

Claranova

Initiation of coverage

Clear path to profitability

Claranova is a group consisting of three businesses focused on mobile and internet technologies with high growth potential. After a long period of restructuring and refocusing the business, the group is demonstrating strong revenue growth and improving profitability. Claranova also has ample funds to make targeted acquisitions to supplement organic growth.

Year end	Revenue (€m)	EBITDA** (€m)	PBT* (€m)	EPS* (€)	DPS (€)	P/E (x)	EV/EBITDA (x)
06/16	117.4	(11.2)	(17.7)	(0.05)	0.0	N/A	N/A
06/17	130.2	(5.0)	(6.6)	(0.02)	0.0	N/A	N/A
06/18e	161.5+	3.4	2.1	0.01	0.0	136.8	89.5
06/19e	232.0	16.7	13.0	0.02	0.0	40.5	18.2
06/20e	271.9	28.2	24.6	0.04	0.0	20.9	10.8

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

Group strategy: Invest in high-growth digital businesses

After several years of restructuring and refocusing the company, Claranova is now a group composed of three standalone businesses. PlanetArt is a high growth digital photo printing business moving into profitability, with growth from new product launches and international expansion. Avanquest is a consumer software retailer and, via recent acquisitions, is looking to shift its focus from one-off software sales to leverage website traffic. myDevices, an Internet of Things (IoT) platform, provides a simple and effective way for SMEs to deploy IoT applications. This is an early-stage business but it has already signed several key agreements with mobile operators. A high degree of outsourcing reduces capital requirements and provides flexibility for the company to respond to market opportunities in each division.

Moving into profitable growth

Factoring in Avanquest's Canadian acquisitions from 1 July 2018, we forecast 44% group revenue growth for FY19 (24% organic) and 17% for FY20. With FY18 revenues already reported (+24% y-o-y, all organic), we forecast a small positive group EBITDA for FY18 (2.1% margin), rising to a 7.2% margin in FY19e and 10.4% in FY20e. Our forecasts do not reflect material upside from the imminent launch of PlanetArt in India nor any large new customers for myDevices.

Valuation: Upside based on peers and growth outlook

The share price has doubled over the past year, as the restructuring and investment in growth areas has started to pay off, and the share moved up to compartment B on Euronext (for market caps of €150m–€1bn). Reflecting the different business models and minority interests for each division, we use a sum-of-the-parts approach to valuation. Based purely on peer group averages per division, we calculate a fair value of €0.96 per share. However, once multiples are adjusted to reflect our views on the growth and profitability of each division, this increases to €1.08 per share. Milestones that could provide upside to our forecasts include: the successful launch of FreePrints in India; growth of the acquired Adaware business; and new operators signing up to use and resell the myDevices platform.

Software & comp services

10 September 2018

Price **€0.79**

Market cap **€310m**

\$1.15/€1

Net cash (€m) at end-FY18e 32.6

Shares in issue 392.3m

Free float 91%

Code CLA

Primary exchange Euronext Paris

Secondary exchange N/A

Share price performance



% 1m 3m 12m

Abs (8.5) (13.9) 76.1

Rel (local) (4.4) (11.2) 70.7

52-week high/low €1.15 €0.43

Business description

Claranova consists of three businesses focused on mobile and internet technologies: PlanetArt (digital photo printing), Avanquest (consumer software) and myDevices (Internet of Things). It is headquartered in Paris with operations in Europe, the US and Canada.

Next events

FY18 results 2 October 2018

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**Claranova is a research client
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Investment summary

Refocused with a clear path to profitability

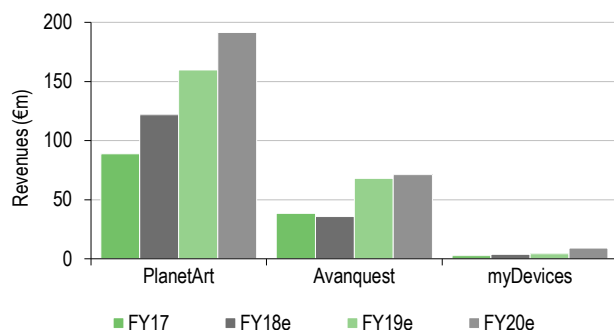
Claranova has been through a long period of restructuring and now comprises three distinct businesses taking advantage of high-growth areas of internet and mobile technology: digital photo printing (PlanetArt), consumer software (Avanquest) and IoT (myDevices). Key investment considerations are as follows:

- Each division is on track to grow revenues and achieve profitability after a period of restructuring, and internal and external investment.
- PlanetArt has an asset-light business model, with all printing outsourced. This gives it significant flexibility to try out new products and new geographical markets without having to make large upfront investments.
- PlanetArt's mobile service, FreePrints, is a market leader in the US and the UK.
- The acquisition of the group of Canadian businesses by the Avanquest division gives access to new methods of distributing and monetising consumer software, reflecting the shift in consumer attitude towards free or freemium products.
- myDevices has secured contracts with two mobile network operators, one in the US and one in China, which should bring its IoT platform to a wide audience.
- The group is well funded. We estimate it had a net cash position of €33m at the end of FY18. Even after paying the cash portion of consideration for the recent acquisition and factoring in the deferred consideration, we forecast net cash of €17m by the end of FY19 rising to €40m by the end of FY20. This should provide funds to support internal investment in growth and/or targeted acquisitions in the PlanetArt and Avanquest divisions.

Financials and valuation

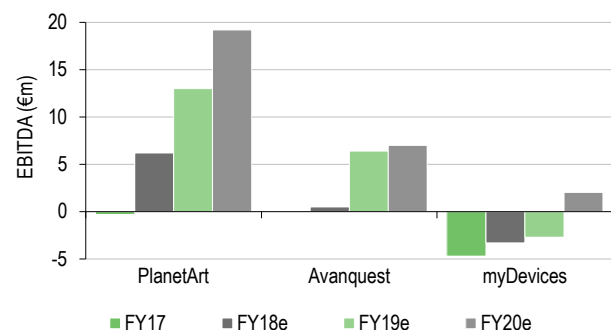
We forecast 44% group revenue growth for FY19 (24% organic) and 17% for FY20. With FY18 revenues already reported (24% growth y-o-y, all organic), we forecast a small positive group EBITDA for FY18 (2.1% margin), rising to a 7.2% margin in FY19e and 10.4% in FY20e. With limited capex requirements, this translates to operating margins of 7.0% in FY19e and 10.2% in FY20e, and a return to positive EPS in FY18e (on a normalised basis).

Exhibit 1: Divisional revenues (€m), FY17–20e



Source: Claranova, Edison Investment Research

Exhibit 2: Divisional EBITDA (€m), FY17–20e



Source: Claranova, Edison Investment Research

Taking into account the differing growth trajectories and profitability of each division, as well as the different levels of minority investment in each, we use a sum-of-the-parts approach to valuation and estimate a fair value of €1.08 per share.

Factors influencing growth and profitability

In addition to the usual competitive pressures and the requirement to keep abreast of technology, our forecasts and the share price are sensitive to the pace and success of geographic expansion for PlanetArt, supplier dependence for PlanetArt's printing service, changes to search engine policies for Avanquest, integration of acquisitions, and the US dollar/euro and sterling/euro exchange rates.

Company description: Online technology investor

Claranova is a group consisting of three businesses focused on mobile and internet technologies with high growth potential. After a long period of restructuring and refocusing the business, the group is demonstrating strong revenue growth and improving profitability.

Background

Claranova was originally founded in 1984 as a consumer software publisher called BVRP Software. In 1996, the company changed its name to Avanquest and listed on Euronext. From 2007 to 2012, it acquired multiple businesses. By 2013, growth had slowed and the company was loss-making – the decision was taken to restructure the business. The company raised €34.5m in equity in June 2015 through the issue of 345m shares at €0.10 per share. Also in FY15, it wrote off €10.7m of debt and converted €2.6m of debt to equity. As part of the restructuring, the company sold off a number of non-core businesses and restructured the remaining businesses into three divisions:

- **PlanetArt** – online and mobile photo printing (76% of FY18 revenues).
- **Avanquest** – online developer and retailer of consumer-focused software. It is the world's largest distributor of third-party software (22% of FY18 revenues).
- **myDevices** – platform to manage connected devices in the cloud (2% of FY18 revenues).

In July 2017, the company organised each division into its own legal entity – this has enabled the company to seek out minority investors in each of the divisions in order to accelerate growth. At the same time, it changed the company name from Avanquest to Claranova.

Group strategy: Monetise internet traffic and connected devices

The company is focused on driving the growth of each business and returning each division to profitability. The **PlanetArt** business is exploiting the popularity of photography on smartphones – its FreePrints business enables consumers to order prints of their photos directly from their smartphones in a simple and cheap fashion. It has shown rapid growth, particularly in the UK and the US, and is about to launch the service in India. Future geographical expansion is likely to be focused on a small number of larger countries, rather than going for wide geographic coverage. The **Avanquest** consumer software business has been streamlined, shifting nearly all distribution online and getting rid of unprofitable lines. The acquisition of a group of Canadian businesses gives the division access to new monetisation tools to exploit the number of visitors to its websites. Finally, the **myDevices** IoT platform is at an early stage of commercialisation. Widespread use of the free Cayenne prototyping tool by more than half a million developers is raising awareness of the platform, and recent contracts signed with mobile network operators demonstrate the first material commercial contracts for the platform.

Management

Claranova is headed up by Pierre Cesarini, CEO. Mr Cesarini joined the company in May 2013 to effect the restructuring of the group. He is supported by the management board: Sébastien Martin (CFO), Roger S Bloxberg (CEO PlanetArt, CEO Avanquest Software (North America)), Todd

Helfstein (president PlanetArt, president Avanquest Software (North America)), Kevin Bromber (head of myDevices), Olivier Thirion (e-commerce business unit director for Avanquest), Phil Schnyder (director of online business development for Avanquest). The group is overseen by a Supervisory Board made up of three members: Caroline Le Bigot, Luisa Munaretto and Jean Loup Rousseau.

PlanetArt – digital photo printing services

PlanetArt offers photo-printing services to consumers via two businesses: FreePrints, which is focused on printing photos using apps on mobile devices (65% of FY17 revenues), and Web-to-print (35% of FY17 revenues), which hosts a number of websites that offer printing services. The two businesses share the same fulfilment infrastructure and marketing teams. The majority of PlanetArt revenues are currently generated in the US (72% in H118) and the UK (21%). The division has emerging revenues in France, Germany, Ireland, Spain and Italy, and is planning to launch the service in India imminently.

FreePrints: Exploiting shift in photography to phones

The FreePrints app was first launched in 2013, and is available for use on Apple and Android mobile devices. Customers are able to print photos that are saved on the mobile device or stored on popular websites such as Facebook, Instagram, Flickr and Dropbox. The offer varies by country. For example, in Europe, customers are offered 500 free prints per year, or 45 free prints per month, for which they pay postage only. In the UK, this works out at up to £4; in Europe, it costs up to €6. In the US, the offer is for 1,000 free prints per year, or 90 per month. The free prints offer is for prints of 6"x4"/15cmx10cm – if a customer wants larger prints, different shaped prints (eg square), borders, duplicates or different finishes, these are available for an additional charge. Once an order is placed, customers are then offered extra printing services, such as customised mugs or t-shirts.

In early 2016, the business launched the FreePrints Photobooks app, which offers a free 20-page softcover photobook every month, again for the cost of postage only (UK c £6, Europe €8).

Upgrades are available for larger formats, more pages and for hardback covers.

Recently, PlanetArt launched the FreePrints Photo Tiles app. This enables customers to order one free PhotoTile (an 8"x8" canvas picture suitable to stick on the wall) per month, again for the cost of postage (£5.99 in the UK). This has so far been launched in the US, the UK and Ireland and is about to be launched in France.

The FreePrints, Photobooks and Photo Tiles apps charge for all printing on a per-job basis with no subscription required. This business is not particularly seasonal. We estimate that more than eight million customers have ordered via one of the apps at least once, and most return, making two to three purchases a year. Overall, 70–85% of monthly revenues come from returning customers; the average order value is in the range €7–8.

Planned India launch

FreePrints is planning to launch in India later this year. Set-up costs relating to the launch include legal costs (consultation with regulators), localisation and adapting the software for the Indian market. Some mobile photo printing apps already exist in India, but have struggled with the delivery aspect of the service so have not received good reviews. Claranova is aiming to offer a better delivery service by contracting with a courier company for all deliveries (at a fixed cost), rather than using India Post, as well as using a network of printing companies to reduce the distance that prints have to be shipped.

Web-to-print

Web-to-print was the original photo-printing service that has been offered by the company since the acquisition of SimplytoImpress in 2010. The business operates through four dedicated websites and generates most of its business in the US.

- SimplytoImpress: high style cards and stationery products with text and photos
- PhotoAffections: wide variety of personalised photo products
- CanvasWorld: turns photos into canvas wall art
- MyCustomCase: personalised cases for mobile phones, tablets and other devices

Although called Web-to-print, the majority of orders come from mobile browsers (as opposed to mobile apps). The business is very seasonal, with a large volume peak in November and December covering Thanksgiving and Christmas. This business typically has a higher order value (\$70–80) than the FreePrints business. Customers tend to order less frequently than for FreePrints, typically once a year.

Competitive market; mobile growing faster than web-based

Since the advent of the smartphone more than 10 years ago, consumers have increasingly shifted from taking photos using digital cameras to using their phones for the majority of their photography. As people tend to have their phones on or close to them at all times, the number of photos taken has increased exponentially. InfoTrends estimates that 1.2 trillion photos were taken in 2017, up 9% compared to 2016, with c 90% taken with mobile devices (85% phones, 5% tablets). The majority of these sit on phones or photo-sharing services such as Instagram and Flickr and are never printed. Mobile apps for photo printing are designed to make the process simple and cheap. Alternatives include buying a home printer, which once specialist paper and ink is factored in, becomes an expensive option, using printing kiosks or uploading photos to web-based printing services.

Future Market Insights estimates that the market for global photo printing and merchandise will be worth \$16.9bn in 2018 and is likely to grow at a CAGR of 2.6% to reach \$22bn by 2028. This masks the shift in distribution channels – in 2018 c 49% of the value is expected to be generated from online services, forecast to grow to 55% by 2028, which implies a CAGR of 3.9%. Within this category, we expect a continuing shift from web-based to mobile app-based printing.

FreePrints competes against large, multinational companies such as Snapfish, Photobox and CEWE, as well as local players such as Lalalab in France and Bob Books in the UK. Web-to-print competes against services from larger online players such as Shutterfly, Photobox and Vistaprint, as well as services offered by pharmacies and retailers such as Walmart, Walgreens, Boots and Tesco and by specialist photography companies such as Snappy Snaps and Jessops. PlanetArt is seeing a slight reduction of competition in this market, as some smaller players have been acquired or left the market.

Exhibit 3 summarises the main competitors. We note that PlanetArt has no legacy film printing services and does not own any printing or retail facilities. This affords it the flexibility to enter new markets.

PlanetArt aims to maintain its app store ratings at as close to 5/5 as possible as this is a key factor in consumers' decision-making when downloading apps. Currently, it is rated at 4.8/5 on both the Apple App Store and Google Play. This compares favourably to competitors who receive lower average review scores on significantly fewer reviews. We note that the Photobox app is no longer available on Android devices, only iOS. The business also aims to maintain high rankings within both app stores, as this also influences consumer's propensity to download. For example, in the UK today, FreePrints and FreePrints Photo Tiles are the No. 1 and No. 2 ranked free photography apps on Google Play. On the App Store in the UK, Freeprints ranks as the fifth most popular app in the

Photography & Video category, after Instagram, YouTube, Snapchat and TikTok – so is in fact the top ranked photo printing app.

Exhibit 3: Mobile and web printing competitors

	Ownership	HQ	Geographic split	Revenues	Volume processed	% mobile to print	Other services	Brands	Own print facilities
CEWE Photoworld	CEWE Stiftung & Co: Frankfurt-listed, market cap €570m	Germany	Europe (21 countries incl. UK), US	FY17: group €599m; photo-finishing €459m	FY17: 2.17bn photos, 6m photobooks	40% of photos printed from smartphone	Mugs, phone cases, calendars, cushions, magnets, canvas, photo books	Photoworld Cheerz	Yes
PhotoBox	Exponent Private Equity, Electra Private Equity	UK	Europe (13 countries including the UK), Australia New Zealand	£325m in FY17	2017: 27m deliveries; 12m active customers	N/A	Mugs, phone cases, calendars, cushions, magnets, canvas, photo books	Moonpig.com posterXXL Hofmann Photobox	Yes
Shutterfly	Nasdaq-listed, market cap \$2.4bn	US	Strongly US weighted	FY17: group \$1.2bn, consumer \$1.0bn	FY17 consumer division: 10m customers, 26m orders, average order value \$37; 15.7m app downloads	23% of revenues from mobile (Shutterfly)	Mugs, phone cases, calendars, cushions, magnets, canvas, photo books	Shutterfly Tiny Prints boutique BorrowLenses Groovebook SBS Lifetouch	Yes
Snapfish	District Photo (privately owned)	US	US, Germany, France, Ireland, Italy, UK, US, Australia, NZ	N/A	90m users (2015)	N/A	Mugs, phone cases, calendars, cushions, magnets, canvas, photo books	Snapfish	Yes
Vistaprint	Cimpress: Nasdaq-listed, market cap \$4.3bn	Neth.	European/North American focus, with presence in South America and Asia-Pacific	\$2.1bn in FY17 (of which Vistaprint was \$1.3bn)		N/A	Business cards, posters, banners, leaflets	VistaPrint Druck.at pixartprinting Exaprint Easyflyer Drukwerkdeal printi YSD.com	Yes

Source: Claranova accounts, Edison Investment Research

Business model

Sales strategy and customer retention

PlanetArt is targeting revenue growth from a combination of growing the customer base (with much more scope to grow FreePrints) and encouraging the existing customer base to order more frequently and buy a wider range of products. Advertising costs are almost completely variable, with spend being dialled up or down depending on the cost of advertising at any given time, and the availability of cash. The division's experience is that this has a direct relationship with the number of new users acquired.

To win new customers, PlanetArt focuses its advertising on Facebook, where it can use micro-targeting, as well as on Twitter and Pandora (internet radio). Occasionally, the company buys TV advertising. To retain and encourage existing customers to spend, the business sends app notifications and emails with special offers and runs a loyalty programme. It also has a 'refer a friend' scheme. The business makes use of existing FreePrints customer base to sell the Photobooks service.

The cost to acquire a FreePrints customer is low- to mid-single-digit euro, which, with a typical order value of €7–8, is covered in roughly nine months. Web-to-print undertakes limited advertising, focusing more on encouraging its existing customer base to place orders. The cost to acquire a

new Web-to-print customer is around 10 times that of a FreePrints customer, but due to the higher average order value and higher gross margin, the payback is almost immediate.

Advertising for the India FreePrints service will be undertaken on a flexible basis, trying different methods to ascertain the most effective and starting with a modest expenditure until the most successful methods are confirmed.

Logistics – outsourced printing

PlanetArt outsources all printing to one printer in the US and one in the UK. In India, PlanetArt has set up a network of several printers to ensure national coverage. As the mobile app service is less seasonal, PlanetArt is able to provide good volumes through the year, not just at Christmas time. During the Christmas peak, PlanetArt can push delivery out from five to 10 days to ensure stable pricing. The business typically prints more than one million photos per day, and 30–50m per month. Cumulatively, it has printed more than one billion photos. The company estimates that the IT system can cope with roughly three times the current volume before any upgrades are required. The system can manage localisation if a new country is added.

Minority investment to fund growth

In September 2017, a group of investors including Cap Investissement, the family office of Groupe Riccobono (a French industrial printer), invested €11.4m in PlanetArt in return for a 7.1% stake.

Financials – moving into profitability

When this business was launched, the aim was to reach critical mass without burning significant amounts of cash. It has grown rapidly since launch, reducing the EBITDA loss every year, with FY17 EBITDA close to break-even and in fact reporting positive EBITDA in H117 and H118, helped by seasonal strength in Q2, ie calendar Q4. The target is for double-digit profitable growth.

Cost of sales consists of printing costs (including the cost of items such as mugs or t-shirts), shipping costs, and payment processing fees. FreePrints earns an estimated gross margin in the region of 35%, with the photo printing service earning an estimated 33–34% (we estimate 23–25% for basic photo printing, 60–65% for add-ons), and photobooks an estimated 40–45%. We estimate that Web-to-print generates gross margins of c 60–65%.

Operating costs include variable costs such as marketing spend, and others that are more fixed in nature: support, marketing staff (staff in the US as well as several people in Paris to manage European marketing), developers, general admin and share of corporate costs (based on revenues). We note that the business hires temps to cover increased support demands during the seasonal peak of the web-to-print business in November/December, which results in higher staff costs in H1.

Exhibit 4: PlanetArt quarterly revenues, Q116–Q418

€m	Q116	Q216	Q316	Q416	Q117	Q217	Q317	Q417	Q118	Q218	Q318	Q418
Revenues	9.5	22.3	10.9	13.7	15.4	34.2	18.7	20.6	21	48.2	23.4	29.4
y-o-y growth					62.1%	53.4%	71.6%	50.4%	36.4%	40.9%	25.1%	42.7%

Source: Claranova

Exhibit 5: PlanetArt annual forecasts

€m	FY15	FY16	FY17	FY18e	FY19e	FY20e
Revenues	32.9	56.4	88.9	122.0	159.7	191.6
y-o-y growth		71%	58%	37%	31%	20%
EBITDA	(9.5)	(9.3)	(0.3)	6.2	13.0	19.2
EBITDA margin	-28.9%	-16.5%	-0.3%	5.1%	8.1%	10.0%

Source: Claranova, Edison Investment Research

The company has reported FY18 divisional revenues but will not report EBITDA profitability until 2 October when full results are released. PlanetArt revenues grew 37% y-o-y, or 47% on a constant currency basis. Growth reaccelerated in Q418 to 43% (51% constant currency), up from the 25% reported in Q318 (37% constant currency). We forecast a moderation of growth in FY19e and FY20e – this does not factor in material revenues from India. We assume that FreePrint revenues grow faster than Web-to-print. As the operating cost base is relatively fixed, aside from marketing costs, we forecast growth in EBITDA margins over FY18e–20e. We assume the majority of India start-up costs were incurred in FY18.

Avanquest – online consumer software retailer

Claranova has been developing and selling consumer-focused software since the company was founded in the 1980s. It sells a mixture of third-party software (85–90% of revenues) and own-IP software (10–15%). The division sells more than 500 products from 200–300 licensors; software is typically from less well-known brands and would not include household names such as Adobe, Microsoft or Norton. The software falls broadly within one of the four categories:

- operating tools, eg PC clean-up, anti-virus
- office tools, eg PDF-based software
- interior/exterior design, eg architecture software
- photo-related, imaging

The business has seen a decline in revenues in recent years, partly due to a process of weeding out unprofitable product lines. The division is now focused on reaching critical mass through acquisition and monetising traffic, which, combined with recent restructuring, should result in improved profitability.

Product strategy

Third-party software

The business employs several specialists who manage software developer relationships on a daily basis, including the types of products, the geographies in which they are available and the level of discounts that can be offered. Developers often start by supplying one product for one geography, then if the product proves popular, extend the contract to incorporate more products or geographies. The software is tested before Avanquest lists it for sale. It will stop selling a product if revenues are too low or if feedback indicates that the quality is not high enough.

Own IP products

Avanquest used to have more in-house developers, but refocused many of them on PlanetArt to develop the photo-printing services. The division therefore has a number of legacy products and uses freelancers to keep them up-to-date.

The division has a number of niche products where it has looked at the most commonly used functionality of popular software such as Photoshop, and developed a simplified version so that a consumer can use the software without being an expert. InPixio is an example of this kind of software. Niche products are developed on an opportunistic basis.

One final category of software is where Avanquest can see a need for certain functionality but does not want to develop it in-house. In this case, it will own the brand but license-in the software from a third party. Architect 3D is an example of this.

Acquisition of Canadian businesses

At the beginning of July, Claranova acquired 50.1% of a group of made up of three Canadian businesses: Adaware, Lulu Software and Upclick. Total consideration for the 50.1% stake is €26.9m; Claranova paid €9.9m in cash in initial consideration and has deferred consideration of €17m/\$20m to pay within the next year. Avanquest expects to put in place debt of c €17m, and to repay the debt over five to six years out of the cash flows of the business. The group generated revenues of \$34.7m/€30.8m and EBITDA of \$5.3m/€4.7m (15.3% margin) in CY17. The remaining 49.9% of the group could be sold by the founders in return for Avanquest shares (exchange ratios not disclosed; dependent on certain performance conditions).

The table below summarises the products offered by each business. All software IP is owned by the businesses. Avanquest already has a good working relationship with the group – it already rebrands Soda PDF as Expert PDF and uses Upclick to process around half of its e-commerce transactions. The Adaware products should be complementary to Avanquest's OneSafe PC Cleaner products.

Exhibit 6: Acquired businesses

	Adaware	Lulu Software	Upclick
Products	H20 (software installer tool), Web Companion (browser security tool), anti-virus software, ad-blocking software	Soda PDF publishing software: converts documents to PDF and vice versa	E-commerce software: platform providing sales funnel optimisation and monetisation for merchants of digital goods and software
Traffic	14m unique visitors per month	4m unique visitors per month	n/a
Transactions	13m downloads per month; 450m software products installed	20m software products installed	1.2m per annum
Customer base	13m	13m	N/A – sells on a B2B basis
CY17 revenues (est)	€10m	€10m	€10m

Source: Claranova, Edison Investment Research

Integration plans – maintain brands, cross-sell

Avanquest does not intend to change the Canadian companies' existing business models and will maintain their brands. We expect some cost synergies from sharing of group infrastructure, but the main focus will be on maximising the opportunity from the combined customer base and internet traffic. The existing Avanquest business has seven million unique visitors per month, three million downloads per month, 30 million software products installed and a customer base of 14 million. Combined, the division has c 25 million unique visitors per month, 16 million monthly downloads, more than 500 million software products installed and a customer base of 40 million.

Avanquest has always been good at monetising emails, with revenue generated per 1,000 emails at more than twice the industry average. It also has a decent level of web traffic but much of this is paid for. Avanquest sees the opportunity to benefit from the acquired group's expertise in traffic generation as well as cross-selling to the combined customer base. The division is also keen to phase out the use of its proprietary e-commerce platform and shift all e-commerce on to Upclick's platform.

Business model

Taking into account the newly acquired businesses, Avanquest generates revenues in four different ways:

- Paid-for products.** For the existing Avanquest business, most software is sold on a one-off licence basis. The business is looking to move to a subscription model for some products, eg OneSafe PC Cleaner, where the customer is likely to need to use the software on an ongoing basis. Other products, such Architect 3D are more suited to a one-off purchase as they tend to be linked to one-off projects. Soda PDF was based on a one-off licence fee, but is now being converted to a subscription licence model.

- **Freemium products/services.** The original Avanquest business offered a few freemium products, including Photo Editor by InPixio and Instacards. Adaware offers its anti-virus software on a freemium basis; the paid version of the software is subscription-based.
- **Advertising/traffic-based.** Adaware's Web Companion tool is a browser add-in for secure browsing, ad-blocking and to identify phishing sites. As the software diverts browsers such as Firefox to search services provided by Google or Bing, Web Companion earns a revenue share based on the searches pushed to these search providers. Adaware's software installer tool is used by websites that offer software downloads. When a consumer decides to download software, they first download a small file onto their PC. Once clicked on, an executable file runs to fully download the software. In the process, the user is prompted to accept and install other complementary software products. If the user accepts any of these additional software products, Adaware will earn a commission from the third-party software provider.
- **Transaction-based.** Upclick sells its services on a business-to-business basis. Merchants sign up to use the platform on a per-transaction basis.

Distribution – mostly web-based

Avanquest used to sell nearly all of its products through major retailers. In many cases, this was a very cash-consumptive way to sell and also was no longer reflecting the way that consumers buy software. Three years ago, the business decided to progressively reduce its retail activities, and now only has limited retail activity in Germany and a larger presence in the US. As retailers in the US have shorter payment terms, this does not consume so much working capital for Avanquest, and also helps when signing up some third-party software suppliers. The main channels through which Avanquest sells now are:

- the Avanquest and Micro Application websites
- affiliates – either via a traditional distributor model, or paid on a revenue share of units sold
- sub-licensing

Avanquest sells across Europe and North America, where there is sufficient ability to pay for software. In those regions where the cost of software could be prohibitive (South America, India, Africa), the business is considering whether it is possible to monetise traffic instead.

Consolidating a fragmented market

The market for consumer software is made up of:

- solutions sold by well-known software companies such as Microsoft (Office suite), Adobe (Acrobat PDF, PhotoShop) and Symantec (Norton anti-virus), which typically make the majority of their money from enterprise customers;
- a large number of very small independent software vendors, which often struggle to market their products; and
- a small number of larger companies specialising in online consumer software sales, typically leveraging their marketing expertise to reach a wide audience.

Avanquest falls into this last category, along with companies such as Avast, Kape and IronSource. Avast (LSE-listed, market cap £2.5bn) and Kape (AIM-listed, market cap £199m) both sell cyber-security and PC hygiene tools and have been actively buying software providers in the space. IronSource is a private Israeli company selling monetisation and distribution tools for software and app developers. Its InstallCore software download tool is one of the most widely used and operates a similar model to Adaware's H2O tool.

Growth strategy – monetise internet traffic

The company views Avanquest's key skill as marketing, rather than software development. Through the Canadian acquisitions, it now has access to a wider product range that generates revenues in several different ways. In addition, the acquired software products were developed in-house so will earn a higher margin. Using the acquired businesses' expertise in generating and monetising web traffic, the division expects to be able to return to organic growth. Avanquest has suggested that it would like to move more in the direction of the type of business operated by IAC, a US-listed media and internet company that owns 150 brands, including Ask.com, Dictionary.com, Dotdash, Investopedia, Match, Tinder, and Vimeo. IAC revenues arise from the traffic generated on its websites – either through subscription services (eg dating websites, Vimeo video services) or advertising. IAC's Applications division is most similar to Adaware's business – it provides browser extensions that enable users to run search queries directly from their browser tab, as well as mobile applications and device cleaner and security tools. In 2017, IAC generated \$578m of revenues from its Applications division and \$362m from its Publishing division. In our view, consumers have become used to receiving online services for free (for example, Facebook or free anti-virus tools) and it is harder to persuade them to pay for software upfront. Monetising consumer software sales via advertising or by offering freemium services is the direction in which the industry is moving and the acquisition of this group of companies should help Avanquest address this market shift.

The division would also consider additional acquisitions, targeting profitable companies with high levels of web traffic.

Financials

The existing Avanquest business has seen a gradual revenue decline, partly due to the discontinuation of unprofitable products. Exhibit 7 shows the quarterly revenue progression over the past three years – this business sees a seasonal peak in Q2 (ie CQ4). The cost of products (ie royalties paid to third-party software providers) ranges from 10–30% of sales. Other costs of sales include bank fees, distribution costs for physical goods and server hosting (c 15%), resulting in a gross margin of 60–65%. Operating costs break down as advertising (c 20%), marketing (c 20%), administrative (c 10%) and R&D (c 3%). The division operates with single IT, marketing and finance teams. The target for this business is for an EBITDA margin in the range of 5–6%.

The Canadian businesses operate at a much higher EBITDA (15.3% in CY17) as they develop their own software. We note that Avanquest already sells Soda PDF under the name Expert PDF, so consolidated revenues will need to reflect this and Avanquest will no longer incur the royalty payments to Lulu Software when selling Expert PDF.

On a pro-forma basis, the division expects to generate annual revenues of at least €65m at an EBITDA margin of c 10%. In the longer term, the division is targeting revenues of €100m at an EBITDA margin of 15–20%, taking into account €2–3m of synergies at the EBITDA level. Our forecasts reflect flat revenues for the original Avanquest business, and growth of the acquired business averaging out at 6.6% in FY19e and 9.8% in FY20e, as the division learns how to accelerate the growth of the Adaware business in particular.

Exhibit 7: Avanquest quarterly revenues, Q116–Q418

€m	Q116	Q216	Q316	Q416	Q117	Q217	Q317	Q417	Q118	Q218	Q318	Q418
Revenues	9.2	12.6	9.3	8.6	9.8	11.3	9.4	8	8.4	11.3	8.6	7.5
y-o-y growth					6.5%	-10.3%	1.1%	-7.0%	-14.3%	0.0%	-8.5%	-6.3%

Source: Claranova

Exhibit 8: Avanquest divisional forecasts

€m	FY15	FY16	FY17	FY18e	FY19e	FY20e
Revenues	40.4	39.7	38.5	35.8	68.1	71.3
y-o-y growth		-2%	-3%	-7%	90%	5%
EBITDA	(1.4)	1.1	0.0	0.5	6.4	7.0
EBITDA margin	-3.5%	2.8%	0.0%	1.4%	9.4%	9.8%

Source: Claranova, Edison Investment Research

myDevices – simplifying IoT for SMEs

Claranova has developed a management platform for IoT applications. Its **IoT in a Box** turnkey solution is designed to enable businesses and consumers to remotely monitor assets.

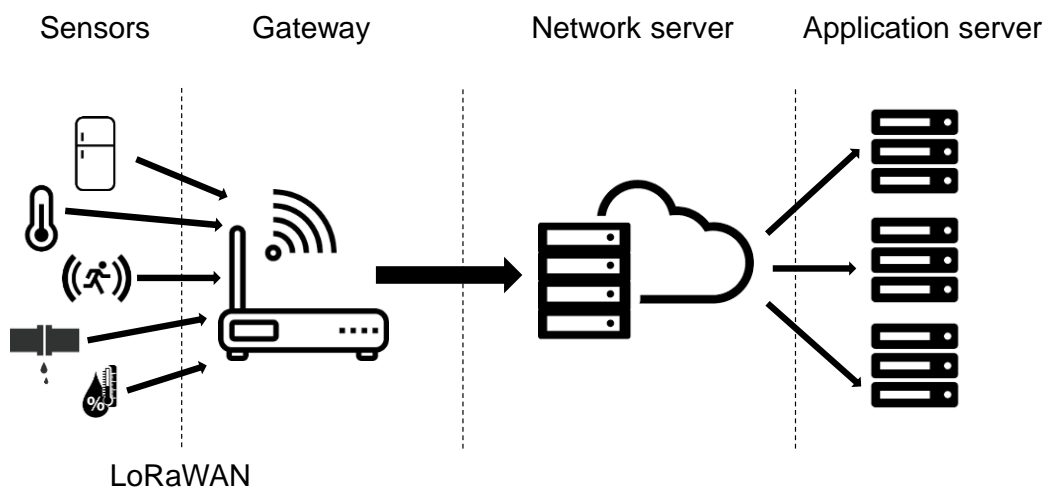
After developing the platform in 2015, the business decided to encourage use of the technology by launching a developer tool, **Cayenne**, in early 2016. Developers use the drag-and-drop IoT project builder to develop prototypes. Cayenne can be used on Raspberry Pi and Arduino boards and is designed to work on LoRaWAN.¹ The Cayenne developer tool has since been downloaded more than 500,000 times. myDevices also runs a manufacturer programme called **Cayenne IoT Ready**, which provides a process for hardware manufacturers to integrate their products into the Cayenne platform. Currently, the platform supports more than 200 different devices.

myDevices plans to monetise the platform by selling its **IoT in a Box** solutions on a B2B basis through telecom operators, system integrators and other resellers. The standard IoT in a Box solution contains the following:

- **Gateway:** this is the solution's link to the cellular/LoRa network or ethernet, to enable the customer to monitor the network remotely.
- **Sensors:** these are positioned as required on the customer's premises and send data back to the gateway on a regular basis. These communicate with the gateway using the LoRaWAN protocol.
- **Apps:** mobile or web-based to control the network, to monitor the network and to provide alerts as required.

The diagram below shows how a typical IoT network is structured.

Exhibit 9: IoT network



Source: Edison Investment Research

¹ LoRa is a low-power, long-range wireless protocol based on a licence-free frequency spectrum; LoRaWAN is a wide area network based on LoRa.

Designed for easy installation and use

The solution is designed to be plug-and-play. The user first downloads the myDevices app, then plugs in the gateway and scans a QR code on the gateway, which registers it on to the network. Then all sensors are scanned via QR code to add them to the network and positioned where necessary. Within the app, the user then edits operating ranges for each sensor, so that SMS and/or email alerts can be sent if any sensor operates outside of the target range. The user can schedule regular reports and can access detailed sensor history via the app. The app also provides the ability to visualise the location of every sensor.

Customers can ask for the IoT in a Box solution to be customised, using the gateway and sensors of choice. myDevices works with a number of hardware suppliers to ensure a wide range of gateways and sensors are available to suit every requirement.

myDevices has already developed white-label solutions for temperature and humidity monitoring, property monitoring, air quality monitoring and rodent control, with multiple versions available for a variety of different users, eg restaurants, supermarkets, commercial buildings, holiday rentals, perishable food manufacturing and healthcare.

LoRa focus attracts investment

The LoRa radio frequency protocol was designed by chip-maker Semtech, which then founded the LoRa alliance in 2015. The LoRa alliance is dedicated to the standardisation of low-power, wide area networks and the global promotion of the LoRaWAN open standard. myDevices is a member of the LoRa alliance, alongside 500 other members including chip manufacturers, gateway and sensor manufacturers, software companies, system integrators and telecom companies. In January 2017, Semtech invested \$3m in myDevices in return for a 13% stake.

Strong growth market; multiple platform providers

The IoT market is in a strong growth phase – IDC estimates that total spending on IoT hardware, software, services and connectivity was c \$800bn in 2017 and is likely to grow at a CAGR of c 15% to reach \$1.4tn by 2021. A large proportion of the IoT market is dominated by enterprises spending on applications in the manufacturing, automotive, logistics, utilities and smart cities sectors. The consumer IoT market includes applications such as wearables (eg Fitbit, Apple Watch) and domestic automation (eg Nest temperature controls, Ring home security). myDevices is positioned somewhere between the two markets, with a focus on simplifying the use of IoT for SMEs.

Research from BCG forecasts incremental spending by companies on IoT of €250bn by 2020, over and above normal technology spending. Of this, it expects €15bn to be spent on IoT platforms. BCG's view is that a complete IoT platform should offer three capabilities:

- application management – in order to customise solutions
- data aggregation and storage – to support actionable insights
- connectivity management – to automatically connect systems, networks and devices

Unlike in some other markets, no one platform provider is dominant. In 2017, BCG counted more than 400 different IoT platform providers, of which c 50 offered all three capabilities. Providers of IoT platforms include large hardware and/or software vendors such as Bosch, Cisco, GE, IBM, Microsoft, PTC, SAP, Siemens and Software AG, as well as smaller IoT platform-focused companies such as Ayla Networks, EVERYTHING, relayr, Telit Communications and thethings.IO. By focusing on the SME niche, where ease of use is the key selling point, myDevices should avoid competing against the larger platform providers that focus on supporting enterprises with complex IoT networks.

Business model

As this is effectively a start-up business, myDevices is taking a flexible approach to monetising its technology. It has signed two major contracts with mobile network operators (MNOs). MNOs are offering IoT applications to their SME and consumer subscribers, which are typically sold as add-on services on monthly contracts. This is an attractive market for MNOs, as it represents an additional use for their cellular networks and should improve customer retention. IoT in a Box is also available for resellers and distributors.

Sprint – IoT factory launched in May

In January, Claranova announced that Sprint (fourth-largest MNO in the US, owned by SoftBank) had signed up to use the myDevices platform for its IoT offering, called Sprint IoT Factory; the IoT Factory launched in May.² Customers can buy off-the-shelf solutions or use the platform to develop their own solutions. myDevices is providing the technology and is responsible for managing the webstore/marketplace as well as managing the ecosystem, which includes taking care of deliveries of hardware, in return for a share of revenue. Sprint is responsible for sales and marketing, network provision, support and payment. In FY18, Sprint contributed \$2m/€1.7m of the division's revenues.

Dr Peng relationship provides entry into the Chinese market

In August 2017, myDevices signed a partnership agreement with Dr Peng, the fourth-largest Chinese MNO, to provide localisation and distribution of the Cayenne platform under licence in China. Dr Peng will manage the scheme and will pay royalties to myDevices. At the same time, Dr Peng took a minority stake in myDevices, investing \$3.5m to obtain a 16% stake. In December 2017, myDevices announced that IoT in a Box and Cayenne had been launched in China, with customised solutions in Mandarin available under the Peng Devices brand.

Financials

Exhibit 10 shows the quarterly revenue progression over the past three years. The division is still generating some revenues from legacy solutions (we estimate c 30% of FY18 revenues); this should decline to zero over the next two to three years. The division has a headcount of c 30, which includes support engineers as well as staff to manage the relationships with Dr Peng and Sprint. The company does not anticipate growing headcount materially unless there is a significant uplift in demand. The division uses Amazon Web Services for storage of all data uploaded to the platform. We model a relatively flat cost base over the three-year forecast period, with rising revenues as the Sprint relationship progresses. We have not factored in material revenues from the Dr Peng relationship or reseller agreements – these could add upside to our forecasts.

Exhibit 10: myDevices quarterly revenues												
€m	Q116	Q216	Q316	Q416	Q117	Q217	Q317	Q417	Q118	Q218	Q318	Q418
Revenues	0.8	1.2	0.8	0.9	0.7	0.6	0.7	0.8	0.6	0.4	1.2	1.5
y-o-y growth					-12.5%	-50.0%	-12.5%	-11.1%	-14.3%	-33.3%	71.4%	87.5%
Source: Claranova												
Exhibit 11: myDevices annual forecasts												
€m			FY15	FY16	FY17	FY18e	FY19e	FY20e				
Revenues			5.5	3.7	2.8	3.7	4.3	9.0				
y-o-y growth				-33%	-24%	32%	16%	110%				
EBITDA			(0.5)	(3.0)	(4.7)	(3.3)	(2.7)	2.0				
EBITDA margin			-9.1%	-81.1%	-167.9%	-89.2%	-62.6%	22.6%				
Source: Claranova, Edison Investment Research												

2 See link here: <https://business.sprint.com/iot-factory/>.

Sensitivities

In addition to the usual competitive pressures and the requirement to keep abreast of technology, our forecasts and the share price are sensitive to the following factors:

- **PlanetArt geographical expansion:** PlanetArt is due to launch in India imminently and may expand into other new countries. The pace of customer adoption in these new geographies is unknown.
- **PlanetArt supplier dependence:** in Europe and the US, PlanetArt relies on one printing supplier. Any issues with this relationship could affect the profitability of the business.
- **Acquisition risk:** the recent acquisitions of the Canadian businesses by Avanquest introduce integration risk.
- **Changes to search engine policies:** several products within the Avanquest business rely on search engines to generate revenues. Changes to these search engines' policies could reduce the ability to earn revenues.
- **Currency:** Claranova's revenue is exposed to currency translation movements, as a large proportion is generated in US dollars, and to a lesser extent sterling. Across the three divisions, there is a high level of natural hedging, with the majority of costs incurred in the country in which revenues are generated. In H118, the weakening of the dollar and sterling versus the euro reduced revenues by €5.4m but EBITDA by only €0.1m.

Financials

Income statement

Exhibit 12: Divisional forecasts				
€m	FY17	FY18e	FY19e	FY20e
Revenues				
PlanetArt	88.9	122.0	159.7	191.6
Avanquest	38.5	35.8	68.1	71.3
myDevices	2.8	3.7	4.3	9.0
Total Revenues	130.2	161.5	232.0	271.9
EBITDA				
PlanetArt	(0.3)	6.2	13.0	19.2
Avanquest	0.0	0.5	6.4	7.0
myDevices	(4.7)	(3.3)	(2.7)	2.0
Total EBITDA	(5.0)	3.4	16.7	28.2
D&A	(0.8)	(0.5)	(0.5)	(0.5)
Normalised EBIT	(5.8)	2.9	16.2	27.7
Share-based payments	(4.8)	(6.0)	(4.6)	(2.0)
Exceptional items	0.4	(4.1)	0.0	0.0
Acquired amortisation	0.0	0.0	0.0	0.0
Reported EBIT	(10.1)	(7.2)	11.6	25.7

Source: Claranova, Edison Investment Research

Exhibit 12 shows our divisional forecasts down to the EBITDA level. We note that all central costs are allocated to the divisions. The company has low capex requirements, hence depreciation is very low. The company has not capitalised development costs since FY16, so these are nearly completely amortised.

Net financial costs take into account the convertible bond (ORNANE) issued on 19 June. This totalled €29m at an annual interest rate of 5%. We have treated the €17m still owing for the Canadian acquisition as long-term debt and assumed a notional interest charge of 5% pa.

We have assumed a 23% rate for tax for FY19e and FY20e, as the bulk of profits are likely to come from the US and the UK with corporate tax rates of 21% and 19%, respectively. According to the FY17 annual report, the company has unused tax losses of c €4m in Germany, c \$45m in the US and c €52m in France, so the amount of tax paid in the next few years is likely to be very low.

As explained earlier in this report, there are minority investors in each of the three divisions. This results in a material minority interest deduction from net income. The company does not plan to pay a dividend.

At the end of FY18, the company held 139k shares in treasury. As part of a new share buyback scheme, the company bought back 1.18m shares in July. The programme allows for a maximum of 7m shares to be bought back, at a price of up to €1, up to a maximum total cost of €5m.

Balance sheet and cash flow

The company typically generates a cash inflow from working capital – both the PlanetArt and Avanquest businesses receive cash from customers in advance of paying suppliers. As noted above, capex requirements are low and the company no longer capitalises development costs.

The convertible bond issued in June consisted of 26.36m bonds at a par value of €1.1 per bond, resulting in proceeds of €29m. The bonds are redeemable at par on 1 July 2023. The bondholders have the right to convert the bonds from 19 June 2018 to the 29th trading day before the normal or early redemption date, at a rate of one share per bond. Claranova can opt to satisfy the conversion entirely in cash, entirely in new/existing shares or a combination of both.

Valuation

In Exhibit 13, we show Claranova's valuation and operating metrics versus four peer groups: photo printing companies, online software retailers, IoT companies and French software companies. As Claranova is a combination of the first three groups and there are material minority investors in each business, we use a sum-of-the-parts approach to fully capture the value of the group.

Based solely on average peer group EV/sales multiples for FY19e (1.5x for PlanetArt, 4.2x for Avanquest and 1.2x for myDevices), we arrive at a sum-of-the-parts valuation for Claranova of €0.96 per share. However, we believe that these multiples are not reflective of the shape and growth prospects for each division. In Exhibit 14, our sum-of-the-parts valuation is based on adjusted FY19e EV/sales multiples by division, as discussed in more detail below. The EV/sales multiple for FY20e and the EV/EBITDA multiples for FY19e and FY20e are implied based on the EV/sales multiple used for FY19e.

Exhibit 13: Peer group financial and valuation metrics

	Quoted ccy	Market cap (m)	Rev growth CY (%)	Rev growth NY (%)	EBITDA margin CY (%)	EBITDA margin NY (%)	EBIT margin CY (%)	EBIT margin NY (%)	EV/ Revs CY	EV/ Revs NY	EV/ EBITDA CY	EV/ EBITDA NY	P/E CY	P/E NY
Claranova	EUR	310	43.7	17.2	7.2	10.4	5.0	9.5	1.3	1.1	18.2	10.8	40.5	20.9
Digital printing														
PlanetArt	EUR		30.9	20.0	8.1	10.0								
CEWE Stiftung	EUR	589	9.4	3.4	14.5	14.8	8.1	8.5	1.0	0.9	6.7	6.3	15.5	14.3
Cimpress	USD	4324	9.3	8.2	14.6	15.6	9.2	11.2	1.9	1.7	12.9	11.2	40.3	26.6
Shutterfly	USD	2598	70.1	12.5	20.3	18.9			1.8	1.6	8.7	8.3	24.2	26.0
Average			29.6	8.1	16.5	16.4	8.6	9.9	1.5	1.4	9.4	8.6	26.7	22.3
Software publisher/reseller														
Avanquest	EUR		90.2	4.7	9.4	9.8								
Avast	GBP	2468	26.2	7.4	54.3	52.8	47.5	43.4	5.4	5.1	10.0	9.6	12.0	11.0
IAC	USD	16410	26.9	13.2	22.6	24.7	18.1	20.9	4.1	3.7	18.3	14.8	27.3	24.6
Kape Technologies	GBP	193	-8.1	17.9	16.8	19.0	14.1	15.9	3.0	2.5	17.7	13.2	33.6	24.3
Average			15.0	12.8	31.2	32.2	26.6	26.8	4.2	3.7	15.3	12.5	24.3	20.0
IoT														
myDevices	EUR		90.2	4.7	-62.6	22.6								
Calamp Corp	USD	829	6.4	7.1	14.4	16.3	14.9	17.0	2.1	1.9	14.4	11.8	19.2	16.5
Digi International	USD	366	23.2	11.4	9.7	11.3			1.4	1.3	14.3	11.1	57.0	26.4
Sierra Wireless	USD	680	15.5	8.6	6.9	8.4	2.8	6.3	0.8	0.7	11.6	8.9	20.3	15.0
Telit Communications	GBP	208	11.1	-4.3	8.6	9.9	2.2	2.7	0.7	0.8	8.3	7.6	33.7	23.4
Average			14.1	5.7	9.9	11.5	6.6	8.7	1.2	1.2	12.2	9.8	32.6	20.3
French software														
Axway Software	EUR	388	-3.6	1.5	10.4	10.7	7.8	8.8	1.3	1.3	13.0	12.4	21.4	19.6
Cegedim	EUR	441	2.7	4.2	17.6	18.3	8.5	9.5	1.4	1.4	8.2	7.5	16.4	13.2
ESI Group	EUR	261	9.4	7.3	11.2	12.9	8.2	10.0	2.0	1.8	17.6	14.3	38.3	29.1
Esker	EUR	325	11.9	13.1	21.7	21.6	14.1	14.5	3.7	3.3	17.2	15.3	38.4	33.1
Harvest	EUR	105	10.1	10.7	20.5	22.7	18.5	20.1	3.5	3.2	17.1	14.0	27.4	22.1
Lectra	EUR	721	3.9	6.4	16.6	16.9	13.7	13.4	2.2	2.1	13.3	12.2	24.5	22.6
Linedata Services	EUR	259	-3.4	0.8	24.0	24.6	16.3	16.6	1.9	1.9	8.1	7.9	14.1	13.5
Prodware	EUR	97	0.8	0.6	18.2	19.2	10.7	11.6	0.9	0.9	5.1	4.8	7.8	7.1
Average			4.0	5.6	17.5	18.4	12.2	13.1	2.1	2.0	12.5	11.1	23.5	20.0

Source: Edison Investment Research, Bloomberg (as at 3 September 2018). Note: we assume Claranova CY is FY19e; averages exclude Claranova divisions.

Exhibit 14: Claranova sum-of-the-parts valuation

	FY19e	FY20e	EV based on FY19e sales multiple (€m)	MI	Value to shareholders (€m)
EV/sales multiple (x)	2.2	1.9	521.2	81%	419.7
PlanetArt	2.3	1.9	359.2	7.1%	333.7
Avanquest	2.0	1.9	136.2	49.9%	68.2
myDevices	6.0	2.9	25.8	31.4%	17.7
EV/EBITDA multiple (implied)					
PlanetArt	27.6	18.7			
Avanquest	21.3	19.5			
myDevices	-9.6	12.6			
	€m				Upside/(downside)
Net cash at end-FY18e	(32.6)		Equity value (€m)	425.3	
Cost of acquisition	26.9		Per-share value (€)	1.08	37%
Adjusted net cash	(5.7)				
Number of shares	392.292				

Source: Edison Investment Research

We have used an EV/sales multiple for **PlanetArt** at a 50% premium to its peer group as we are forecasting revenue growth (all organic) well above the average for the peer group. We note that Shutterfly's 70% revenue growth in FY19e reflects its acquisition of Lifetouch earlier this year. This results in an implied EV/EBITDA multiple at a premium to peers, reflecting PlanetArt's lower EBITDA margins. As PlanetArt has a fully outsourced production model, it has minimal depreciation and amortisation, and we would expect its EBIT margin to be very close to its EBITDA margin. On this basis, PlanetArt's profitability is much closer to that of its peers.

We have used a multiple for **Avanquest** that is at a large discount to its peers (and to the transactions in Exhibit 14). Looking at organic revenue growth in FY20, Avanquest is likely to grow at a slower rate than its peers. In addition, it is generating substantially lower profitability than its peers on an EBITDA and EBIT margin basis. We note that the Canadian group of businesses was acquired at a trailing price/sales multiple of c 1.8x. We would expect that as part of a larger group, Avanquest should be able to accelerate the growth of the acquired businesses as well as generate cost synergies.

For **myDevices**, we have used an EV/sales multiple for FY19 that is at a substantial premium to its listed peer group. However, this drops to a more reasonable multiple in FY20, reflecting the acceleration in revenues. We note that the number of pure-play listed peers for this market is low, and their forecast growth is substantially lower than for myDevices. We therefore think it is more appropriate to apply a multiple based on recent transactions (see Exhibit 15), which show that IoT platforms command price/sales multiples anywhere between 4.2–8.9x sales. We note that the first minority investment in myDevices by Semtech in January 2017 valued the business at \$24.3m post-money (€20.9m).

Clearly, if the company does not achieve our forecasts, there could be downside to the share price. Factors that could provide upside to the valuation include faster-than-expected growth of the Avanquest business (which, in turn, is likely to lead to better profitability), material upside from the launch of FreePrints in India and new contracts with mobile operators for myDevices.

Recent transactions

In the table below, we summarise recent transactions in each of the three markets. In both the IoT and consumer software markets, the range of multiples is very wide, reflecting the differing growth rates of the acquired businesses. We note also that definitive information regarding historical and forecast growth is not available for most of these transactions.

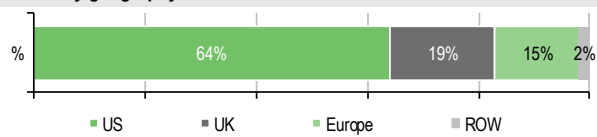
Exhibit 15: Recent M&A transactions						
Date	Acquirer	Target	Deal value	Financials	Valuation	Details of business
IoT						
Jun-18	ARM	Stream Technologies	N/A	N/A	N/A	IoT-X connectivity platform
Jun-18	Montagu Private Equity	Wireless Logic	£400m	Revs £45m (year to April 2017)	Price/sales 8.9x	IoT platform; 2,500 customers, 3.1m subscriptions
Feb-18	Amazon	Ring	\$900m	CY17 revs \$415m (+144% y-o-y)	Price/sales 2.2x	Smart home security
Feb-18	Google	Xively	\$50m	Q417 revs \$3m	Price/sales 4.2x	IoT platform
Feb-14	Google	Nest	\$3.2bn	Revs c \$300m	Price/sales 10x	Smart home thermostat control; smoke and CO detectors
Consumer software publishers/retailers						
Jul-18	Kape	Intego	\$16m	CY17 PBT \$1.4m, \$6m run rate revenues	Price/PBT 11.4x, Price/sales 2.7x	Anti-malware, firewall and parental control products for Mac; 150k subscribers
Jul-17	Avast	Piriform	\$121m	CY17 revs \$21.7m, EBITDA \$8.6m	Price/sales 5.6x, Price/EBITDA 14.1x	CCleaner— PC cleaner tool; 90m users
Mar-17	Kape	CyberGhost	\$9.8m	CY16 EBITDA \$1m	Price/EBITDA 9.8x	VPN solutions; 1.5m active users
Jul-16	Avast	AVG	\$1.3bn	CY16 revs \$419m, adj op. profit \$132.6m	Price/sales 3.1x, price/op. profit 9.8x	Anti-virus software
Photo printing						
Mar-18	CEWE	Cheerz	€36m for 80%	FY18e revs c €30m	Price/sales 1.5x	European digital photo printing
Oct-15	Exponent Private Equity, Electra Private Equity	Photobox	£400m	FY15 PF revs £275m	Price/sales 1.5x, c 10x EBITDA	European digital photo printing

Source: Edison Investment Research

Exhibit 16: Financial summary

	€'m	2015	2016	2017	2018e	2019e	2020e
30-June		IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
INCOME STATEMENT							
Revenue		93.1	117.4	130.2	161.5*	232.0	271.9
EBITDA**		(11.4)	(11.2)	(5.0)	3.4	16.7	28.2
Normalised operating profit		(11.4)	(16.0)	(5.8)	2.9	16.2	27.7
Amortisation of acquired intangibles		0.0	0.0	0.0	0.0	0.0	0.0
Exceptionals		15.6	(10.0)	0.4	(4.1)	0.0	0.0
Share-based payments		(0.0)	(0.1)	(4.8)	(6.0)	(4.6)	(2.0)
Reported operating profit		4.2	(26.1)	(10.1)	(7.2)	11.6	25.7
Net Interest		1.1	(1.7)	(0.9)	(0.8)	(3.2)	(3.2)
Joint ventures & associates (post tax)		0.0	(0.0)	0.0	0.0	0.0	0.0
Exceptionals		0.0	0.0	0.0	0.0	0.0	0.0
Profit Before Tax (norm)		(10.3)	(17.7)	(6.6)	2.1	13.0	24.6
Profit Before Tax (reported)		5.3	(27.8)	(11.0)	(8.1)	8.4	22.6
Reported tax		(0.6)	(0.8)	(0.4)	(0.3)	(1.9)	(5.2)
Profit After Tax (norm)		(10.9)	(18.5)	(7.0)	1.7	10.0	18.9
Profit After Tax (reported)		4.7	(28.6)	(11.4)	(8.4)	6.5	17.4
Minority interests		(8.1)	0.0	0.3	0.5	(2.4)	(4.0)
Discontinued operations		(3.2)	0.0	0.0	0.0	0.0	0.0
Net income (normalised)		(18.9)	(18.5)	(6.7)	2.2	7.7	14.9
Net income (reported)		(6.5)	(28.6)	(11.0)	(7.9)	4.1	13.3
Basic average number of shares outstanding (m)		58	375	375	384	392	392
EPS - basic normalised (€)		(0.33)	(0.05)	(0.02)	0.01	0.02	0.04
EPS - diluted normalised (€)		(0.33)	(0.05)	(0.02)	0.01	0.02	0.04
EPS - basic reported (€)		(0.11)	(0.08)	(0.03)	(0.02)	0.01	0.03
Dividend (€)		0.00	0.00	0.00	0.00	0.00	0.00
Revenue growth (%)		N/A	26.1	10.9	24.0	43.7	17.2
EBITDA Margin (%)		-12.2	-9.5	-3.8	2.1	7.2	10.4
Normalised Operating Margin		-12.3	-13.7	-4.4	1.8	7.0	10.2
BALANCE SHEET							
Fixed Assets		15.7	3.0	2.0	1.8	28.3	27.9
Intangible Assets		12.0	1.5	0.9	0.8	27.3	27.0
Tangible Assets		0.6	0.5	0.3	0.3	0.2	0.1
Investments & other		3.1	1.1	0.7	0.7	0.7	0.7
Current Assets		48.0	25.5	28.1	75.4	81.5	106.0
Stocks		5.9	5.0	3.7	4.4	6.4	7.4
Debtors		4.8	4.7	4.3	5.3	7.6	8.9
Cash & cash equivalents		30.5	11.1	17.1	62.7	64.6	86.7
Other		6.9	4.7	2.9	2.9	2.9	2.9
Current Liabilities		(32.0)	(25.3)	(28.1)	(32.6)	(38.1)	(42.9)
Creditors		(26.9)	(24.5)	(26.6)	(31.1)	(36.6)	(41.4)
Tax and social security		(0.3)	(0.0)	(0.3)	(0.3)	(0.3)	(0.3)
Short term borrowings		(4.8)	(0.7)	(1.1)	(1.1)	(1.1)	(1.1)
Other		0.0	0.0	0.0	0.0	0.0	0.0
Long Term Liabilities		(2.4)	(1.1)	(0.7)	(29.7)	(46.7)	(46.7)
Long term borrowings		(1.8)	(0.6)	0.0	(29.0)	(46.0)	(46.0)
Other long term liabilities		(0.7)	(0.5)	(0.7)	(0.7)	(0.7)	(0.7)
Net Assets		29.3	2.1	1.3	14.9	25.0	44.3
Minority interests		0.0	0.0	(0.1)	(1.3)	(3.7)	(7.7)
Shareholders' equity		29.3	2.1	1.2	13.6	21.3	36.6
CASH FLOW							
Op Cash Flow before WC and tax		(6.8)	(9.2)	(5.0)	3.4	16.7	28.2
Working capital		0.4	2.5	6.8	2.8	1.3	2.4
Exceptional & other		(3.8)	(4.3)	(2.2)	(3.3)	0.0	0.0
Tax		0.3	(0.3)	(0.0)	(0.3)	(1.9)	(5.2)
Net operating cash flow		(9.8)	(11.3)	(0.4)	2.6	16.0	25.5
Capex		(4.4)	(0.9)	(0.2)	(0.4)	(0.2)	(0.2)
Acquisitions/disposals		10.8	(0.4)	3.6	13.2	(9.9)	0.0
Net interest		(0.9)	(0.1)	(0.0)	(0.8)	(3.2)	(3.2)
Equity financing		33.2	(5.1)	1.9	2.0	(1.0)	0.0
Dividends		0.0	2.0	0.0	0.0	0.0	0.0
Other		0.1	0.1	0.1	0.0	0.0	0.0
Net Cash Flow		29.0	(15.7)	5.0	16.7	1.8	22.2
Opening net debt/(cash)		18.0	(23.9)	(9.8)	(16.0)	(32.6)	(17.4)
FX		0.1	(0.1)	(0.6)	0.0	0.0	0.0
Other non-cash movements		12.6	1.7	1.8	(0.0)	(17.0)	0.0
Closing net debt/(cash)		(23.9)	(9.8)	(16.0)	(32.6)	(17.4)	(39.6)

Source: Claranova, Edison Investment Research. Note: *Actual, **per Claranova definition.

Contact details Immeuble Vision Défense – 89-91 Boulevard National La Garenne-Colombes CEDEX France https://claranova.com/investors/	Revenue by geography 																
Management team CEO: Pierre Cesarini Prior to joining Avanquest as Group CEO in May 2013, Mr Cesarini began his career at Apple's California headquarters, where he spent 10 years and played a key role in the development of the PowerMac. In 1998, he founded TempoSoft, a supplier of intranet applications for HR management and planning that was purchased by Oracle in 2005. In 2007, he became CEO of Atego, an embedded software provider.	CFO: Sébastien Martin A seasoned veteran in all key areas of corporate finance, Mr Martin holds an Executive MBA from HEC and has 20 years' experience in fast-growing technology companies. He has headed up more than 20 notable operations from incorporation to acquisition to restructuring.																
Chairwoman of supervisory board: Caroline Le Bigot Graduate of Sciences Po Paris and an Executive MBA at Stanford, Caroline has decades of experience in high tech internationally. She is currently assisting large French, US and Israeli companies in their development. Her passion for high tech and user interface design, her knowledge of software and hardware environments, and her expertise in international businesses and complex projects have benefited the accelerated development of Claranova.	Vice-chairwoman of supervisory board: Luisa Munaretto With decades of experience in private equity, Ms Munaretto is a co-founder of IndEU Capital, an investment fund that has specialised in luxury brands with a strong focus on digital branding and innovation. Her experience in private equity also includes numerous investments in France and Italy through her position of director of strategy at 21 Partners, an investment company of the Benetton family.																
<table border="1"> <thead> <tr> <th>Principal shareholders</th> <th>(%)</th> </tr> </thead> <tbody> <tr> <td>Pierre Cesarini</td> <td>6.3</td> </tr> <tr> <td>Mandarine Gestion</td> <td>0.5</td> </tr> <tr> <td>Claranova SADIR (treasury shares)</td> <td>0.3</td> </tr> <tr> <td>Mandarine Gestion</td> <td>0.2</td> </tr> <tr> <td>La Financiere de l'Europe</td> <td>0.2</td> </tr> <tr> <td>Promepar Asset Management</td> <td>0.2</td> </tr> <tr> <td>Lyxor International Asset Management</td> <td>0.2</td> </tr> </tbody> </table>		Principal shareholders	(%)	Pierre Cesarini	6.3	Mandarine Gestion	0.5	Claranova SADIR (treasury shares)	0.3	Mandarine Gestion	0.2	La Financiere de l'Europe	0.2	Promepar Asset Management	0.2	Lyxor International Asset Management	0.2
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Companies named in this report Avast (AVST LN), CEWE Stiftung (CWC GR), Cimpres (CMPR US), Kape (KAPE LN), Shutterfly (SFLY US), Telit Communications (TCM LN)																	

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