

# Checkit

## Smarter operations management

Checkit has emerged from a period of corporate activity as a pure-play business focused on driving the adoption of its connected SaaS software, in particular its workflow management application. Checkit's software is designed to enable smarter operations management, exploiting Internet of Things technology to connect people, processes and assets. With a proven ability to sign up blue-chip customers across a number of target verticals, growth in recurring revenues and an expanding customer base should help to close the valuation discount to software peers.

Year end	Revenue (£m)	PBT* (£m)	EPS* (p)	DPS (p)	P/E (x)	EV/sales (x)
01/19	1.0	(4.4)	(2.5)	0.0	N/A	N/A
01/20	9.8	(5.1)	(3.1)	0.0	N/A	1.8
01/21e	13.0	(3.8)	(6.0)	0.0	N/A	1.4
01/22e	14.1	(3.2)	(5.2)	0.0	N/A	1.3

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

## Checkit emerges from restructuring programme

After a period of intense corporate activity, including the acquisition of Next Control Systems and the disposal of Bulgin and EET, Checkit is now fully focused on the provision of smarter operations management software and services. Its Checkit Connect division offers SaaS software for workflow management, automated monitoring and buildings management, while Checkit BEMS designs, installs and maintains building energy management systems. Management is restructuring the business to reflect the new organisational structure and its SaaS software strategy, with growth of the workflow management software business a particular focus.

## Recurring revenue focus

Checkit Connect is the driver of our revenue growth forecasts, based on new and upsell business of a recurring nature. Checkit is aiming to reach EBITDA break-even on a monthly basis during FY23. With net cash of £12.4m at the end of October, Checkit has sufficient funding to support its growth strategy. In our view, growth in recurring revenues will be the most important KPI to track in the short to medium term, as this will evidence adoption of Checkit's technology.

## Valuation: SaaS potential not recognised

On an EV/sales multiple of 1.4x in FY21e, Checkit trades at a significant discount to the UK software sector (5.1x forward sales). On a sum-of-the-parts basis attributing EV/sales multiples that better reflect the performance and prospects for each division, we estimate that the stock is significantly undervalued. For example, using a 4x FY21e multiple for Checkit Connect and 1x for Checkit BEMS would result in a valuation of 72p per share. Key triggers to help Checkit attract a higher multiple include evidence that customers are signing up to use Connect software, existing customers are expanding their usage and, to a lesser extent, that non-recurring revenues are being converted to subscription services.

Initiation of coverage

Software & comp services

1 December 2020

**Price** **53.0p**  
**Market cap** **£33m**

Net cash (£m) at end Q321	12.4
Shares in issue	62.0m
Free float	56.2%
Code	CKT
Primary exchange	AIM
Secondary exchange	N/A

### Share price performance



%	1m	3m	12m
Abs	19.1	15.2	20.5
Rel (local)	5.9	8.7	38.3
52-week high/low		53.5p	24.0p

### Business description

Checkit optimises the performance of people, processes and physical assets with connected digital solutions. The company is headquartered in Cambridge, UK and has its operations centre in Fleet, UK.

### Next events

FY21 trading update	February 2021
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## Investment summary

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### Company description: Optimising performance, everywhere

Checkit provides software and services that optimise the performance of people, processes and physical assets in large and complex organisations. Operations are split across two divisions: Checkit Connect (53% of H121 revenue) and Checkit BEMS (47%). Checkit Connect's SaaS software is designed to connect people, processes and places in real time via workflow management, automated monitoring and buildings management applications. Checkit BEMS designs, installs and maintains building energy management systems. The group is focused on growing the workflow management software business, which has already been adopted by blue-chip customers and is designed to support the needs of deskless workers who make up 80% of the workforce but are underserved by the enterprise software market. The group is also keen to shift some non-recurring services onto a subscription basis to provide more visibility and improve profitability. The group is in the midst of a restructuring programme to optimise the operational structure post the Elektron disposal and to reflect the evolution from a hardware business to a SaaS software business.

### Financials: Growth from recurring revenues

Our forecasts factor in growth in monthly recurring revenues due to increasing adoption of Connect software and the conversion of project or one-off work to a subscription basis, with BEMS revenue relatively flat. We assume a limited increase in the cost base, as the restructuring enables the reallocation of resource to support the new business model. Our forecasts assume revenue growth of 32% in FY21 and 9% in FY22, with recurring revenue increasing from 30.5% in FY20 (pro forma) to 46.1% in FY22. Checkit is targeting break-even EBITDA on a monthly basis in FY23. With cash of £12.4m at the end of October, the group is well-funded to support growth until cash flow break-even is achieved.

### Valuation: Not reflective of SaaS potential

Trading on an EV/sales multiple of 1.4x in FY21e, Checkit trades at a significant discount to the UK software sector (5.1x forward sales). In our view, the value of Checkit Connect is masked by the value attributed to Checkit BEMS (flat growth, non-recurring revenues). On a sum-of-the-parts basis, attributing EV/sales multiples that better reflect the performance and prospects for each division, we estimate that the stock is significantly undervalued. For example, using a 4x FY21e multiple for Checkit Connect and 1x for Checkit BEMS would result in a valuation of 72p per share. Key triggers that would help Checkit attract a higher multiple include evidence that customers are signing up to use Connect software, existing customers are expanding their usage and, to a lesser extent, that non-recurring revenues are being converted to subscription services.

### Sensitivities: Ability to scale

The main factors that will influence our estimates and the share price include the group's ability to scale, the dependence on a number of large customers, competition and shareholder concentration.

## Company description: Connected workplace software

Checkit designs, builds and operates cloud-based services and devices that connect people, processes and places in real time. This includes software for several workplace applications: workflow management for remote workers, automated sensors and buildings management.

## Company background

Checkit has evolved out of the company previously called Elektron Technology (Elektron). In May 2019, Elektron acquired Next Control Systems (a provider of high-end, service-based temperature monitoring for healthcare and life sciences in the UK as well as data-related buildings energy management system (BEMS) services) for cash of £10.5m and renamed it Checkit UK. In July 2019, Elektron announced that it was selling Elektron Technology UK, which included the Bulgin business, for a cash consideration of £105m. The deal completed in September 2019. The disposal left two businesses within Elektron: Checkit software and Elektron Eye Technology (EET). Of the net proceeds of £94m, Elektron returned £81m to shareholders by a tender offer for shares (two shares for every three held) at 65p per share. This reduced the number of shares outstanding from 186m to 62m. On 2 October 2019, Elektron changed its name to Checkit. In July 2020, Checkit agreed the sale of EET assets for total proceeds of £0.8m. These will be received monthly in cash over a 24-month period.

Financials in this note are for the Checkit business, with Bulgin and EET treated as discontinued operations. The remaining business within Checkit comprises Checkit UK and Checkit Europe.

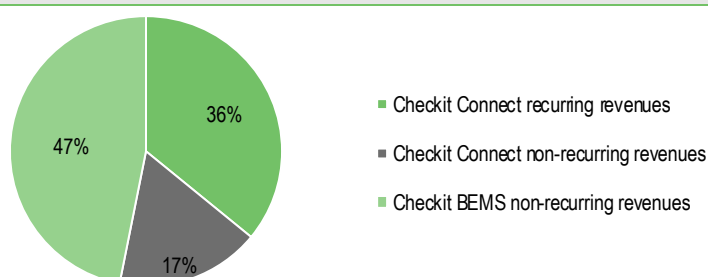
## Business description

The group operates through two divisions: Checkit Connect and Checkit BEMS, with headquarters and product development in Cambridge and its operations centre in Fleet, Hampshire. The group has c 170 employees in the UK, with c 100 involved in providing the Checkit service to customers, c 30 involved in product development and c 15 in sales and marketing.

- **Checkit Connect:** this is the home of the three software solutions – Connected Workflow Management (CWM), Connected Automated Monitoring (CAM) and Connected Building Management (CBM). The software is licensed on a subscription basis and is available via the cloud. In FY20, there were 58,000 registered users of Checkit software, 26,706 checklists had been created with the software and 827,406 checks undertaken within those checklists. In total, Checkit software managed 6.5 billion data points in the year.
- **Checkit BEMS:** this division undertakes installation and maintenance of buildings energy management systems.

The chart below shows the revenue split between the two divisions in H121 (the most recently reported period) and the contribution from recurring versus non-recurring revenues. Profit is not disclosed at the divisional level.

**Exhibit 1: H121 revenue by division, £6.4m in total**



Source: Checkit

## **Group strategy: Grow the workflow management SaaS business**

The group's goal is to be the global leader in providing solutions that empower large, multi-site organisations to optimise performance. Its software tracks the daily activity of frontline workers, connects workflows and provides actionable insight.

Post the disposal of Bulgin and EET, the main focus of the group is to build the connected workflow management business. At the same time, the company is keen to grow the proportion of recurring revenues and expects to do this by converting business to subscription licensing and/or services where possible.

### **Immediate priorities**

- Integrate Checkit UK and successfully separate from Bulgin (Checkit has been using Bulgin for certain back office services).
- Increase the profitability of Checkit UK.
- Continue to invest in product development.
- Increase the focus on the healthcare sector.
- Target EBITDA profitability in the medium term.

While the BEMS business has lower growth prospects and typically generates non-recurring revenues, management views this business as a useful way to acquire customers for the Connect division and notes that it is profitable and cash generative.

### **Customer focus shifts to reflect the 'new normal'**

The group is focused on five main verticals which meet the criteria of having multi-site operations with a high number of non-desk-based workers. The company targets tier one and tier two customers. Tier one customers comprise large national and multinational companies and make up around half of the market opportunity (according to the company). Tier two customers are smaller (typically turnover <£1bn), but still multi-site, and have the appetite and ability to pay for the solution.

Verticals and selected customers include:

- Healthcare: NHS.
- Food retail: Waitrose.
- Large franchisors: BP.
- Facilities management: Sodexo.
- Pharmaceutical: AstraZeneca.

The group has shifted its focus away from hospitality and leisure due to COVID-19, but still has customers in this area (Dishoom, Tenpin, Center Parcs, Merlin).

### **Intention to expand geographically**

Geographically, business is predominantly generated in the UK (97% in H121). The group is keen to expand internationally and had started building a presence in the US pre-COVID. However, the decision was taken to wind this down during the pandemic and revisit when the outlook is clearer. The group is preparing products and services for international expansion, developing support services, language packs, partners and hardware product approvals. Accreditations have been achieved for the US market and are pending in Australia and New Zealand.

## **Management**

The executive board consists of Executive Chairman Keith Daley (bio on page 19), CFO Aylsa Muir (bio on page 19) and Company Secretary Sara Coate. Keith was the chairman of Elektron for 15

years and is a 23% shareholder of Checkit having recently increased his stake. Non-executive directors include John Wilson (who was CEO of Elektron and led the MBO of Bulgin last year) and Rachel Neaman. The board is supported by the executive leadership team, which includes the Checkit Connect COO, chief product officer, chief technology officer, chief HR officer, commercial director, strategic projects director and BEMS managing director. The company is currently seeking a chief commercial officer, with sales and marketing leadership provided by board members in the meantime. This is the highest priority recruitment given the desire to build on the blue-chip client base, attract new customers and reinvigorate sales post-COVID-19.

## Market background

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With its workflow management software, the company is focused on connecting and empowering deskless mobile workers who are not able to use desktop software in their day-to-day working environment. Roughly 80% of the global workforce (2.7 billion people) does not work at a desk, instead working on the front line in sectors such as retail, hospitality, facilities management, manufacturing, agriculture and leisure. These workers are not able to make use of the typical software packages that office workers rely on such as ERP, CRM, HCM<sup>1</sup>, accounting, communications or productivity software. This can make it difficult for management to track the performance of staff in remote locations and for those remote workers to feel engaged with the companies they work for. It also makes it more complicated to ensure company procedures and policies are followed, which can have implications for a company's brand.

Of the current enterprise software market (estimated at \$195bn in 2020, source: Statista), only a small proportion is designed for this group of workers. Venture capital investment firm Emergence Capital has estimated that only 1% of software venture funding is focused on this type of software. The large enterprise software vendors may add some mobile functionality to their applications, but have not developed applications that are specifically focused on the workflows of deskless workers. Software companies tend to develop applications for specific processes when there is a high volume of similar types of transactions, eg supply chain software for purchasing, CRM software for customer interaction. Checkit's sweet spot is supporting workers who perform a combination of routine tasks and infrequent but important tasks where the volume and variety of tasks is such that it is difficult to build a targeted application. The software that has been developed in this market has come from smaller private companies, typically with a vertical focus.

In Exhibit 2, we detail a number of competitors to CWM, all of which are private companies. The restaurant, bar and retail sectors have been significantly affected by the COVID-19 pandemic, with the majority of front-of-house staff unable to work during the various lockdowns (those helping with takeaway/click & collect/delivery services being the exception). This will have acted as a drag on new business for several of the companies listed below and could also have increased churn. This also explains why Checkit has shifted its focus away from these sectors.

Looking at Exhibit 2, Checkit views its competitive advantages as having the ability to scale, sensor integration, collaboration and analytics strength, and the growing number of prebuilt processes and dashboards.

In the temperature monitoring software market, fellow cloud-based software providers include Contronics (multiple sensor types for the healthcare market), Kelsius (temperature monitoring for food services and healthcare) and Monnit (wide variety of sensors including power and motion as well as environmental across a wide range of sectors). Checkit is the only provider in this market that offers integration with workflow management software.

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<sup>1</sup> ERP: enterprise resource planning, CRM: customer relationship management, HCM: human capital management.

**Exhibit 2: Selected competitors**

Company	HQ	Customers	Users	Sectors served	Sensors	Funding	Comment
GoSpotCheck	US	>225 brands in 70 countries including Beam Suntory, Compass Group, Diageo, Under Armour	400k	Beer, wine & spirits; retail; consumer goods; restaurants; facilities management; healthcare	Temperature	\$72m	Recently cut workforce by c 20% to 100 as customer base hit by COVID-19
iAuditor	Australia	26k in 85 countries including BHP Billiton, Burger King, IKEA, Sofitel	500k	Construction, hospitality, manufacturing, retail, transport & logistics, facilities management	Temperature (soon)	\$149m	Health & safety focused. FY19 revenues A\$28.3m; ARR +85% y-o-y in April 2020. Valued at A\$1.3bn in April 2020 funding round
Jolt	US	Includes Chick-fil-A, McDonalds, Burger King, Marriott	N/A	Restaurants	Temperature		>1.7bn tasks completed using the software to date
Trail	UK	Includes Wagamama, Bill's, Brewdog	N/A	Hospitality, leisure	No	£2m	
UpKeep	US	>1,000 including Yamaha, Siemens, Unilever	400k (most use free version)	Facilities management (maintenance focused)	Temperature	\$49m	>10m work orders created on the app
YOOBIC	UK	>150 brands including Domino's Pizza, Kate Spade, Puma	N/A	Retail, restaurants, logistics, manufacturing, fashion, beauty, grocery, pharmaceutical	No	\$30m	Retail focused. Task management, staff communication, mobile learning.
Zenput	US	>500 in 35 countries including Chipotle, Five Guys, 7-Eleven	40k locations	Restaurants, convenience stores, grocery	Temperature	\$20m	Focus on franchise businesses.

Source: Company websites

## Checkit Connect

The Checkit Connect division includes all three Checkit software solutions. The division was created to standardise and optimise the customer experience across all recurring services and aims to deliver connected products as a service to build long-term relationships and recurring revenue streams.

The goal of the software is to support smarter operations management – to enable companies to provide a better customer experience and improved efficiency while meeting all compliance requirements. Checkit currently offers three software solutions but, over time, expects to combine them into one. We review each solution in more detail, noting that the company's focus is first and foremost on growing the CWM business.

### Connected Workflow Management (CWM)

The goal of this solution is to create effective workforces, with staff doing the right thing, at the right time and in the right place. The software has been developed to guide and track the actions of deskless workers and to give managers the ability to oversee and respond in real time.

Currently, front-line workers may use pen and paper to complete checklists, spreadsheets, one-off apps, legacy solutions or simple task management systems. Often, these methods mean information is not provided to management on a timely basis, work may not be performed in a consistent manner, it is difficult to get an overview of how different sites and teams are performing, and staff can feel disconnected from the rest of the company. Checkit's CWM software has been developed to address these problems.

### App provides benefits to workers and management alike

The app is designed to be used on any Android device, and it will be possible to use it on any device once the browser-based version of the software is launched. Exhibit 3 below shows the key

features of the software and the benefits it provides and Exhibit 4 shows several screen shots of the app.

### Exhibit 3: Workflow management app features and benefits

#### Features

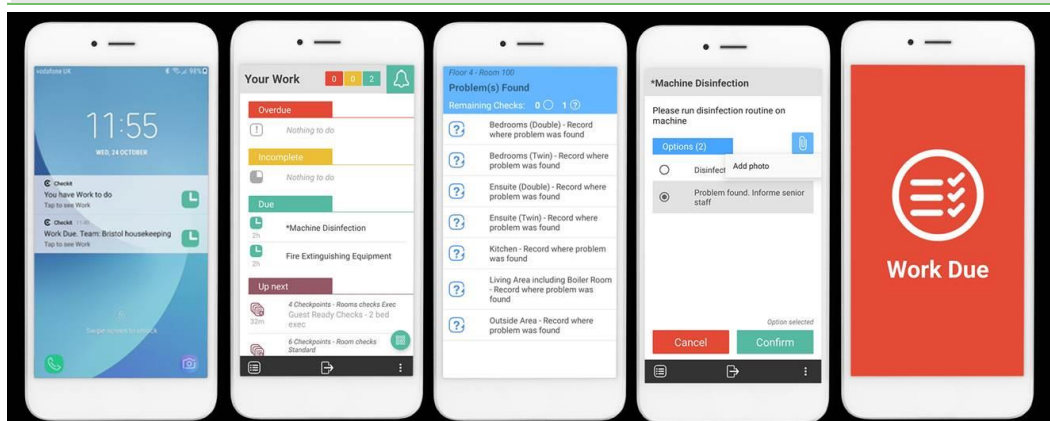
- Easy-to-use, collaborative checklists
- Provides information and instructions where they are needed, including documents such as policies, instruction manuals
- Provides photo upload facility, eg to provide evidence for returns or customer complaints
- Can read QR or barcodes so that actions can be triggered by the worker's location, eg a QR code in a hotel room or on a piece of equipment
- Provides alerts so that a problem can be escalated in real time
- Takes manual inputs from workers as well as automated inputs from sensors
- Online and offline working
- Smart delay-based checks for time-controlled processes

#### Benefits

- Ensures adoption and compliance with company procedures
- Provides consistency across sites
- Allows teams to work collaboratively ie multiple team members can work together on one checklist, supervisors can have a real-time view of progress
- Enables timely resolution of problems
- Reduces wastage
- Allows individual/team/site performance to be monitored

Source: Checkit, Edison Investment Research

### Exhibit 4: Examples of app functionality



Source: Checkit

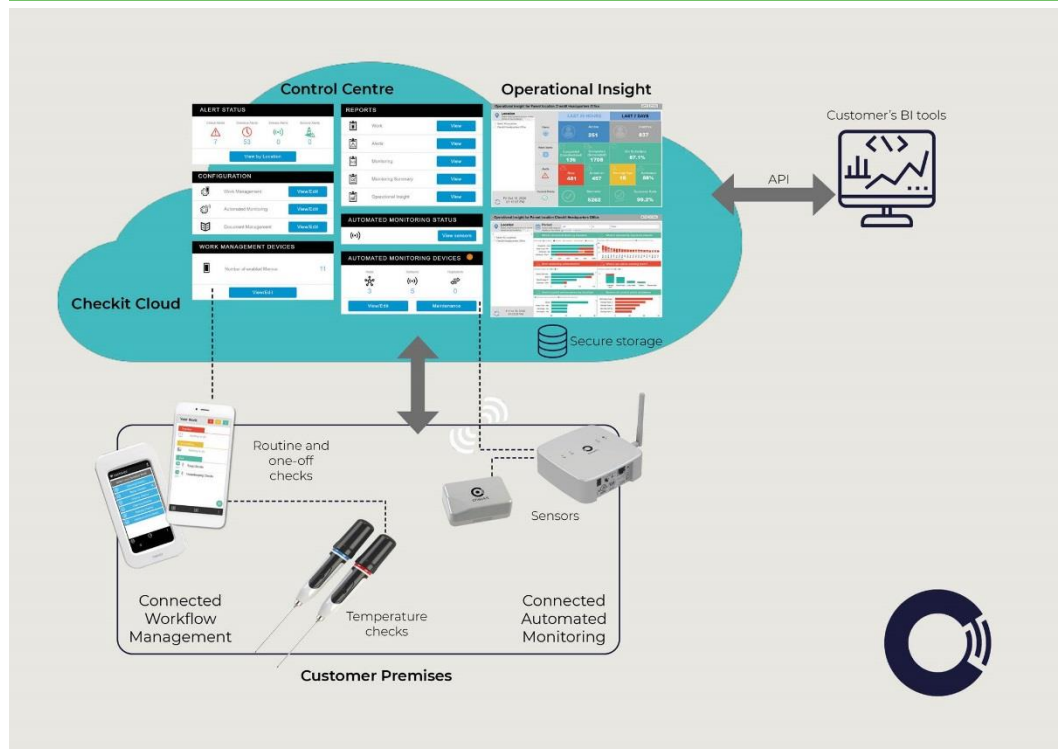
## Bringing insight to management

The diagram below shows the configuration of Checkit's platform. Workflows and data are all managed in the control centre, with data stored in the cloud. New checklists are created in the control centre using simple building blocks and tools – no coding is required. These are then allocated to the relevant sites and roles.

The workflow management app communicates with the control centre, allowing management to review worker activity across the company's entire estate. Data can be tracked by site, team, individual or process. Checkit provides some standard KPIs and dashboards to give an overview of performance and customers can also feed data from the control centre into their own business intelligence (BI) systems. Checkit provides an open API<sup>2</sup> to business intelligence tools such as Microsoft Power BI.

<sup>2</sup> Application programming interface



**Exhibit 5: Checkit platform**


Source: Checkit

### Case study – food-to-go for BP

In October 2019, Checkit announced that it had signed a contract with BP to supply its CWM and CAM software for use in 325 company-owned locations in the UK over a three-year period. Discussions are ongoing regarding the use of CWM in franchise locations in the UK and locations outside the UK. One use for the CWM software is to manage the food-to-go counters within the stores. These typically contain items such as sausage rolls and pies, which must be kept warm within a specific temperature range, and can only remain on the shelves for a limited amount of time. BP has two challenges: ensuring that products are safe to eat and that the right quantities of product are available at the right time (stock outs are as much a problem as food wastage). This encompasses several processes: food cooking, hot hold, food wastage, food safety and product expiry. BP has developed checklists to address the challenges:

- **Scheduled and unscheduled checks** – checking quantities left on the shelves, recording quantities added to the shelves.
- **Time-delayed checks** for hot hold – to ensure nothing is held for too long.
- **Environmental health officer (EHO) ready records** – in case of scheduled or unscheduled visits.
- **Temperature checks** – to ensure the temperature inside the products is in the correct range.
- **Integration with automated monitoring** (hot hold wireless sensors) – sensors placed within cabinets that monitor temperature continuously.
- **Date expiry checks** – so no out-of-date food remains on the shelves.
- **Production planning business intelligence** – using data on product demand to plan the quantity of products required throughout the day in order to maximise sales and minimise wastage.



## **Connected Automated Monitoring (CAM)**

CAM provides asset protection and 24/7 compliance via automated temperature monitoring. Wireless monitoring solutions collect continuous data from multiple sites, enabling trend analysis and live alerts. Automated Monitoring can be used for general applications including food safety, general medical and environmental temperature checks. Automated Monitoring + (formerly Tutela from Next Control Systems) meets the exacting standards of healthcare, pharmaceutical, life science and biotech research, providing temperature control and assurance for samples, reagents and drugs. Customers typically operate in a demanding regulatory regime where there is financial risk to the stock value and potential legal liabilities if any harm arises from improper storage of products/samples.

The solution provides specialist wireless sensors, cloud data recording, compliance process management, manned alert management, calibration and onsite QA processes.

### **Case study – helping a hospital trust to store drugs safely**

Checkit has worked with the Birmingham and Solihull Mental Health NHS Foundation Trust's pharmacy team since 2018. The trust has more than 90 medical fridges across more than 40 sites, storing medicines such as vaccines and insulin as well as controlled drugs. The manual, paper-based system for checking the temperature of fridges was vulnerable to gaps when busy clinical staff did not have time to undertake the checks. This resulted in a costly fridge failure and a Care Quality Commission (CQC) report highlighting the need for a better system. The trust signed up to use CAM to automate the process. The system collects real-time temperature readings from sensors in all medicines fridges across the trust and presents the data on a central dashboard. This helps management pinpoint variance, errors and potential technical issues, and the trust now has evidence of compliance and is inspection-ready at all times.

Checkit is currently conducting tailored pilots within specific healthcare settings to demonstrate the value of CWM alongside the use of CAM. CWM will not be targeted at clinical applications, but instead is focused on improving operational efficiency within hospitals, for example ensuring patients are provided meals on time or tracking samples from hospital to lab. The company is also developing integration with CWM for alert handling, ie an alert from CAM would trigger a workflow within the CWM app. The company has been moving from single, ad hoc contracts with individual hospital departments to contracts covering entire hospitals and trusts, and this is a key area of focus for the business.

## **Connected Building Management (CBM)**

The software has been designed to support the creation of efficient, low-carbon buildings (this was formerly the software sold under the Axon brand). The platform integrates information from disparate building energy management systems including energy metering, lighting, environment and occupancy so that the customer can run multiple buildings at maximum efficiency, keeping costs down and reducing CO<sub>2</sub> emissions across the board.

The service is more people-based than the other solutions – Checkit has a call centre that provides a monitoring service so that when an alert is triggered, someone calls the customer. The service is usually set up as an annual fixed fee contract. The company is currently working to develop automatic alerts from the software.

## Product development

The division's product development plans are focused on the following areas:

- **Innovating and responding to customer feedback in areas of core strength and differentiation:** the division is soon to launch a browser-based version of the software which will expand the use of the software to iOS devices and PCs.
- **Creating value from data:** the platform features a data lake and data pipelines that funnel and process data from CWM and sensors. Using this, Checkit has developed a recommendation engine that analyses data from CWM, identifies missed sales opportunities and recommends a product mix to optimise availability for future periods. This is already being used by a major retailer.
- **Improving efficiencies for customer and internal benefit:** the company has completed the first phase of making the CAM solution installable and manageable through set-up wizards that can be used on a mobile device, resulting in lower support costs, more self-serve installation, and greater potential for third-party installation and maintenance of Checkit hardware globally.

## Business model

### Recurring revenue streams

The software is sold on a subscription basis, with a minimum contract length of three years. Previously, some contracts had been sold with a minimum contract length of one year, and those customers are now on rolling contracts that terminate with 12 months' notice. Customers are required to pay yearly in advance. Licences are usually based on a combination of users and sites, with top-ups as users exceed the maximum allowed per site and additional licences required for new locations. Under its 'Peace of Mind' service, customers can pay one subscription fee to include software, installation, support and maintenance of software and hardware, and provision of hardware.

### Non-recurring revenue streams

Non-recurring work includes installation of sensors (first-time and additional), small works and maintenance of equipment, and callouts for engineers. Work tends to be charged on a day rate basis and is mostly undertaken on site. The division is developing self-service installation of sensors and converting some calibration contracts to annual contracts that include a set number of calibrations per year. This category of revenue is likely to decline as a result of self-service installation and the incorporation of all changes into recurring revenue.

### Hardware: Customer chooses payment mechanism

Customers can use Checkit-sourced hardware (designed by Checkit and manufactured by a third party) or their own hardware (customers are increasingly using their own smartphones or tablet devices). Checkit-sourced hardware such as the Memo (a rugged handheld device for dedicated use with CWM), a Bluetooth probe for temperature checks and sensors, can be purchased outright or paid for on a subscription basis.

## Checkit BEMS

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This business comprises the renamed Next Controls brand acquired as part of the Next Control Systems acquisition. Checkit BEMS designs, installs and maintains building energy management systems for new and existing customers. The managing director of BEMS is responsible for running the team of skilled engineers that deliver the BEMS services. The division has a wide customer base, with Waitrose/John Lewis the largest customer. Revenues are non-recurring in nature,

although as the business sometimes signs annual maintenance contracts, a proportion of revenues can be defined as repeatable rather than recurring.

## Restructuring programme well underway

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The business underwent significant change in CY19, with the acquisition of Next Control Systems in May followed by the sale of Bulgin in September, the change of company name from Elektron Technology to Checkit in October and the share buyback in November. This presented the company with two operational challenges:

1. **Demerger:** untangle Bulgin, EET and Checkit back office processes and create an infrastructure for Checkit that supports its long-term aim to grow the SaaS software business.
2. **Integration:** bring the original Checkit and acquired Next Control Systems operations together to create a coherent business with a common goal.

As part of the demerger process, Bulgin continued to provide back office services to Checkit according to the Transitional Services Agreement (TSA). This was scheduled to terminate at the end of September 2020. While Checkit has set up its own back office processes to replace those provided by Bulgin, the agreement has been extended to the end of December 2020 to allow Bulgin to finalise its own new premises (delayed due to COVID-19 restrictions).

At a more strategic level, management is keen to reshape the business to ensure it is built for scale. As the company is shifting its focus from a hardware-based business to a SaaS software business with international ambitions, the structure of the company needs to reflect the requirements of a SaaS business.

The key features of SaaS software are as follows:

- **Multi-tenant:** all customers use the same software solution. It is not customised but can be personalised and configured by individual users. The benefit of this to the software developer is that only one version of the software needs to be maintained and software upgrades can be undertaken on an ad hoc basis. Each upgrade is then made available to all users at the same time. For the customer, this means more frequent small upgrades rather than the disruption of larger upgrade projects.
- **Cloud-based:** the software is accessed via browsers or mobile apps with all data stored in the cloud. This means users can access the software from anywhere, a key benefit for deskless workers and those working from home during the current pandemic.
- **Subscription licensing:** rather than buying a perpetual licence upfront with an ongoing maintenance contract, the customer signs up to use the software for a minimum period (in the case of Checkit, typically three years) and can choose to stop using the software at any time after this period (in the case of Checkit following three months' notice). The subscription fee includes the provision of upgrades and support on an ongoing basis. While SaaS companies highlight the high recurring revenues this business model provides (typically 80%+), this also requires the provision of high levels of ongoing customer service to ensure customer retention. For companies used to the perpetual licence model, this can represent a significant mind shift and the customer service ethos needs to run through the entire company.
- **Operational rather than capital cost for customers:** as customers do not need to sign up for large perpetual licences and potentially complex installation projects, the decision to use SaaS software shifts from being a capital expenditure project to being operational expenditure. Small numbers of employees can sign up to trial software before extending to a wider base if deemed suitable. This can make it easier to sign up new customers, although it also reduces the barriers to entry for competitors.

Successful SaaS software businesses typically focus on growing the number of subscribers as fast as possible, which requires a significant investment in sales and marketing headcount. At the same time, product development is a key investment area, so that software remains competitive and adapts to customer demand for new functionality.

Management is currently engaged in restructuring Checkit so that it can take advantage of the opportunity in the workflow management space – ensuring that it has a sales and marketing function with SaaS experience, a product development team focused on evolving the offering and a customer success function to ensure high levels of customer retention.

## COVID-19 impact

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Once COVID-19 lockdown restrictions came into force in the UK from March 2020, the business transitioned to working from home where possible (the software is cloud-based so can be supported remotely). Restrictions made it difficult to deliver certain BEMS projects which involved being on site. It was also more difficult to develop new business without face-to-face meetings. The company took advantage of the furlough scheme and asked remaining staff members to take a salary cut. The chairman agreed to waive his salary and remaining board members reduced their salaries by up to 36%. Salaries were reinstated to their normal levels from 1 July. Some customers (generating revenue of c £15k per month) requested service and payment holidays which were granted. We would expect the most recent lockdown to have less of an impact on the BEMS business than during the first lockdown, as staff are able to go onsite and customer facilities continue to operate.

The company has shifted its addressable market focus to emphasise those parts of the economy that are less affected by COVID-19 restrictions. This includes the healthcare and food-to-go sectors. Checkit donated temperature monitoring equipment to the NHS Nightingale hospitals, which should improve awareness of its technology, and the requirement for cold storage of vaccines could provide a further opportunity. At the same time, the company has reduced its focus on the hospitality and leisure industries.

The company also noted that the changes to the way people are having to work during the pandemic are likely to drive a greater need for the type of software Checkit provides. As those that can work from home, the greater dispersal of the workforce makes it harder to ensure company policies and procedures are followed and to get an overview of performance. At the same time, companies are under cash flow and cost pressure and need to increasingly focus on risk control and compliance to ensure the safety of their workforce and customer base.

## Sensitivities

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Our forecasts and the share price will be sensitive to the following factors:

- **Ability to scale:** the pace at which the company grows the SaaS business may differ from our forecasts. Our forecasts assume that Checkit is able to grow the SaaS-software part of the business without substantially increasing its cost base – if this is not the case, it would push out the timing of cash break-even.
- **Competition:** currently the closest competitors to Checkit are privately owned businesses, many of which are likely to be loss-making. If larger, better-funded software companies decide to target this space, Checkit may struggle to compete.
- **Reliance on key customers:** Checkit has several customers that contribute a material proportion of revenue. The loss of one of these customers could have a significant impact on revenue and profitability.

- **Shareholder concentration:** executive chairman Keith Daley owns 23% and D&A Income owns 19% of the company.

## Financials

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### Income statement

The company discloses revenue by division and also discloses the split between recurring and non-recurring revenues in each division. Historic financials and forecasts only include continuing operations; EET and Bulgin are accounted for in discontinued operations. The company disclosed pro forma revenues for Checkit Connect and Checkit BEMS for H120 and FY20, which we have included in Exhibit 5 for reference. Note that the company does not disclose gross margin by division; these are our estimates.

### Checkit Connect

Connect generated 53% of H121 revenue, up from 45% in H220. As the BEMS business recovered in Q3, this dropped to 47% in Q321. Revenue growth of 17% y-o-y in H121 was from a combination of price increases and the roll-out to new sites for a major customer, and we expect this roll-out to continue into H221. Revenue growth of 7% for Q321 was the result of 30% growth in recurring revenues and a 40% decline in non-recurring revenues.

68% of H121 Connect revenue was recurring and this increased to 75% in Q321; it comprised subscription licence revenue for the three software solutions. The company intends to convert some of the non-recurring business to subscription-type contracts, so we forecast growth in recurring revenues while non-recurring revenues decline. Overall, we forecast 9.6% growth in Checkit Connect revenue in FY21 (versus pro forma FY20 revenue) and 12.7% in FY22.

We estimate that the division generates a gross margin of c 45% (a blend of higher SaaS margins and lower time-and-materials-based margins for the non-recurring work) and use this in our forecasts. We note that in H121, both divisions benefited from the furlough scheme which helped offset the effect of lower revenues.

### Checkit BEMS

Revenues from this division are non-recurring, consisting of projects to install and maintain buildings energy management systems. H121 revenue (-9% y-o-y compared to pro forma H120) was affected by the first lockdown, particularly in Q2. For H221, we expect an increase h-o-h, as although it will include the second lockdown, this is likely to be of shorter duration and less onerous. A revenue decline of 5% y-o-y for Q321 reflected the return to near-normal working conditions (revenues were up 38% on a quarter-on-quarter basis). Over the forecast period, we do not expect material revenue growth for BEMS. We estimate that divisional gross margin is just over 25% - management intends to improve this margin through better pricing of contracts and other efficiencies.

We forecast operating expenses at a group level. Excluding depreciation, operating costs declined to £3.4m in H121 compared to £3.8m in H220, helped by the furlough scheme and salary cuts. The company is targeting break-even EBITDA on a monthly basis during FY23.

The company incurred exceptional costs of £0.5m in H121, related to the organisational restructure, and we forecast an additional £0.3m in H221 and £0.4m in FY22.

As the company has tax losses carried forward during our forecast period, we assume a tax rate of zero.

**Exhibit 6: Half-yearly and yearly forecasts by division**

Revenue (£m)	H120 PF	H120 A	H220	H121	H221e	H122e	H222e	FY20PF	FY20 A	FY21e	FY22e
Checkit Connect	2.9	1.7	3.0	3.4	3.1	3.5	3.8	5.9	4.7	6.5	7.3
Recurring	1.9	1.2	2.0	2.3	2.7	3.1	3.4	3.9	3.2	5.0	6.5
Non-recurring	1.0	0.5	1.0	1.1	0.4	0.4	0.4	2.0	1.5	1.5	0.8
Checkit BEMS - all non-recurring	3.3	1.5	3.6	3.0	3.5	3.4	3.4	6.9	5.1	6.5	6.8
<b>Total revenue</b>	<b>6.2</b>	<b>3.2</b>	<b>6.6</b>	<b>6.4</b>	<b>6.6</b>	<b>6.9</b>	<b>7.2</b>	<b>12.8</b>	<b>9.8</b>	<b>13.0</b>	<b>14.1</b>
Recurring	30.6%	37.5%	30.3%	35.9%	40.6%	44.8%	47.2%	30.5%	32.7%	38.3%	46.1%
Non-recurring	69.4%	62.5%	69.7%	64.1%	59.4%	55.2%	52.8%	69.5%	67.3%	61.7%	53.9%
Revenue growth (y-o-y)											
Checkit Connect				17.2%	2.3%	2.6%	23.8%			9.6%	12.7%
Checkit BEMS				-9.1%	-2.8%	13.3%	-2.9%			-5.8%	4.6%
Total				3.2%	-0.5%	7.7%	9.6%			1.3%	8.6%
Gross profit											
Checkit Connect		0.6	1.2	1.5	1.4	1.6	1.7		1.8	2.9	3.3
Checkit BEMS		0.1	0.7	0.8	1.0	0.9	1.0		0.8	1.7	1.9
<b>Total gross profit</b>		<b>0.7</b>	<b>1.9</b>	<b>2.3</b>	<b>2.3</b>	<b>2.5</b>	<b>2.7</b>		<b>2.6</b>	<b>4.6</b>	<b>5.2</b>
Gross margin											
Checkit Connect		35.0%	40.0%	45.0%	45.0%	45.0%	45.0%		38.2%	45.0%	45.0%
Checkit BEMS		7.0%	19.4%	25.7%	27.7%	27.7%	28.2%		15.8%	26.7%	27.9%
Total gross margin		21.9%	28.8%	35.9%	35.8%	36.4%	37.0%		26.5%	35.8%	36.8%
Operating costs		(1.9)	(3.3)	(3.4)	(4.2)	(3.8)	(3.8)		(5.2)	(7.6)	(7.6)
<b>EBITDA</b>		<b>(1.2)</b>	<b>(1.4)</b>	<b>(1.1)</b>	<b>(1.9)</b>	<b>(1.3)</b>	<b>(1.2)</b>		<b>(2.6)</b>	<b>(3.0)</b>	<b>(2.4)</b>
Depreciation		(0.9)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)		(1.3)	(0.8)	(0.8)
Amortisation		(0.8)	(0.5)	0.0	0.0	0.0	0.0		(1.3)	0.0	0.0
<b>Normalised operating profit</b>		<b>(2.9)</b>	<b>(2.3)</b>	<b>(1.5)</b>	<b>(2.3)</b>	<b>(1.7)</b>	<b>(1.6)</b>		<b>(5.2)</b>	<b>(3.8)</b>	<b>(3.2)</b>
Exceptional items		(0.2)	(11.1)	(0.5)	(0.3)	(0.2)	(0.2)		(11.3)	(0.8)	(0.4)
<b>Reported operating profit</b>		<b>(3.1)</b>	<b>(13.4)</b>	<b>(2.0)</b>	<b>(2.5)</b>	<b>(1.9)</b>	<b>(1.8)</b>		<b>(16.5)</b>	<b>(4.5)</b>	<b>(3.6)</b>

Source: Checkit, Edison Investment Research Note: A = reported, PF = pro forma (includes acquisition for full year), FY21e revenue growth is with respect to FY20 PF revenue.

## Balance sheet and cash flow

Checkit has previously capitalised and amortised a proportion of development spend, but recently decided to expense all development costs in the period incurred. While H121 results included capitalised development costs, we expect the company to reverse this policy for the full year and have treated H121 in this way in the table above. The company spends minimal amounts on tangible fixed assets and has property lease commitments of c £0.5m per year.

As subscription licences are paid for 12 months in advance, the company does not have significant working capital requirements. Non-recurring revenues can result in work-in-progress, with inventory at 46 days' sales outstanding at the end of H121.

Gross/net cash stood at £13.4m at the end of H121 and £12.4m at the end of Q321. We forecast that cash will decline to £10.5m by the end of FY21 and £7.1m by the end of FY22.

## Valuation

With Checkit not expected to hit full year EBITDA profitability within our forecast period, comparison with peer multiples is restricted to EV/sales multiples. The table below shows how Checkit is trading compared to the UK software sector and to the average of 39 US SaaS companies. Very few of the UK group are pure-play SaaS companies, with many in the midst of a shift from perpetual to SaaS-based licensing. Checkit trades at a significant discount, in our view reflecting its current loss-making position and mix of recurring versus non-recurring business. Currently, around half of Checkit's revenues could be considered as SaaS-based (ie Checkit Connect revenues), but we expect this proportion to increase over time as Checkit Connect grows more quickly than Checkit BEMS. Within Checkit Connect, we also expect recurring revenues to increase as a proportion of divisional revenues, which should also be more highly valued.



**Exhibit 7: Peer group multiples**

	EV/sales		Revenue growth (%)	
	CY	NY	CY	NY
<b>Checkit</b>	<b>1.4</b>	<b>1.3</b>	<b>32.3</b>	<b>8.6</b>
UK software - average	5.3	4.6	13.5	14.3
UK software - median	3.7	3.4	6.4	7.4
US SaaS software - average	19.5	15.7	29.1	22.4
US SaaS software - median	17.1	13.9	25.4	22.3
Xero	23.3	19.6	18.6	18.9

Source: Edison Investment Research, Refinitiv (as at 30 November)

Looking at the business on a sum-of-parts basis, in the table below we show the potential valuation on the basis of a range of multiples for each part of the business. Using a multiple of 4x FY21e sales for Checkit Connect (similar to UK software peers and well below larger US SaaS peers) and 1x for Checkit BEMS (reflecting limited growth prospects for this part of the business) would suggest a fair value of 72p per share, well ahead of the current share price of 53p.

**Exhibit 8: Sum-of-parts per share valuation based on EV/sales multiples**

		Checkit Connect multiple (x)							
		1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
<b>Checkit BEMS multiple</b>	<b>0.2</b>	33	43	54	64	74	85	95	106
	<b>0.4</b>	35	45	56	66	77	87	98	108
	<b>0.6</b>	37	47	58	68	79	89	100	110
	<b>0.8</b>	39	49	60	70	81	91	102	112
	<b>1.0</b>	41	51	62	72	83	93	104	114
	<b>1.2</b>	43	53	64	74	85	95	106	116
	<b>1.4</b>	45	56	66	76	87	97	108	118

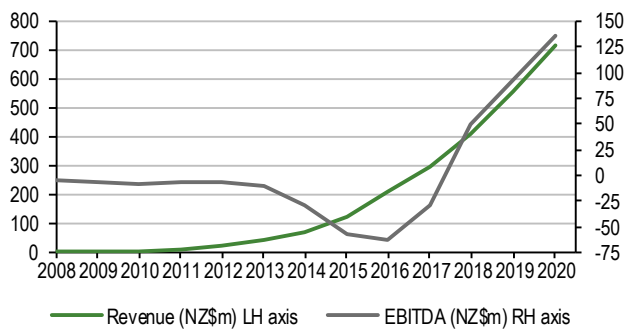
Source: Edison Investment Research

For Checkit to be valued more in line with SaaS software peers, investors will want to see evidence of growth in annualised recurring revenue within Checkit Connect. Some of this could come from shifting current one-off services onto a subscription basis but, more importantly, it should come from signing up new customers for Checkit Connect software. Evidence that new customers are signing up and existing customers are adopting the software on a wider scale would, in our view, be more valuable than reaching break-even. The company is well funded (£12.4m cash on the balance sheet at the end of October), so following the typical SaaS company strategy of investing in product and sales to grow the business rapidly is well within its means. In our view, investors should consider growth in recurring revenues as the key measure of success in the medium term, rather than seeing EBITDA break-even as the main goal.

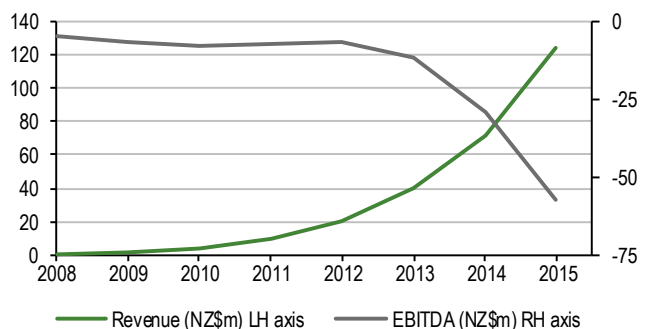
## Typical progression of a successful SaaS business

Listed US SaaS software businesses have much higher levels of revenue generation than Checkit. In our view, this is a function of the venture capital funding environment in the US, where companies are often funded to grow while private, and have already achieved a significant level of customer adoption and revenue by the time they go public. This makes it difficult to track revenue growth from the early stages of a business. Europe does not have such a well-established funding environment and the ecosystem of pure-play SaaS software companies is much smaller (both private and public). To track how a SaaS business might trade from start-up to becoming a well-established player, we have reviewed the performance of Xero, the ASX-listed cloud accounting software developer, as this company came to market when it was pre-revenue.

Xero originally listed on the NZX in May 2007, raising NZ\$15m from the issue of 15m shares at NZ\$1 per share. This gave the company a market cap of NZ\$55m. At this point in time, the company had no revenues. In 2012, the company went for a secondary listing on the ASX and in 2018, it dropped the NZX listing. The company now has a market cap of A\$19.4bn. The charts below show the progression of revenue and EBITDA from FY08 (y/e 31 March 2008) to FY20. In Exhibit 9, we show the years FY08–FY15 so that the earlier numbers can be seen more easily.

**Exhibit 9: Xero revenue and EBITDA, FY08–20**


Source: Xero

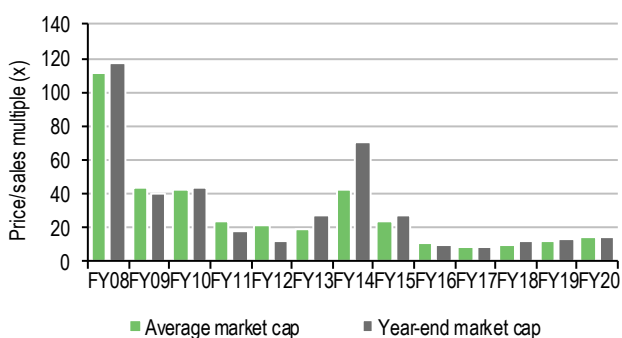
**Exhibit 10: Xero revenue and EBITDA, FY08–15**


Source: Xero

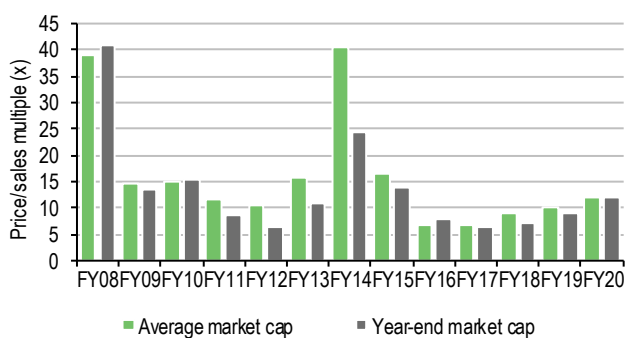
Reported revenue growth tracks the growth in subscriber numbers and annualised contracted monthly revenue (ACMR). 95–98% of annual revenue is generated from subscription licences. The company saw rapid subscriber growth, from 950,000 at the end of FY08 to 6 million by the end of the following year and 157 million by the end of FY13. Over the same period, revenue increased from NZ\$0.4m in FY08 to NZ\$1.1m in FY09 and to NZ\$40m in FY13.

The increasing scale of the business has allowed the company to grow its gross margin from 63.5% in FY13 (the first time that it was reported) to 85.2% in FY20. However, the high level of investment in sales & marketing and R&D to drive the growth of the business means that the company did not reach positive EBITDA until FY18. In FY20, sales & marketing was 44% of sales (down from 55% in FY13) and R&D (before capitalisation and amortisation) was 31% (down from 47% in FY13).

We have charted the price/sales multiple of the company from FY08 to FY20, using both year-end and average market cap for each year, and on a current and forward sales basis. The multiple has never fallen below 6x on either basis and has actually increased again more recently.

**Exhibit 11: Price/sales – current year revenue**


Source: Xero, Refinitiv

**Exhibit 12: Price/sales – forward year revenue**


Source: Xero, Refinitiv

**Exhibit 13: Financial summary**

	£'m	2019	2020	2021e	2022e
Year end 31 January		IFRS	IFRS	IFRS	IFRS
<b>INCOME STATEMENT</b>					
Revenue		1.0	9.8	13.0	14.1
Cost of Sales		(1.0)	(7.2)	(8.3)	(8.9)
Gross Profit		0.0	2.6	4.6	5.2
EBITDA		(2.3)	(2.6)	(3.0)	(2.4)
Normalised operating profit		(4.4)	(5.2)	(3.8)	(3.2)
Amortisation of acquired intangibles		(0.1)	(1.0)	0.0	0.0
Exceptionals		0.0	(10.3)	(0.8)	(0.4)
Share-based payments		0.0	0.0	0.0	0.0
Reported operating profit		(4.5)	(16.5)	(4.5)	(3.6)
Net Interest		0.0	0.1	0.0	0.0
Joint ventures & associates (post tax)		0.0	0.0	0.0	0.0
Exceptionals		0.0	0.0	0.0	0.0
Profit Before Tax (norm)		(4.4)	(5.1)	(3.8)	(3.2)
Profit Before Tax (reported)		(4.5)	(16.4)	(4.5)	(3.6)
Reported tax		0.0	0.7	0.0	0.0
Profit After Tax (norm)		(4.4)	(5.0)	(3.8)	(3.2)
Profit After Tax (reported)		(4.5)	(15.7)	(4.5)	(3.6)
Minority interests		0.0	0.0	0.0	0.0
Discontinued operations		8.6	89.4	0.9	0.0
Net income (normalised)		(4.4)	(5.0)	(3.8)	(3.2)
Net income (reported)		4.1	73.7	(3.6)	(3.6)
Basic average number of shares outstanding (m)		178	161	62	62
EPS - basic normalised (p)		(2.48)	(3.10)	(6.05)	(5.21)
EPS - diluted normalised (p)		(2.48)	(3.10)	(6.05)	(5.21)
EPS - basic reported (p)		2.31	45.78	(5.81)	(5.85)
Dividend (p)		0.00	0.00	0.00	0.00
Revenue growth (%)		N/A	880.0	32.3	8.6
Gross Margin (%)		0.0	26.5	35.8	36.8
EBITDA Margin (%)		-230.0	-26.5	-22.8	-17.3
Normalised Operating Margin		-440.0	-53.1	-28.9	-22.9
<b>BALANCE SHEET</b>					
Fixed Assets		5.0	1.2	1.2	1.2
Intangible Assets		2.9	0.0	0.0	0.0
Tangible Assets		1.7	1.2	1.2	1.2
Investments & other		0.4	0.0	0.0	0.0
Current Assets		19.5	19.4	16.6	13.1
Stocks		4.3	1.7	2.1	2.2
Debtors		5.1	3.4	3.4	3.6
Cash & cash equivalents		10.1	14.3	10.5	7.1
Other		0.0	0.0	0.6	0.2
Current Liabilities		(7.9)	(5.6)	(6.0)	(6.2)
Creditors		(7.6)	(5.1)	(5.5)	(5.7)
Tax and social security		(0.3)	0.0	0.0	0.0
Short term borrowings		0.0	0.0	0.0	0.0
Other		0.0	(0.5)	(0.5)	(0.5)
Long Term Liabilities		(0.3)	(0.7)	(0.7)	(0.7)
Long term borrowings		0.0	0.0	0.0	0.0
Other long term liabilities		(0.3)	(0.7)	(0.7)	(0.7)
Net Assets		16.3	14.3	11.1	7.5
Minority interests		0.0	0.0	0.0	0.0
Shareholders' equity		16.3	14.3	11.1	7.5
<b>CASH FLOW</b>					
Op Cash Flow before WC and tax		(2.3)	(2.6)	(3.0)	(2.4)
Working capital		(0.5)	(1.0)	0.0	(0.2)
Exceptional & other		9.1	4.3	(0.8)	(0.4)
Tax		(0.5)	(0.5)	0.0	0.0
Net operating cash flow		5.8	0.2	(3.7)	(3.0)
Capex		(2.2)	(1.6)	(0.3)	(0.3)
Acquisitions/disposals		1.3	84.2	0.2	0.4
Net interest		0.0	0.1	0.0	0.0
Equity financing		0.0	(77.9)	0.5	0.0
Dividends		0.0	0.0	0.0	0.0
Other		0.0	(0.8)	(0.5)	(0.5)
Net Cash Flow		4.9	4.2	(3.8)	(3.4)
Opening net debt/(cash)		(5.2)	(10.1)	(14.3)	(10.5)
FX		0.0	0.0	0.0	0.0
Other non-cash movements		0.0	0.0	0.0	0.0
Closing net debt/(cash)		(10.1)	(14.3)	(10.5)	(7.1)

Source: Checkit, Edison Investment Research

Contact details	Revenue by geography
Broers Building 21 JJ Thomson Avenue Cambridge UK CB3 0FA +44 1223 643313 www.checkit.net	N/A
Management team	
<b>Executive Chairman: Keith Daley</b> Keith was appointed to the board in 2004 and became chairman in 2008. Originally a corporate banker, Keith is a serial entrepreneur and chairman with a strong sales and marketing focus. He has bought, invested in, managed and sold numerous businesses over the past 37 years. Keith chairs the Checkit board in an executive capacity. He leads on all corporate finance transactions such as acquisitions and disposals.	<b>CFO: Aylsa Muir</b> Appointed as chief financial officer in September 2020 and responsible for finance and operations at Checkit, Aylsa is an experienced leader with a track record of success in the technology sector. Since joining the company, she has taken a key role in optimising the company's operational structure. Before joining Checkit, Aylsa was divisional finance director at IRIS Software Group, having previously served as CFO of the payroll and HR technology provider SD Worx. Before that, she completed her training with the Chartered Institute of Management Accountants and held prominent finance roles at World Flowers and PepsiCo.
Principal shareholders	(%)
Keith Daley	23.3
D&A Income	19.1
Herald Investment Management	7.5
Ruffer LLP	7.3

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