<b>Other comprehensive income</b>						
Net gain on net investment in foreign subsidiary and associate	-	-	-	(2,240)	-	(2,240)
Net profit on hedge of movement in foreign subsidiary and associate	-	-	-	964	-	964
<b>Total comprehensive income for the period</b>	-	-	-	(1,276)	4,578	3,302
<b>Transactions with owners, recorded directly in equity</b>						
Income tax on share options	-	-	1,959	-	-	1,959
Exercise or issue of shares	-	3,753	-	-	-	3,753
Share-based payment charge	-	-	600	-	-	600
Dividends to equity holders	-	-	-	-	(3,533)	(3,533)
<b>Balance at 31 August 2017</b>	<b>124</b>	<b>76,028</b>	<b>12,784</b>	<b>7,059</b>	<b>41,817</b>	<b>137,812</b>



## Consolidated statement of financial position (unaudited)

	As at 31 August 2018 £'000	As at 31 August 2017 £'000	As at 28 February 2018 £'000
<b>Assets</b>			
Property, plant and equipment	8,691	6,610	7,714
Intangible assets and goodwill	156,996	158,826	149,744
Trade and other receivables	9,810	2,686	6,594
Investment in equity – associated investees	2,631	1,948	2,631
Other financial assets	3,870	3,452	3,433
Deferred tax asset	20,223	17,503	18,353
<b>Non-current assets</b>	<b>202,221</b>	<b>191,025</b>	<b>188,469</b>
Trade and other receivables	58,067	46,509	53,718
Cash and cash equivalents	12,984	13,738	12,365
<b>Current assets</b>	<b>71,051</b>	<b>60,247</b>	<b>66,083</b>
<b>Total assets</b>	<b>273,272</b>	<b>251,272</b>	<b>254,552</b>
<b>Equity</b>			
Share capital	130	124	128
Share premium	83,851	76,028	81,286
Shares option reserve	16,293	12,784	14,341
Currency translation adjustment reserve	(2,386)	7,059	(6,874)
Retained earnings	41,421	41,817	49,218
<b>Equity attributable to shareholders</b>	<b>139,309</b>	<b>137,812</b>	<b>138,099</b>
<b>Liabilities</b>			
Loans and borrowings	33,805	23,460	25,205
Trade and other payables	1,360	33,912	32,127
Deferred tax liabilities	10,382	12,474	9,811
Contingent deferred consideration	-	2,850	-
<b>Non-current liabilities</b>	<b>45,547</b>	<b>72,696</b>	<b>67,143</b>
Loans and borrowings	3,339	3,378	3,346
Trade and other payables	75,689	27,881	34,070
Current tax payable	639	1,051	1,195
Employee benefits	5,966	6,870	5,011
Contingent deferred consideration	2,783	1,584	5,688
<b>Current liabilities</b>	<b>88,416</b>	<b>40,764</b>	<b>49,310</b>
<b>Total liabilities</b>	<b>133,963</b>	<b>113,460</b>	<b>116,453</b>
<b>Total equity and liabilities</b>	<b>273,272</b>	<b>251,272</b>	<b>254,552</b>

**Consolidated statement of cash flows (unaudited)****Six months ended 31 August**

	<b>2018</b>	2017
	<b>£'000</b>	£'000
<b>Cash flows from operating activities</b>		
Profit for the period	5,932	4,578
Adjustments for:		
Net finance costs	759	839
Depreciation of property, plant and equipment	1,495	1,161
Amortisation of intangible assets	5,125	5,384
Increase in deferred consideration	848	1,023
Equity settled share-based payment transactions	1,543	1,006
Grant income	(364)	(596)
Tax expense	1,626	1,729
	<u>16,964</u>	<u>15,124</u>
<i>Changes in:</i>		
Trade and other receivables	(3,110)	1,687
Trade and other payables	(396)	(3,794)
Cash generated from operating activities	<u>13,458</u>	<u>13,017</u>
Taxes paid	(3,695)	(3,471)
<b>Net cash from operating activities</b>	<u>9,763</u>	<u>9,546</u>
<b>Cash flows from investing activities</b>		
Interest received	1	1
Acquisition of other investments and associates	(437)	(950)
Net increase in loans to other investments	(2,883)	(2,167)
Acquisition of property, plant and equipment	(2,465)	(1,442)
Acquisition of intangible assets	(3,833)	(3,766)
Deferred consideration paid	(4,111)	(1,237)
<b>Net cash used in investing activities</b>	<u>(13,728)</u>	<u>(9,561)</u>
<b>Cash flows from financing activities</b>		
Proceeds from issue of share capital	2,567	3,344
Drawdown of new facility	8,900	-
Repayment of borrowings	(1,766)	(1,812)
Payment of finance lease liabilities	(7)	(30)
Interest paid	(679)	(490)
Dividends paid	(4,316)	(3,030)
<b>Net cash from financing activities</b>	<u>4,699</u>	<u>(2,018)</u>
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>734</b>	<b>(2,033)</b>
Cash and cash equivalents at 1 March	12,365	16,250
Effects of exchange rate changes on cash held	(115)	(479)
<b>Cash and cash equivalents at 31 August</b>	<u>12,984</u>	<u>13,738</u>

## Notes to the Interim Results

### 1 Basis of Preparation

The results for the six months ended 31 August 2018 are unaudited and have not been reviewed by the Company's Auditors. They have been prepared on accounting bases and policies that are consistent with those used in the preparation of the financial statements of the Company for the year ended 28 February 2018.

The financial statements contained in this report do not constitute statutory accounts within the meaning of Section 477 of the Companies Act 2006. The results for the period ended 28 February 2018 were prepared under International Financial Reporting Standards (IFRSs) as adopted by the EU ("adopted IFRSs") and reported on by the auditors and received an unqualified audit report. Full accounts for the period ended 28 February 2018 have been delivered to the Registrar of Companies.

### 2 Segmental Reporting

#### *Revenue by industry*

	<b>2018</b>	2017
	<b>£'000</b>	£'000
FinTech	<b>82,715</b>	66,848
MarTech	<b>19,789</b>	18,260
Other	<b>3,070</b>	2,729
	<hr/>	<hr/>
Total	<b>105,574</b>	87,837
	<hr/> <hr/>	<hr/> <hr/>

#### *Revenue by category*

	<b>2018</b>	2017
	<b>£'000</b>	£'000
Managed services and consulting	<b>42,463</b>	35,636
Software	<b>63,111</b>	52,201
	<hr/>	<hr/>
Total	<b>105,574</b>	87,837
	<hr/> <hr/>	<hr/> <hr/>

#### *Geographical location analysis*

	<b>2018</b>	2017
	<b>£'000</b>	£'000
UK	<b>29,891</b>	28,979
Rest of Europe	<b>17,483</b>	14,317
Americas	<b>47,105</b>	34,781
Australasia	<b>11,095</b>	9,760
	<hr/>	<hr/>
Total	<b>105,574</b>	87,837
	<hr/> <hr/>	<hr/> <hr/>

### **3 Dividends**

An Interim Dividend of 7.7p per share will be made for the six months to 31 August 2018. This will be paid to shareholders on 6 December 2018 to shareholders on the register on 16 November 2018. The shares will be marked Ex-Dividend on 15 November 2018.

### **4 Earnings per Share**

Basic earnings per share for the six months ended 31 August 2018 has been calculated on the basis of the reported profit after taxation of £5.9m (H1 2018: £4.6m) and the weighted average number of shares for the period of 25,767,759 (H1 2018: 25,135,875). This provides basic earnings per share of 23.0 pence (H1 2018: 18.2 pence).

Diluted earnings per share for the six months ended 31 August 2018 has been calculated on the basis of the reported profit after taxation of £5.9m (H1 2018: £4.6m) and the weighted average number of shares after adjustment for the effects of all dilutive potential ordinary shares 27,341,839 (H1 2018: 26,790,129). This provides diluted earnings per share of 21.7 pence (H1 2018: 17.1 pence).

The Board considers that adjusted earnings is an important measure of the Group's financial performance. Adjusted earnings in the period was £10,571k (H1 2018: £9,208k), which excludes the amortisation of acquired intangibles of £1,846k, (H1 2018: £2,335k) share-based payments of £1,543k (H1 2018: £1,006k), acquisition costs of £1,582k (H1 2018: £1,364k), loss on foreign currency translation of £46k (H1 2018: £350k), share of loss of associate £6k (H1 2018: £41k) and associated taxation impact of these adjustments of £384k (H1 2018: £466k). Using the same weighted average of shares as above provides adjusted basic earnings per share of 41.0 pence (H1 2018: 36.6 pence) and adjusted diluted earnings per share of 38.7 pence (H1 2018: 34.4 pence).

### **5 Interim Report**

Copies can be obtained from the Company's head and registered office: 3 Canal Quay, Newry, Co. Down, BT35 6BP and are available to download from the Company's web site [www.firstderivatives.com](http://www.firstderivatives.com).