

Due Diligence and Valuation Report

Arrowhead Code: 76-01-20
 Coverage initiated: December 01, 2015
 This document: May 26, 2022
 Fair share value bracket: EUR 2.18 and 2.29
 Share price (May 25, 2022): EUR 1.03ⁱ

Analysts

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Market Data

52-Week Range: EUR 0.92 – EUR 1.17ⁱⁱ
 Average Daily Volume: 1,558ⁱⁱⁱ
 Market Cap. (25-May-2022): EUR 24.3 million (mn)

Financial Forecast (in EUR) (FY ending - Dec)

EUR	'22E	'23E	'24E	'25E	'26E	'27E	'28E
High PBT '000	2,294	2,834	3,242	3,986	4,509	5,338	5,782
High NI '000	1,669	1,944	2,254	2,791	3,187	3,850	4,190
High EPS	0.07	0.09	0.10	0.12	0.14	0.17	0.19
Low PBT '000	2,228	2,705	3,062	3,742	4,198	4,946	5,322
Low NI '000	1,619	1,846	2,116	2,603	2,948	3,549	3,835
Low EPS	0.07	0.08	0.09	0.12	0.13	0.16	0.17

Note: The forecast is based on sole assumptions of Arrowhead

Company Overview: Keyware Technologies (herein referred to as "Keyware", "KEYW", "the company", or "the group") is a Belgium-based independent network service provider in the electronic payments industry. Keyware primarily operates in Belgium, with a small presence in Netherlands. The company was formed in 1996 and got listed on Euronext Brussels in September 2003 with the stock symbol of "KEYW". Prior to 2003, Keyware was listed on NASDAQ Europe (also known as EASDAQ) since June 2000.

The group currently operates through three segments: the terminal rentals/sales segment, the authorizations/transactions segment and the software segment. KEYW has collaborated with world leaders in payment terminal manufacturing, such as Worldline, Ingenico and Loyaltel to offer its customers a wide range of solutions for payment terminals. It also provides transaction services and has partnered with Worldline, Six Pay, PaySquare, EMS, Bancontact and Paynovate to enhance the quality of its services. The company has been strategically transitioning to financial technology (FinTech). The company's traditional payment terminals segment has been diminishing in importance to the benefit of the software segment. The software segment of the company provides software for payment transaction for banks and financial institutions,



Company: Keyware Technologies NV
 Ticker: EBR: KEYW
 Headquarters: Zaventem, Belgium
 Founder: Mr. Stéphane Vandervelde
 CEO (ad interim): Mr. Guido Van der Schueren
 CFO: Mr. Alain Hubert
 COO: Mr. David Leynen
 CCO: Mr. Joris Maes
 CEO EasyOrder: Mr. Laurent Vandervelde
 Website: www.keyware.com

tokenization, instalment payment, ordering and payment.

Key Highlights: (1) The company reported a substantial growth in revenue and EBITDA in FY 2021 as business operations recovered to normal levels; (2) In January 2022, Keyware Technologies acquired Payment Solutions BV, a supplier of electronic payment solutions, which will allow it to leverage operational synergies and grow its customer base by 15%; (3) All three operating segments of the company reported topline growth in FY 2021; (4) The company completed migration of its customers to the new partner and generated substantially higher commissions while consumer spending recovered; (5) The Terminals segment of the company signed a number of new contracts and saw a growth in the share of subscription revenue in FY 2021; (6) The Software segment continued to grow owing to a growth in number of customers, while the company continued to invest in improvement of the platforms; (7) A stable level of contribution from the high-margin software segment (27.7% in FY 2021), lower cost of terminals, growth in the Authorization segment led to a growth in EBITDA by 40.6% YoY to EUR 4.0 mn; (8) Keyware reported a significant increase in net profit to EUR 653k in FY 2021 from EUR 66k in FY 2020 as a result of higher EBIT and recognition of deferred tax revenues;

Key Risks: (1) Lower than expected increase in the terminal base and excessive contract terminations; (2) Change in the authorization partner to have an impact in revenues from the authorization segment in the short term; (3) EasyOrder is still making losses and high customer concentration in the software segment; (4) Impact of COVID-19 pandemic on profitability.

Valuation and Assumptions: Based on due diligence and valuation estimates, Arrowhead believes that Keyware's fair share value lies in the EUR 2.18 and 2.29 bracket. We have valued the company using the Blended valuation method, with equal weightage to Discounted Cash Flow (DCF) method and EV/EBITDA (2021E) multiple based valuation. Our DCF model suggests a fair value bracket^{iv} of EUR 2.11 and EUR 2.28, while relative valuation provides fair value of EUR 2.26 to EUR 2.30.

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1. Summary and Outlook

We are updating coverage on Keyware Technologies NV, headquartered in Zaventem, Belgium, an independent network service provider in the electronic payment industry. It has its own transaction platform and several strategic partners for payment terminals, acquiring services, e-commerce, m-commerce and airtime.

Key Highlights:

- (1) The company recovered to normal levels in FY 2021, delivering revenue and gross profit growth across the three operating segments as the COVID-19 pandemic situation improved during a part of the year and the company completed migration to a new authorization partner.
- (2) It acquired Payment Solutions BV in January 2022, to grow its customer base and strengthen its position in the Electronic Payment solutions market. It will additionally allow the company to leverage the synergies between the terminals segment operations and Payment Solutions BV. The acquisition is to add 2,500 contracts to the company and is anticipated to contribute EUR 2.3 mn in sales and EUR 440k in EBITDA in FY 2022. In order to finance the acquisition, the company took a loan of EUR 1.0 mn, payable in monthly installments over the course of 5 years.
- (3) In FY 2021, the company reported an increase in revenue of 36.5% YoY. Revenue amounted to EUR 17.7 mn, as a result of growth in all segments. The higher number of contracts signed and increased sales efforts in the Terminals segment, recovery in consumer spending and higher commissions in the Authorization segment and increased demand in the Software segment contributed to the increase.
- (4) The gross profit increased by 22.3% YoY to EUR 12.4 mn because of lower cost of terminals as a result of strong performance in the Authorization segment and lower cost of terminals purchased. The gross margin, however, decreased owing to a difference in reporting of authorization segment sales in FY 2021 and FY 2020.
- (5) The company's EBITDA increased by 40.6% YoY to EUR 4.0 mn, owing to the higher gross margin which helped offset the increase in personnel costs, other operating costs and allowances on current assets. The EBITDA margin increased to 22.4% in FY 2021 from 21.7% in FY 2020.
- (6) Its cash and cash equivalents increased to EUR 1.7 mn in FY 2021 from EUR 1.5 mn in FY 2020, as it paid off a lower amount in loans in FY 2021 as compared with FY 2020. The company took loans of EUR 1.2 mn in FY 2021, repaid loans related to the Magellan acquisition and closed the year with debt of EUR 1.6 mn as compared to 2.9 mn in FY 2020.
- (7) The Magellan business and the EasyOrder tool underwent several changes to offer upgraded and improvised products. The advancements in the products will facilitate ease of use and relate to providing a range of services making the two businesses more holistic and help Keyware with the transition and position itself as a full-fledged software developer. The two businesses saw increased opportunities and demand as result of the COVID-19 pandemic as payment apps/contactless payments gained importance in relation to cash payment methods. The company carried out some major projects in the Magellan business and continued to invest in its software-as-a-service (SaaS) capabilities in the EasyOrder business (expected in FY 2022 also).

Key Risks: (1) Lower than expected increase in the terminal base, excessive contract terminations and slow adaptability to the ever-changing technology; (2) Dependency on a few customers in the software segment; (3) Covid-19 pandemic's impact on the profitability and uncertain duration of recovery; (4) EasyOrder is still in the start-up phase and this business is currently making losses; (5) In the software segment, the top and the top three customers accounted for 27.5% and 55.9% of FY 2020 sales; (6) Change in the payment card industry (PCI) standards meant certain types of Ingenico payment terminals were no longer required and were being replaced, impacting their demand.

Industry Overview: The electronic payment industry's value chain comprises of several services - providing terminals, transaction services, telecommunication services, etc. Keyware is an active player in providing terminal installation, maintenance and repair services as well as transaction services to its clients. With the government eliminating the use of paper food coupons and introducing electronic coupons, the industry is poised to witness a growth in the number of terminals as many retailers accepting the food coupons do not currently own a payment terminal. Additionally, the government has reduced the cash transactions from earlier EUR 5k to EUR 3k which favorably impacts the volume of payment transactions on terminals. Therefore, the industry is well poised to grow through both the volume of transactions as well as the number of terminals over the coming years. In view of the COVID-19 pandemic, the Belgian government has increased the upper limit of contactless payment transactions to EUR 50 from EUR 25. The change in

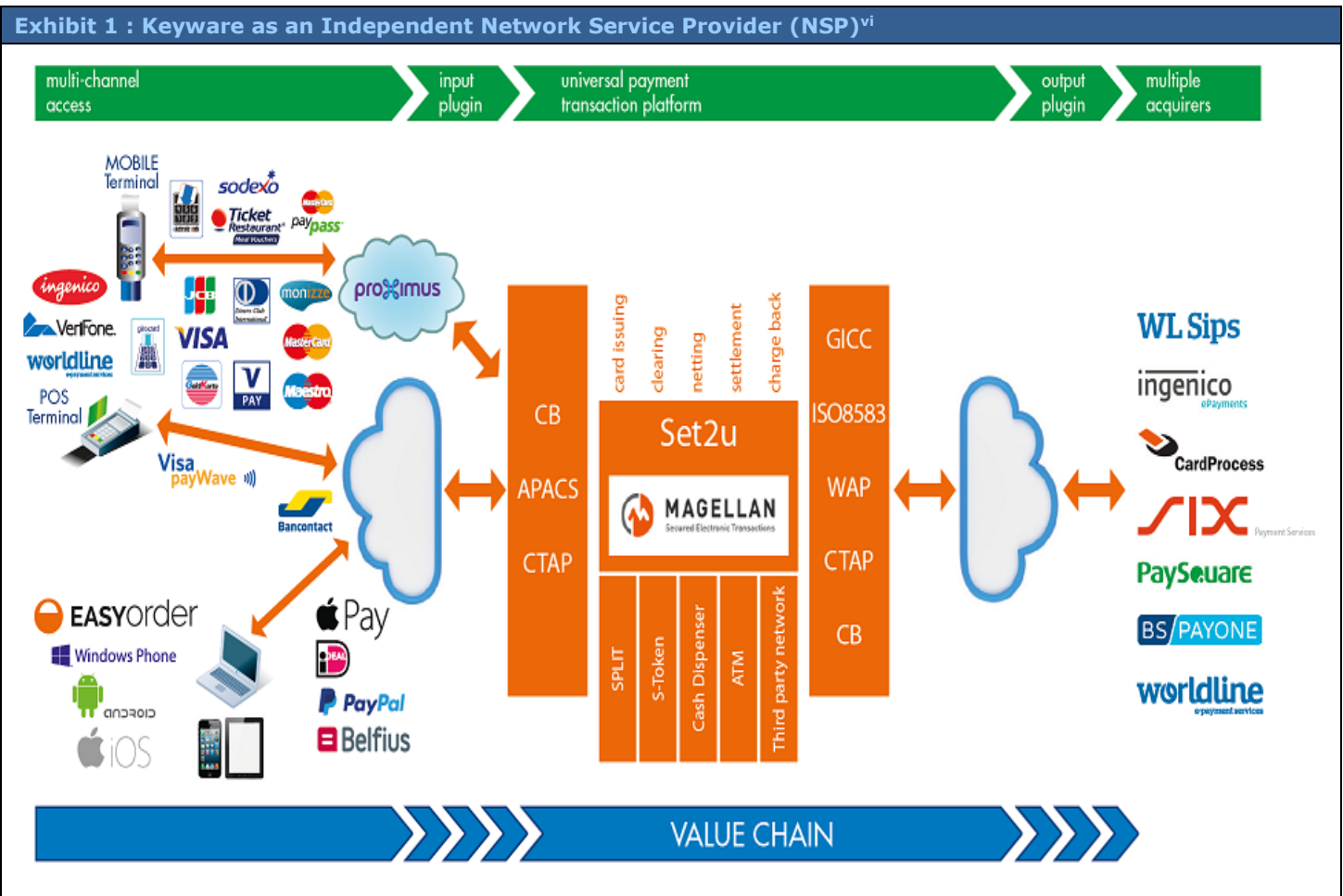
the upper limit is likely to benefit the company as customers are going to be able to use contactless payments for higher amounts and an increasing number of people are expected to use contactless payments for transactions.

2. Business Overview^{vi}:

Keyware Technologies NV was established in June 1996 as a public limited company and is headquartered in Zaventem, Belgium. The company’s shares have been trading on Euronext Brussels under the symbol “KEYW” since June 2000. Keyware is an independent network service provider offering electronic payment solutions in the regions of Belgium and Netherlands. It has more than 15 years of experience in programming, installation, personalization, maintenance, rental and sale of payment terminals. It offers payment services for e-commerce and m-commerce and solutions for loyalty cards. It has partnered with leading global terminal builders like Ingenico, Verifone, Worldline and Loyalek and transaction partners - Worldline, Six Pay, PaySquare, Bancontact, EMS and Paynovate - to offer its customers the most suitable and updated payment solutions.

In FY 2017, the group implemented a FinTech strategy according to which it would transition from a pure service company to a software developer. The terminal segment is currently at a mature stage and is witnessing lower number of signed contracts on a YoY basis. In the future, the contribution of this segment to revenues is expected to decline in favor of the fast-growing software segment. The authorizations and transactions segment are expected to remain a key segment in the following years. The company is also diversifying its strategy by focusing on sectors that are considered more stable or less cyclical in nature, such as Tier 2 companies. This, in turn, is expected to bring stability in the revenues in the long run and hence, reduce the risk of defaults.

Further, with Keyware’s presence in Belgian, French, Luxembourg and German markets, growth is expected to be realized across borders.



In June 2016, Keyware Transactions & Processing GmbH was incorporated as a 100% subsidiary, which started operations in the last quarter of FY 2016. Its activities are into rental and sale of payment terminals.

In September 2016, a participation of 40% was acquired in Magellan SAS to gain access to Magellan’s electronic solutions for physical environments, e-commerce and m-commerce. Magellan offers innovative solutions for the maintenance of electronic transactions through the existing software solutions like S-TOKEN (payment data anonymization), SET2U (payment platform) and SPLIT (a form of micro credit offered by merchants consisting of payment through instalments). Keyware acquired further 60% stake in Magellan by paying EUR 6,000k and reported consolidated financials on June 30, 2017.

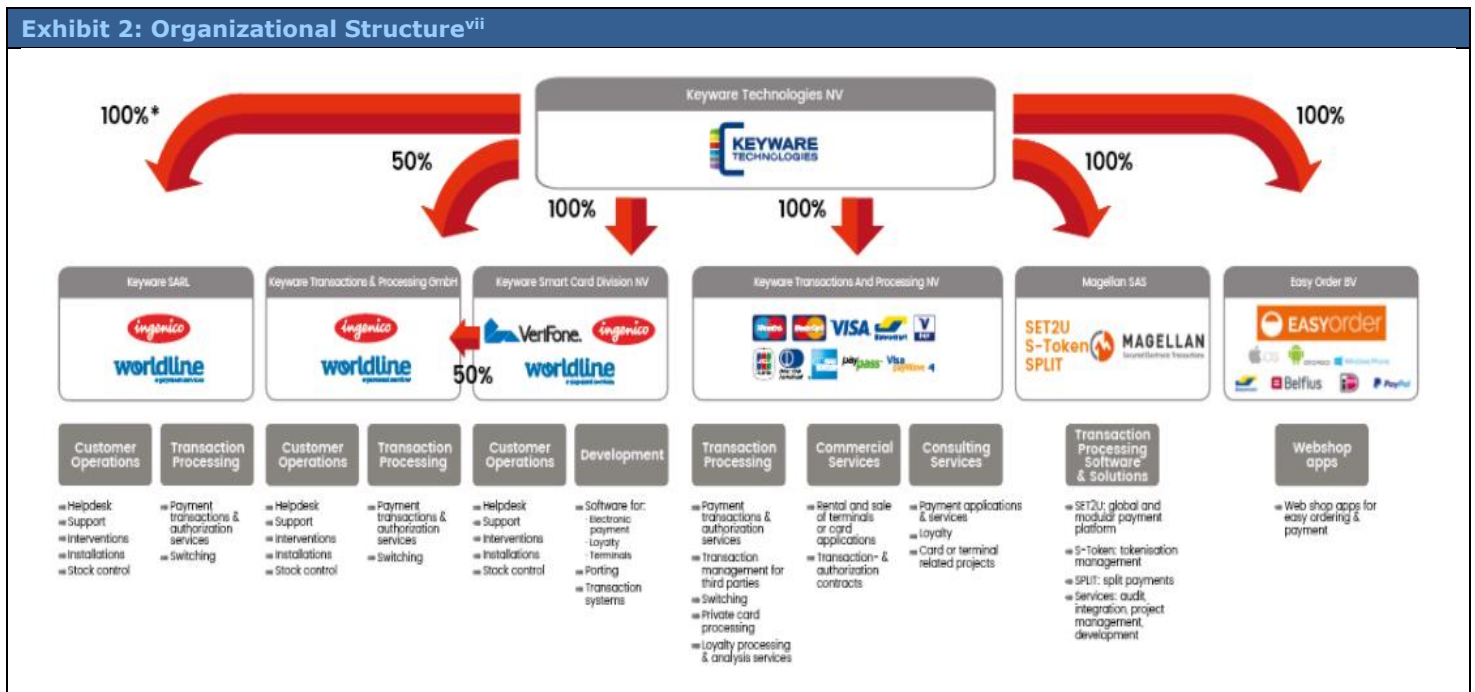
In January 2017, Keyware acquired 100% shares of VOF EasyOrder. This takeover is expected to combine the expertise of both companies and offer a web shop app to merchants, thus a possibility to personalize own web shop on smartphone, tablet or PC. Keyware has also made investments in this platform for customer acquisition.

It is expected that the opening of an office in Paris and establishing the Luxembourg subsidiary will help the company to be in close touch with its customers through its sales force and to enhance sales through cross-selling opportunities.

Keyware had 62 employees at the end of FY 2019, compared with 57 employees at end of FY 2018, with 40 being employed in Belgium. The average number of employees for FY 2019 was 60, compared with 53 for FY 2018. Apart from this, the group also recruited 10 consultants and contractors in FY 2019, compared with 13 in FY 2018.

2.1 Ownership Structure

Keyware Technologies NV operates through its fully owned subsidiaries - Keyware Smart Card Segment, PayItEasy BVBA and Keyware Transaction & Processing NV. PayItEasy BVBA was established as a 50% joint venture between Keyware Technologies NV and J4S BVBA in mid-2013. Following the acquisition of the remaining 50% of shares in FY 2014, In FY 2017, Keyware fully acquired and consolidated Magellan and EasyOrder. PayItEasy which fully consolidated from October 01, 2014 has now fully merged with KTP in July 2019. In July Keyware Smart Card Segment merged with Keyware Transaction & Processing NV, further reducing the group structure



2.2 Company Milestones

Exhibit 3: Keyware Milestones	
Year	Events
2003	<ul style="list-style-type: none"> Keyware shares got listed on Euronext for the first time in September 2003 Payment Software got certified by Electronic Payment Certificate Institute
2005	<ul style="list-style-type: none"> The number of customers exceeded 5,000 in the payment terminal segment
2007	<ul style="list-style-type: none"> Acquired BRV Transactions NV. KEYW benefitted as BRV held license from Royal Bank of Scotland (RBS) for direct offering of credit/debit card authorization for Visa and Master Card in Belgium
2009	<ul style="list-style-type: none"> Successfully added fixed IP terminals and portable GPRS terminals to its existing offerings Entered co-operative venture with PaySquare, which enabled KEYW to offer payment authorization services on its own and on third-party terminals
2011	<ul style="list-style-type: none"> Successfully penetrated higher market segment customers - government schools, municipalities, etc.
2013	<ul style="list-style-type: none"> Partnership with Worldline allowed Keyware to rent/sell Worldline terminals in the Benelux region
2014	<ul style="list-style-type: none"> The reduction in the amount of cash permissible for transactions from EUR 5k to EUR 3k by Belgian government added to the already growing volume of transactions for Keyware Added a record number of terminals crossing the 14,000 mark
2015	<ul style="list-style-type: none"> Acquired the assets of GlobalPay in January, taking over several purchase and lease contracts Replacement of paper meal vouchers with electronic version from the last quarter of FY 2015 is set to bring in new growth opportunities for Keyware in FY 2016 Transition from spread income model to brokering model for authorization services
2016	<ul style="list-style-type: none"> Partnership with Bancontact, making the company a Certificate Holder in the "Terminal Provider" and "Point of sale (POS) Gateway" categories Keyware opened an office in Germany and started offering payment terminals and transaction services beginning from fourth quarter of FY 2016 Completed buy-back share for a maximum amount of EUR 1.0 mn Keyware signed for 40% participation in French FinTech Company Magellan SAS and held a Call option for remaining 60% of the shares Keyware received PA DSS 3.1 security certificate for Magellan's SET2U payment software platform Acquisition of VOF EasyOrder for a EUR 700k investment
2017	<ul style="list-style-type: none"> On June 30, 2017, Magellan became 100% subsidiary as Keyware acquired the remaining 60% of Magellan stake. The financing of the acquisition was partially through the internal funds amounting to EUR 1.5 mn and remaining by bank loans of EUR 4.5 mn In May 2017, Keyware's board of directors decided to initiate a share buy-back programme capped to EUR 1.0 mn of which buy-back worth EUR 700k was repurchased in FY 2017
2018	<ul style="list-style-type: none"> Keyware completed its share buy-back program initiated in FY 2017 by repurchasing shares worth EUR 200k in FY 2018 Keyware distributed for the second time a dividend amounting to EUR 0.03 per share. The amount was paid in September 2018 Keyware announced a third share buy-back programme for a maximum amount of EUR 1,000k
2019	<ul style="list-style-type: none"> Keyware distributed dividend of EUR 0.04, amounted to EUR 913k Keyware SARL was incorporated
2020	<ul style="list-style-type: none"> Keyware signed an agreement with a new authorization partner; migration expected to be completed by mid-2021, depending on the technical aspects Keyware entered into an agreement with another supplier of payment terminals

2.3 Business Model

Keyware provides value addition to its customers by offering personalized payment services - terminals, applications, telecom and transactions, installation, maintenance and repair services. Its tie-ups with the various global players for each part of the payment solution enables it to offer its customers the best solutions available in the industry. Keyware provides personalized and flexible payment solutions through three business segments - Payment Terminals, Transaction Services and Software.

2.3.1 Payment Terminals

It involves renting and selling of fixed, portable and mobile payment terminals from various terminal builders through its Smart Card Segment. The terminals sold/rented are supplied by Ingenico, Worldline and Loyalktek. Worldline and Ingenico provide the merchants with secure, extensive and innovative technology; thereby, becoming the first choice for most users. Loyalktek specializes in the field of electronic and payment terminals.

Keyware has a large presence in the Tier-III market segment, providing terminals to smaller local shops, grocery stores, fashion departments, pharmacies, cafés and restaurants. With the introduction of Worldline terminals to its product portfolio, the company is now looking to penetrate the Tier-II segment, incorporating big corporate houses, government agencies, automotive companies and others.

2.3.2. Transaction/Authorization Services

Keyware commenced providing transaction authorization services from FY 2007. Under this segment, Keyware offers transaction services to acquirers such as banks and payment institutions. It sends the transaction data it receives from the retailer's terminal to the acquirer for payment authorization via the involved debit/credit card schemes and then provides for clearing and settlement of the transactions.

2.3.3. Software

The segment comprises activities of Magellan and EasyOrder. Keyware has advanced e-commerce and m-commerce software. The in-house technology of Magellan helps to process transactions and to secure mobile payments. It also helps the consumers to easily split or postpone their payments without the use of credit cards. In FY 2019, Keyware upgraded the Magellan offerings to transform its products as if they were "plug and play" using the existing banking systems without the customers being required to spend on expensive and new developments. The company has enhanced and innovated its offerings in the field of e-commerce to tap into new and large customers. Magellan improved its array of services to provide end-to-end processing of transactions to customers with continuous follow-up of the highest standards. These innovations were also integrated in the EasyOrder app.

EasyOrder, an innovative ordering and payment app, available as SaaS for which customers pay monthly fee based on their selected functionalities. The software segment is currently becoming Keyware's main segment, developing principally in France and in its overseas departments and territories. Keyware updated the EasyOrder tool, in FY 2019, to make it a one-stop shop for online orders, reservations, payments, online marketing options, customer loyalty cards and a cash register system. The interface of the app was made friendly for the user and it was made possible to integrate EasyOrder website into any existing website by connecting EasyOrder to other systems through public Application Programming Interfaces (APIs). Personnel for marketing and attracting new customers were also employed. The advancements made would appeal and attract a broader audience.

2.4 Products and Services^{viii}

- 1. PayFix:** These terminals use a fixed cable connection to communicate from the terminal to the telephone network or internet modem. They are generally found in shops with fixed payment/ check-out counters.
- 2. PayAway:** These are portable terminals consisting of a base station and a portable device. The base station operates via a fixed connection just like a fixed terminal. However, the portable device has a range of approximately 150 meters, which can be used to receive payments from customers in restaurants and cafes without them going to the billing counter.
- 3. PayMobile:** These pocket-sized terminals use the GSM or GPRS communication technology and can be taken anywhere within Belgium to receive the payments. They are mostly used by door-to-door suppliers and taxi drivers to receive payments.
- 4. Pay-E:** This channel is used to assist e-retailers who wish to add the option for electronic payment on their website. It provides transaction services, along with standard templates, that can be integrated into the web-shop of a

retailer without any hassle. Keyware can also adapt to the customer's needs and offer customized solutions to an e-retailer depending upon purchases with debit cards or credit cards, average purchase value, purchase frequency, etc. As a back-end support, Keyware also provides the retailer secure access to the payment module on its site, enabling the retailer to view reports, activate options and monitor its payments.

5. **Pay-M:** The service provided on this channel is like "Pay-E," except that it is provided for the mobile applications.
6. **SET2U:** It is a software platform which interprets, regulates and manages the payment transactions. Initially, it was directed for the businesses such as banks, lending institutions, payment processors and other service providers. Set2U has reduced the complicated conventional payment environment for these businesses while leading to better mobility, comfort and security. It provides a centralized solution in the form of SaaS for every payment method and app.
7. **S-Token:** This software secures sensitive critical data while ensuring that all PCI DSS and EMVCo requirements for the financial sector are met simultaneously. Transactions are kept secure by replacing sensitive data with irreversible tokens with no intrinsic value. This application has substantial potential.
8. **SPLIT:** It helps the customers to spread out the payments for their purchases in three or four instalments via their bank card irrespective of which national law applies. This is referred to as micro-credit. Customers can make the payment without creating any special credit account nor to file a credit request. While these split payments can be observed already in South America and Scandinavia, it is expected that they will become more important on Europe's mainland too.

2.5 Company Premiums^{ix}

- 1. Growth through diversification into software activities:** Keyware's software segment comprises Magellan and EasyOrder which contributed nearly EUR 4.9 mn or 27.7% to the total revenue in FY 2021. The Magellan acquisition allows merchants in Belgium market to have their customers paying in instalments and in a secured way.
- 2. Partnership with world leaders in terminal manufacturing and transaction services:** Keyware has collaborated with leaders among terminal builders- Ingenico and Worldline - to offer its customers a wide range of world-class terminals to choose from. It has transaction partners such as EMS and Paynovate. This allows Keyware to offer its customers the latest up-to-date services and maintain Keyware's competitiveness in the fast-changing technological market.
- 3. Increasing profitability and lower Financial debt in future:** Based on our estimates, we expect the company to register top line growth of 4.0%-6.0% during FY 2021-29. Supported by strong operating performance, we expect the company to generate strong free cash flows. Thus, Keyware's financial leverage will continue to decline and balance sheet will be totally financial debt free once the Magellan acquisition related loans will have been reimbursed.
- 4. Diverse portfolio of customers:** KEYW is a company with approximately 15k customers contributing to its top line. According to the company, its most important customers contribute less than 1% to the sales of the terminals segment. This isolates the company from any significant risk arising from concentrated group of customers.
- 5. Growing trend toward cashless payment options:** In recent years, a shift toward cashless payment options has been seen as such payments have become more popular among customers. The total volume of non-cash transactions is expected to reach 204 bn in 2022 from 134 bn in 2017. Additionally, the recent COVID-19 pandemic has led to an increasing trend toward cashless payment options to prevent the spread of the virus. Keyware's software segment equips it to leverage on the new opportunities.^x

2.6 Company Risks^{xi}

- 1. Pace of technology adoption:** Keyware's market of operations, especially its payment terminals segment, is characterized by frequent new developments in the field of technology, changing customer needs, upcoming new mode of payments through internet and mobile, changing industry standards etc. To stay ahead of its peers, Keyware needs to respond to these changing circumstances in a swift and timely manner without compromising on the quality of services offered to its customers. Not being able to adapt to the fast pace of this industry can result in negative consequences for the company.

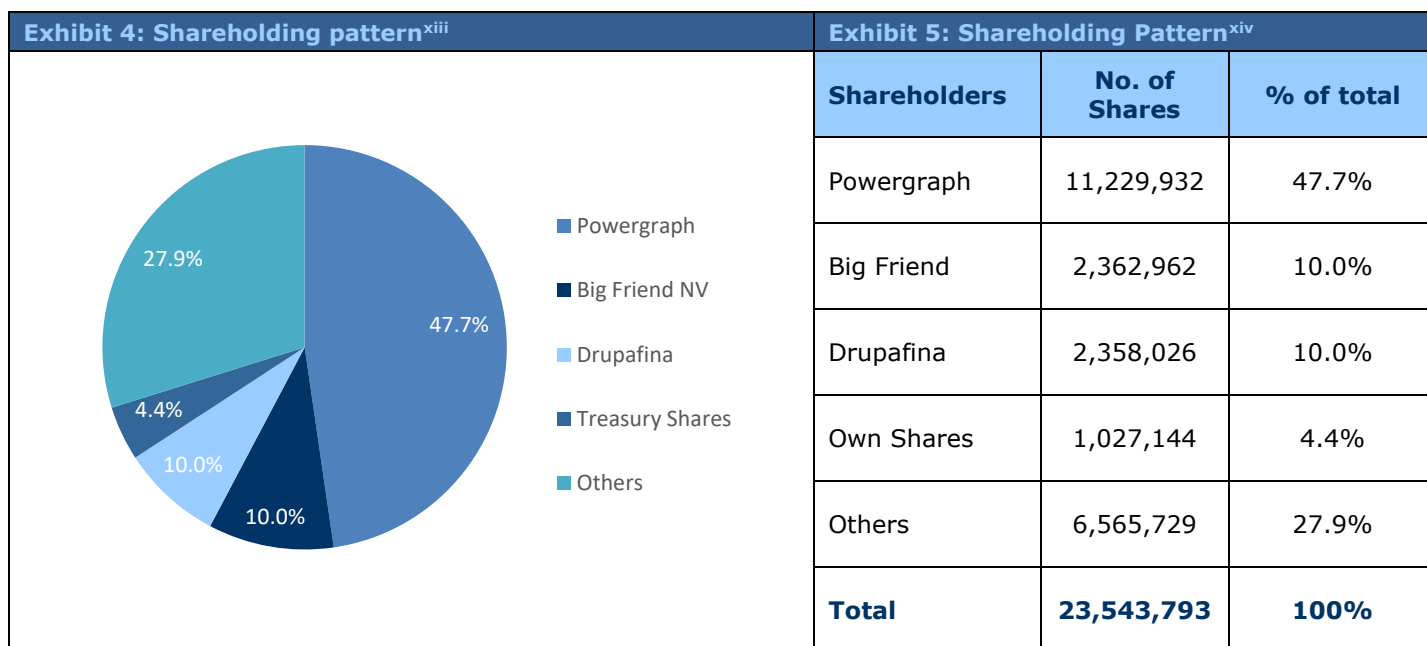
The company is making attempts to limit this risk through initiatives such as diversifying of its range of products, associating with in a technologically innovative company (Magellan), and the commercializing of its payment app (Easy Order) from FY 2017.
- 2. Less than expected swaps or renewals:** Keyware enters into a 5-year long lease contract with its customers and it remains crucial for the company to have higher renewals. An increase in attrition rate will not only decrease the revenues but also serve as a negative performance indicator for the other prospective customers.
- 3. Dependency on acquirer:** At any point of time, an acquirer can decide to terminate or discontinue its contract with Keyware which a risk to organization is. In such a case, company must try to find a new acquirer to maintain the flow of revenue from these terminals.
- 4. Obsolescence of payment terminals:** The company has witnessed a higher inventory obsolescence because some of the returned terminals no longer comply with PCI standards. This can affect the financial year in which the payment terminals can be utilized up to a given deadline
- 5. Supplier dependency:** Keyware sourced its payment terminals from Loyalttek, Worldline and Ingenico (the acquisition of Ingenico by Worldline made the merged entity the fourth-largest player in payment services). Having a limited number of suppliers lowers the company's bargaining power with its suppliers and puts greater pricing power in the hands of the supplier. Additionally, if there is a problem with one main supplier this might affect operations if there is not enough inventory on hand
- 6. COVID -19:** The recent COVID-19 pandemic has impacted the businesses such as horeca, retail and service rendering shops such as salon shops and beauty parlors, which have further impacted Keyware as the payment transactions have decreased and new installations are not to be executed. This has affected the profitability of the company and the pace of recovery is not certain as the pandemic has not subsided.
- 7. Migration of contracts in the authorization segment:** Change in the authorization partner by the company to have a short-term impact in revenues from the authorization segment in FY 2020 and FY 2021 as the full migration

is likely to be accomplished by the end of 2021 depending on the technical aspects. Retaining existing clients would depend on the performance of the new partner, failing which the company could lose its customers.

- 8. Customer Dependency:** The company has limited customers in the software segment, which increases its dependency for business on these customers. The company's top 3 customers in the software segment generated 55.9% of the revenue from the software segment in FY 2020 with one customer accounting for 27.5% of the revenue.
- 9. EasyOrder:** This business is still in the start-up phase and during the pandemic many traders started using this app to generate sales. Though the sales have picked up, the business currently still needs financial support

2.7 Keyware’s Shareholding Pattern

On May 26, 2022, the number of shares outstanding were 23,543,793^{xii}.



2.8 Listing and Contact Details

The ordinary shares of Keyware Technologies are listed on Euronext Brussels (EBR) (Ticker: EBR: KEYW, Date of Listing –September 3, 2003)

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3. Financial Overview:

FY 2021

Strong topline growth supported by strong performance in all 3 segments

The company reported a 36.5% YoY increase in revenue to EUR 17.7 mn in FY 2021 as all 3 operating segments reported growth.

Revenue in the Terminals segment amounted to EUR 7.1 mn, 6.5% higher on a YoY basis as the company, supported by increased commercial and sales efforts, signed a higher number of contracts and generated strong subscription-based revenue.

The Authorizations segment reported a revenue of EUR 6.0 mn, increasing significantly by 158.4% YoY, on account of accounting treatment in FY 2021, migration to a new partner and a recovery in consumer spending.

The Software segment generated a revenue of EUR 4.9 mn in FY 2021, up 14.1% YoY, with a growth in the number of merchants offering SPLIT solutions.

Bottom line grew as a result of sales growth

Gross profit increased by 22.3% YoY to EUR 12.4 mn in FY 2021, as the Authorization segment reported a gross profit of EUR 2.0 mn (up by 90.1% YoY) as the revenue grew. The high-margin software segment and the terminals segment also reported a growth in gross profit as it amounted EUR 4.9 mn (up by 15.2% YoY) supported by topline growth and lower cost of terminals, respectively.

The gross profit margin, however, decreased to 70.3% from 78.5% in FY 2020 as a result of migration to a new partner and reporting of part of the revenue in the Authorization segment as agency revenue in FY 2020 .

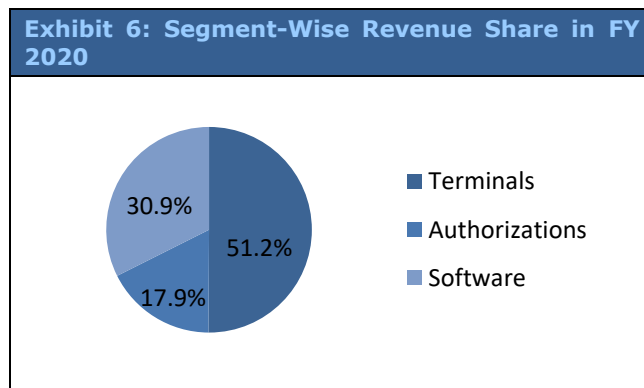
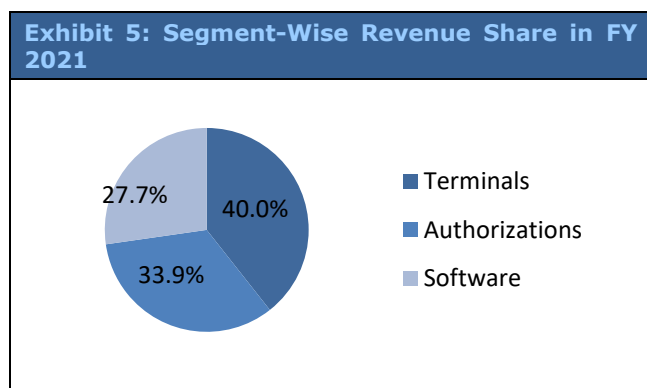
EBITDA saw a growth of 40.6% YoY to EUR 4.0 mn in FY 2021, with a margin of 22.4% (as compared with 21.7% in FY 2020).

Net profit increased to EUR 653k, growing substantially by 889.4% YoY, owing to a higher EBIT and deferred tax revenue of EUR 264k.

Improved cash position despite increased capex and lower operating cashflow

Even as cash generated from operating activities decreased YoY (due to delayed collection of receivables in FY 2020) and capital expenditure increased, the cash and cash equivalents increased to EUR 1.7 mn from EUR 1.5 mn in FY 2020 as the company took new loans (amounting to EUR 1.2 mn) and repaid a lower amount of debt in FY 2021 as compared with FY 2020.

The debt decreased to EUR 1.6 mn in FY 2021 as compared with EUR 2.9 mn in FY 2020 as the company completed the payment of the loan related to the acquisition of Magellan.



4. Key Variable Analysis^{xv}

4.1 Variable 1 – Revenue from payment terminals

Keyware’s major source of revenue is the number of terminals it sells/ leases. Considering developments such as partnership with Worldline, requirement of new terminals in the market for electronic meal vouchers, limit on the amount of cash for transactions, we forecast the number of terminals to increase for Keyware. The installed base of terminals of the company was approximately 15k in 2020. The following are our estimates for components of revenue from payment terminals for the forecast period under two scenarios, Low bracket and High bracket:

Exhibit 7: Payment Terminal Revenue Breakdown									
In EUR mn		2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Low Bracket	Rental revenues	3.6	3.8	3.7	3.7	3.6	3.6	3.6	3.6
	Terminal sales	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	Rendered services	2.7	3.2	3.1	3.0	3.0	2.9	2.8	2.7
	Cancellation pay	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8
	Total	7.5	8.2	8.0	7.8	7.7	7.5	7.4	7.3
High Bracket	Rental revenues	3.7	4.0	4.0	3.9	3.9	3.9	3.9	3.9
	Terminal sales	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	Rendered services	2.7	3.2	3.1	3.1	3.0	2.9	2.9	2.8
	Cancellation pay	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8
	Total	7.6	8.3	8.2	8.1	8.0	7.9	7.8	7.7

Note: The forecast is based on sole assumptions of Arrowhead

4.2 Variable 2 – Revenue from authorization services

As per the new reporting methodology from 2016 onwards, the segment revenue is disaggregated into gross revenues and related cost components. Such a disaggregated presentation would only affect the presentation of the income statement, i.e., higher revenue and cost of goods sold and a lower overall gross profit margin. However, the other KPIs (EBIT, EBITDA, PBT and NI) would remain largely the same.

On December 31, 2019, Keyware offered transaction/ authorization services on 94% of the total installed base of terminals. These terminals form a source of revenue for the authorization services’ segment. Given that the company holds strong partnerships with transaction service providers like EMS and Paynovate we estimate the number of terminals offering transaction services to increase in the future. Also, the agreement with Charleroi Airport will also contribute to the revenue from authorization services. Following is the estimated revenue from authorization services during the forecast period for the low bracket and high bracket:

Exhibit 8: Authorization Services Revenue								
In EUR mn	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Low Bracket	7.5	8.3	8.2	8.2	8.2	8.2	8.2	8.3
High Bracket	7.8	8.6	8.6	8.6	8.7	8.7	8.7	8.8

Note: The forecast is based on sole assumptions of Arrowhead

4.3 Variable 3 – Revenue from software services

After the acquisition of Magellan and EasyOrder during FY 2017, software services have been added as a new revenue stream to the company’s business model. Following is the estimated revenue from software services during the forecast period for the low bracket and high bracket:

Exhibit 9: Software Services Revenue								
In EUR mn	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Low Bracket	5.3	5.8	6.3	6.9	7.4	8.0	8.6	9.3
High Bracket	5.4	5.9	6.5	7.1	7.8	8.5	9.2	10.0

Note: The forecast is based on sole assumptions of Arrowhead

5. News^{xvi}

- 1. FY 2021 results announced:** On March 16, 2022, the company announced its FY 2021 results. Revenue amounted to EUR 17.7 mn in FY 2021, up 36.5% YoY with growth reported in all three segments. EBITDA grew by 40.6% YoY to EUR 4.0 mn owing to the topline growth. The cash and cash equivalents increased to EUR 1.7 mn from EUR 1.5 mn in FY 2020 owing to the cash inflow from new loans and lower amount of debt repaid.
- 2. Ended contract of Stéphane Vandervelde:** On April 15, 2021, Keyware Technologies announced that it had reached an agreement with Stéphane Vandervelde to end his contract with the company. In his place, Guido Van Der Schueren will serve as the CEO ad interim until a new CEO is appointed.
- 3. FY 2020 results announced:** On March 25, 2021, Keyware Technologies announced its FY 2020 results. The company reported a revenue of EUR 13.0 mn in FY 2020, a decline of 28.5% YoY. The EBITDA of the company decreased by 6.2% YoY to EUR 2.8 mn on account of a decrease in revenue. The EBITDA margin increased to 21.7% from 16.5% in FY 2019 as a result of cost saving initiatives. The company repaid debt amounting to EUR 2.7 mn in FY 2020 and closed the year with cash and cash equivalents of EUR 1.5 mn.
- 4. Acquittal in case:** On March 24, 2021, Keyware Technologies announced that it had been definitely acquitted in a court case related to Keyware Smart Card Segment SA. The case was related to techniques used by the company to advertise its offerings.
- 5. H1 2020 results announced:** On August 28, 2020, Keyware Technologies announced its H1 2020 results. The turnover reduced by 15.7% YoY in H1 2020 to EUR 7.7 mn, owing to COVID-19-related headwinds. The gross margin and EBITDA margin increased to 67.4% and 19.9%, respectively, from 60.9% and 16.7%. However, the net margin decreased to 3.6% from 4.8% in H1 2019, on account of lower financial income and increased write-downs on current assets. The company repaid debt amounting to EUR 1.4 mn, reducing it to EUR 2.8 mn, while cash and cash equivalents increased to EUR 1.3 mn from EUR 1.2 mn in H1 2019.
- 6. Termination of the share buy-back program:** On September 05, 2020, Keyware announced that it had bought 480,222 shares for a total amount of EUR 420k as part of its ongoing share buy-back program. The company held a total of 1,027,144 treasury shares (4.36% of the issued shares as of August 28, 2020). The company announced that it had decided to terminate the ongoing program as it had not met the objective of buying back shares of EUR 1.0 mn, even a year after extension.
- 7. Q1 2020 trade update:** On May 15, 2020, the company reported a revenue of EUR 4.2 mn in Q1 2020, a decrease of 10.7% on a YoY basis. The decrease was due to a decline in revenue of authorization and terminals segment due to closure of businesses during the lockdown.
- 8. Consequences of COVID-19:** On March 20, 2020, Keyware announced that due to COVID-19 it had to temporarily reduce its sales force which would directly impact the number of contracts that would have been signed in their period of unemployment. The Terminals segment will be affected and a delay in collection of receivables might be seen. However, noncash payments will become popular as they would decrease the risk of catching an infection. However, the overall consequences cannot be estimated at this point.
- 9. FY 2019 results announced:** On March 12, 2020, Keyware announced its FY 2019 results. The company reported a revenue of EUR 18.1 mn in FY 2019, decreasing by 7.7% YoY. The decrease was due to a decline in revenue of authorization and terminals segment. EBITDA decreased by 5.7% YoY to EUR 3.0 mn, even as EBIT increased, due to lower noncash costs. The net profit decreased by 48.9% YoY to EUR 320k because of lower financial income and higher corporate taxes.
- 10. Appointment of COO:** On January 06, 2020, the company announced the appointment of new COO, David Leynen, who took over from Wim Verfaillie.

6. Management and Governance^{xvii}

The company has a team of experienced professionals with expertise in the field of technology, operations, sales and marketing and finance. These highly qualified professionals have been with the firm for a long time, signifying the stability of the firm's management. The management's focus is on improving profitability and creating shareholder value.

Exhibit 10: Management Team		
Name	Designation	Background
Guido Van der Schueren	CEO ad interim	<ul style="list-style-type: none"> Guido Van der Schueren is among the main shareholders of Keyware Technologies and chairman of the boards of Hybrid Software, Global Graphics (Euronext: GLOG: BB) and Brand Quadergy He cofounded Artwork Systems and served as the managing director until 2007 He then served as the Chief Commercial Officer (until mid-2011) and vice chairman of the board of Esko Artwork
David Leynen	COO	<ul style="list-style-type: none"> David Leynen holds a master's degree (engineering) in electricity, electronics and computer science and has completed an executive master's in management from Solvay Business School He has valuable experience in the electronic payments industry, having served as the CTO at Sodexo and CCO at FICS/S1 He has been the Customer Services Head at MasterCard Europe and CIO/IT at Group Jolimont He has been appointed as the Chief Operating Officer (COO) in 2020
Joris Maes	CCO	<ul style="list-style-type: none"> Joris has over 20 years of experience in international sales and marketing positions at Alcatel-Lucent, KPN, AT&T and Balta He has completed his master's in industrial engineering (electronics) and is an MBA in General International Management from the Vlerick Leuven Gent Management School He has been associated with Keyware since 2010
Alain Hubert	CFO	<ul style="list-style-type: none"> Alain joined Keyware in 2013 and has over 20 years of experience in financial management, taxation and accounting Previously, he worked with Ernst & Young as an Executive Director of Transaction Advisory Services (TAS) He has been a certified auditor since 1998; until 2008 he was an audit partner at Constantin Bedrijfsrevisoren He has proficiency in due diligence, quality and risk management He completed Licentiate Applied Economic Sciences (UG) and Special Licentiate in Accountancy work from Vlerick School of Management
Laurent Vandervelde	CEO EasyOrder + Country Manager Germany	<ul style="list-style-type: none"> Master Commercial Engineer @ Solvay Business School Sales and marketing development at Readz Experienced in international sales and marketing strategies Market analysis for technology start-ups At Keyware since 2016
Franck Willmann	CEO Magellan	<ul style="list-style-type: none"> He has more than 20 years of experience in payments applications He was co-founder of Magellan and Caravel payment solutions He has been associated with Magellan for 16 years He served as director of products and services at Magellan for five years

7. Industry Characteristics

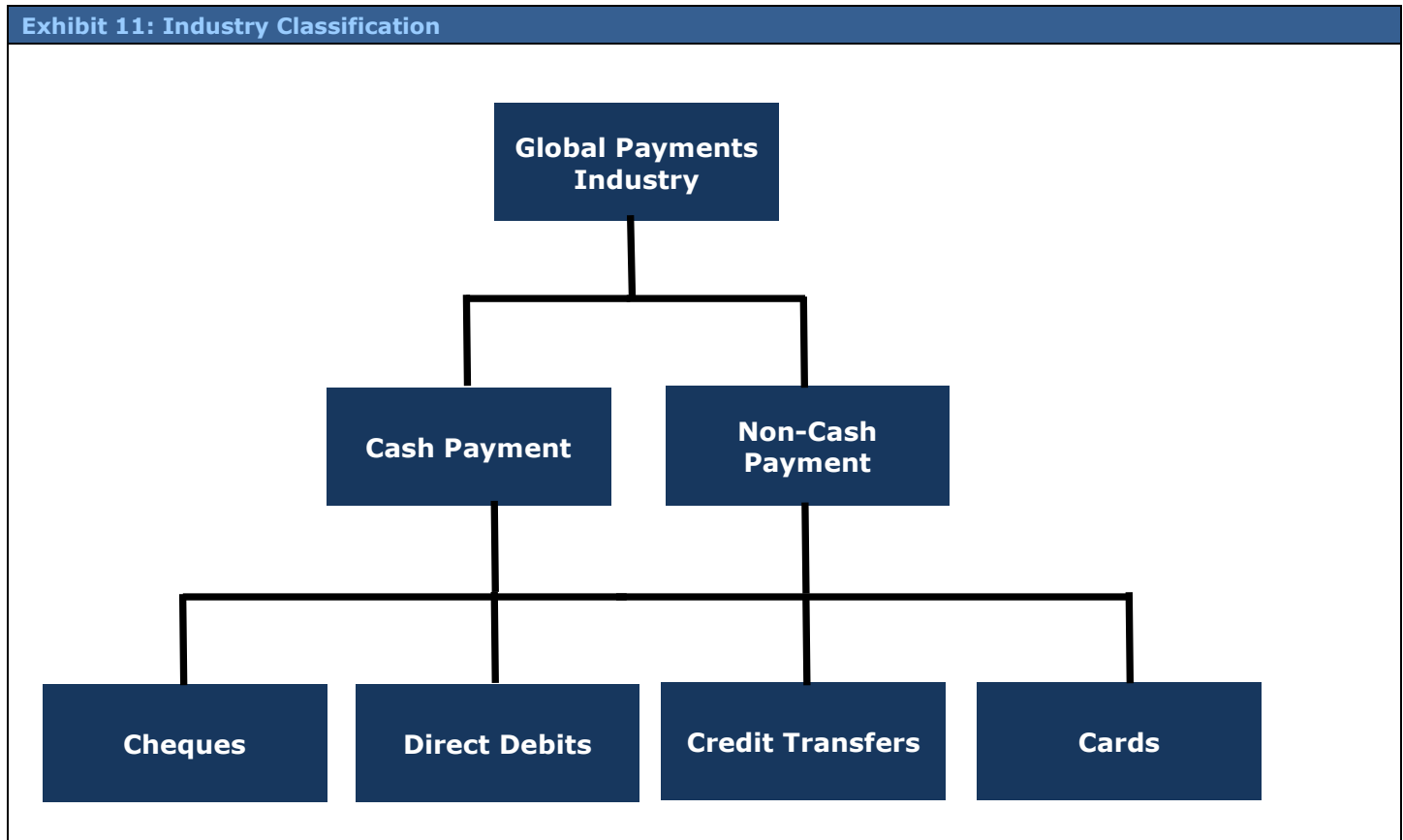
7.1 Industry Overview^{xviii}

The global FinTech market is expected to grow to USD 324 bn by 2026 at a CAGR of 23.4% from 2021 onward. The high penetration of mobile devices and usage of technology-based solutions is creating greater demand for financial and banking solutions. FinTech covers a wide range of services such as robotic trading, peer-to-peer lending platforms, crowdfunding, robo-advice, virtual currencies and cashless payments. Infrastructure-based technology in the open platforms and application programming interfaces are transforming the financial services industry in addition to operational advancements such as the automation of robotic processes (RPA), chatbots and distributed accounting technology (DLT) which allows for more efficiency and agility.^{xix}

The electronic payment industry involves multiple stakeholders, including terminal providers, banks and payment institutions, transaction service providers, infrastructure telecommunication companies, and government agencies, which create a strong payment services ecosystem. The industry is fast eliminating the use of cash and cheques as modes of payment and moving toward technologically enhanced methods such as Debit/Credit Cards, Credit Transfers and Direct Debits. Various European countries have also formulated laws limiting the use of cash for any transaction. Since January 2014, for example, the Belgian authorities have revised the limit on cash transactions for the purchase of goods and services from EUR 5,000 to EUR 3,000. This bodes well for the players involved in the electronic payment industry as this will bolster the volume of transactions occurring through the non-cash modes of payment.

7.2 Industry Segments

The payment industry broadly comprises two segments – Cash payments and Non-Cash payments. Non-Cash Payments are further divided depending upon the payment methods.



1. **Cash Payments:** Transactions happening using paper money form a part of this segment.

2. Non-Cash Payments:

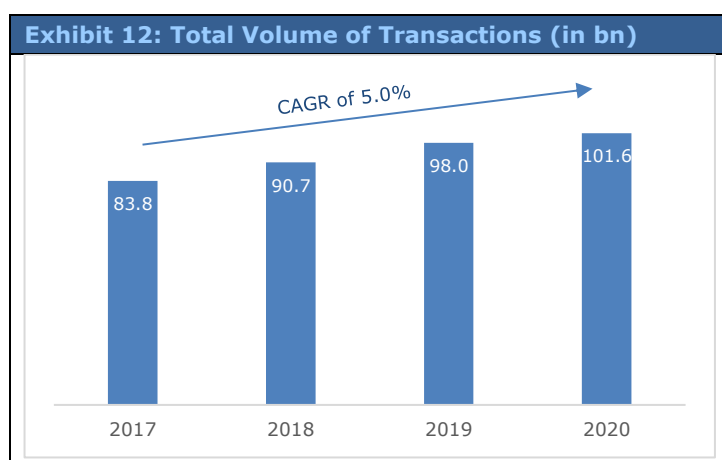
- a. **Cheques:** A written consent where the person signing the cheque obliges to pay the drawer the amount of money stated on the cheque.
- b. **Direct Debits:** An arrangement that allows the banks to transfer the funds from a customer's account to a third party on previously agreed fixed dates. This mode of payment is especially used to pay bills.
- c. **Credit Transfers:** It is a direct mode of transfer of money from one account to another.
- d. **Cards:** Use of credit/debit/loyalty cards for making payments for the goods and services purchased.

Keyware Technologies forms a part of the non-cash payment system by providing services to facilitate the card payments. For this, it provides infrastructure support in the form of renting/selling of payment terminals, along with maintenance support. It also provides transaction services required to transmit, authorize and verify the card data used during the transaction. Since the company's major revenues come from renting of terminals, which are used to complete the card transactions offline, the more the number of transactions, the better the company's performance in terms of revenue.

7.3 Market performance

Total Volume of Non-Cash Payment Transactions ^{xx}:

As per the European Payments Council, the total number of transactions increased to 101.6 bn in FY 2020 from 83.7 bn in FY 2017, at a CAGR of 5.0% for the forecast period. The total value of transactions increased to EUR 167.3 tn (up 8.7% YoY) in FY 2020.



7.4 Payment Process Participants ^{xxi}

Various stakeholders play an important role in ensuring successful electronic transactions. A high level of collaboration is required to ensure the safe and seamless transfer of funds from one bank account to another. Following are the various participants in an electronic payment process:

1. **Cardholders:** They are the consumers who use the electronic mode of payment for purchasing goods and services. The transactions are carried out via plastic/physical cards - debit cards, credit cards, loyalty cards, gift cards or virtual cards - and Smartphones.
2. **Retailers:** They sell goods or services and accept the non-cash payment methods. Retailers use fixed, portable or mobile payment terminals to carry out the transactions and receive the payment via a non-cash payment method such as a card.
3. **Payment acceptance processing providers:** These provide the retailers with means to operate and execute the card payment. They arrange for necessary infrastructure such as installation of point-of-sale (POS) terminals, online payment gateways to collect and transmit the card data and receive payment authorization.
4. **Acceptance-related service providers:** They provide additional features to retailers such as coupon, loyalty or ticket functionalities on the payment terminal, electronic meal vouchers, etc.
5. **Acquirers:** These are the banks and payment institutions that facilitate the transfer of funds from the consumer's bank (issuing bank) to the retailer's bank account after charging a service fee. The acquirers give the retailers access to various card schemes such as Visa, MasterCard, Maestro, Bancontact/Mister Cash, JCB, Diners, etc., and a "merchant account." The payment received from the customer is then transferred into this merchant account.
6. **Acquiring Processors:** They provide transaction processing services to the acquirers, which include transmitting the card data from the retailer's terminal to acquirers' for receiving payment authorization via the credit/debit card schemes and clearance and settlement of all the transactions.

- 7. **Card Schemes:** Various schemes – MasterCard, Maestro, Visa, V-Pay, Diners, JCB, etc. – are available for the retailer to choose from. Each card scheme has different processing costs, which the retailer has to pay depending upon the service he adopts.
- 8. **Clearing and Settlement Institutions** Generally, the national banks who provide clearing and settlement services between the acquiring bank and issuing bank.

Keyware, as a participant, is active in payment acceptance processing, acceptance-related services and transaction services as described in points 3, 4 and 6 above.

7.5 Payment Card Industry Security Standards^{xxii}

Payment Card Industry Security Standards Council (also referred to as PCI SSC), formed in 2006, is responsible for the development, management, education and awareness of PCI Security Standards. It includes Payment Application Data Security Standard (PA-DSS), Personal Identification Number (PIN) Transaction Security (PTS) and Data Security Standard (DSS).

- 1. **PA-DSS:** It applies to software vendors and others who develop payment applications that store, process or transmit cardholder data and/or sensitive authentication data.
- 2. **PTS:** These standards contain the set of requirements for the secure management, processing and transmission of PIN data during online and offline payment card transaction processing at ATMs and POS terminals. The requirements are applicable to all the acquiring institutions and agents responsible for PIN transaction processing on payment card industry participants’ denominated accounts.
- 3. **DSS:** These standards apply to all the participants in payment card processing, including merchants, acquirers, service providers and all the entities that store, process or transmit the cardholder’s data and sensitive authentication data. Cardholder data include cardholder name, expiration date, service code, Primary Account Number (PAN), amongst others. The cardholder data, except PAN, must be protected in compliance with the PCI DSS requirements. Sensitive authentication data include Card Verification Value (CVV), Card Verification Code (CVC) or Personal Identification Number (PIN) codes and must not be stored in any form after authorization.

Exhibit 13: PCI-DSS Compliance Requirements



7.6 Growth Drivers

1. Digitalization of Financial Services^{xxiii}: Digitalization has changed the interface between the customers and service providers, leading to increased expectations by the customers. Historically, customers relied on physical bank branches for carrying out deposits, withdrawals and to fulfill their other financial needs. However, with digitalization, the customers usually access the automated versions of these services as per their convenience. The emergence of new technologies such as distributed ledger technology, big data, the Internet of Things (IoT), cloud computing, artificial intelligence (AI) and biometric technologies have transformed activities such as payments, planning, lending, funding, trading and investment, insurance, security, operations and communications. Newer trends such as Banking-as-a-Service and Embedded Finance are gaining momentum and seek to transform the financial services industry further.

Digitalization has helped FinTech companies to build a leaner, more efficient model, which allows for scaling of activities and reduction of costs. The COVID-19 pandemic oversaw a number of companies shift to the digital model, which was attributable to the change in consumer behavior (72% increase in usage of FinTech apps in Europe during the pandemic).

The traditional banking companies have realized the importance of digital transformation and have earmarked it as a key spending area. Based on a study of capital market firms, 93% of executives at these companies are investing long-term in digital innovation. Additionally, another study indicated that 33% of financial services Chief Information Officers identified digital to be their top-most priority in 2019. The investment in digital was anticipated to be EUR 389.4 bn in FY 2019 and expected to rise to EUR 442.5 bn by FY 2021.

2. Real-Time Payments (RTP)^{xxiv}: A new phase of evolution has been introduced in the FinTech sector with the innovation of RTP. These payments are drastically different from conventional payment methods in terms of speed, value-added messaging capabilities and immediate availability of transaction status. These also facilitate greater precision in budgeting by businesses and help in smoothening their overall cash management due to the early availability of funds.

As from the consumers' point of view, faster payments are often linked with increased consumer satisfaction, especially when consumers are becoming increasingly comfortable with technology. In this growing era of convenient mobile and digital services, RTP often generate positive consumer sentiment for businesses. In addition to speed, RTP provide more security and reliability in comparison to the alternatives, such as cheques and cash, which are responsible for RTP's increased popularity.

It is forecast that the global market for RTP will grow to USD 62.5 bn by 2026, at a CAGR of 32.3% from 2020 onward. Increasing acceptability (56 countries activated RTP payments by 2020 as compared with only 14 countries 6 years earlier) will be one of the driving factors of this growth. Additionally, RTP payments will gain more traction from Peer-to-Peer (P2P) payment apps and Business-to-Business (B2B) payment option (about 60% of respondents in a study believe that RTP payment option will benefit B2B transactions more than any other option).

3. Rising Number of Payment Options^{xxv}: Nowadays, there are multiple payment options available to the customers, apart from traditional options such as cash and credit. Online and mobile payments are becoming popular among the customers. Online payments include online banking and electronic commerce and payment services. Mobile payments basically include transactions connected through mobile network operators, e-wallets and cards linked to mobile phones.

A variety of firms offering such a complex structure of payment options are required to work in collaboration with third-party FinTech organizations that provide POS hardware, cloud-based software solutions and payment infrastructure to smoothen these transactions.

Conclusively, it can be said that payment firms are entrenched as an essential component of retail business operations around the world.

The pandemic saw substantial growth in digital/mobile payment methods, which attained a 21.5% transaction payment market share in 2020 (POS payments). These are expected to account for 33% of all POS transactions. Credit and debit cards are expected to hold on to their market share of 22% in the next 2 years. Cash transactions, however, are expected to decrease from 20.5% in 2020 to 12.7% in 2024.

4. Increasing usage by Millennials^{xxvi}: FinTech’s adoption is higher among millennials. They have a growing requirement of financial services and are the core future consumers of the industry. As per the Global Payments Report by FIS, in 2021, 44% of millennials globally have made use of a mobile wallet, while another 34% are interested in doing so. About 64% agree that mobile wallets make payments easier.

Nearly 39% of those surveyed prefer to use contactless cards or digital wallets when paying in-store during the pandemic.

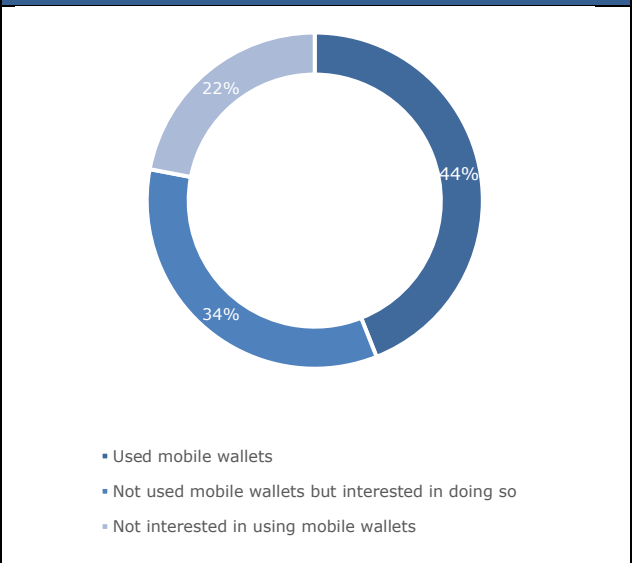
About 66% of those surveyed use mobile banking applications as well.

In **Belgium**, 35% of people made at least one mobile payment in a physical store in 2021 as compared with 30% in 2020. Nearly 40% of Belgians feel comfortable paying using a smartphone while 70% feel comfortable paying using contactless payment options.

About 6% of Belgians (all age groups) do not carry cash with them while 42% of Belgians do not carry more than EUR 20, with the volume of cash transactions falling by 39% in 2021. Contactless cards represent the go-to payment method for Belgians (36% in 2021 versus 16% in the previous year), while 37% prefer to use traditional cards (versus 60% in 2020) and 13% prefer to use cash.

The most noticeable trend is among 16–24-year-olds for whom mobile payment has become the preferred option.

Exhibit 14: E-wallet popularity among Millennials (2021)



7.7 Products and Services

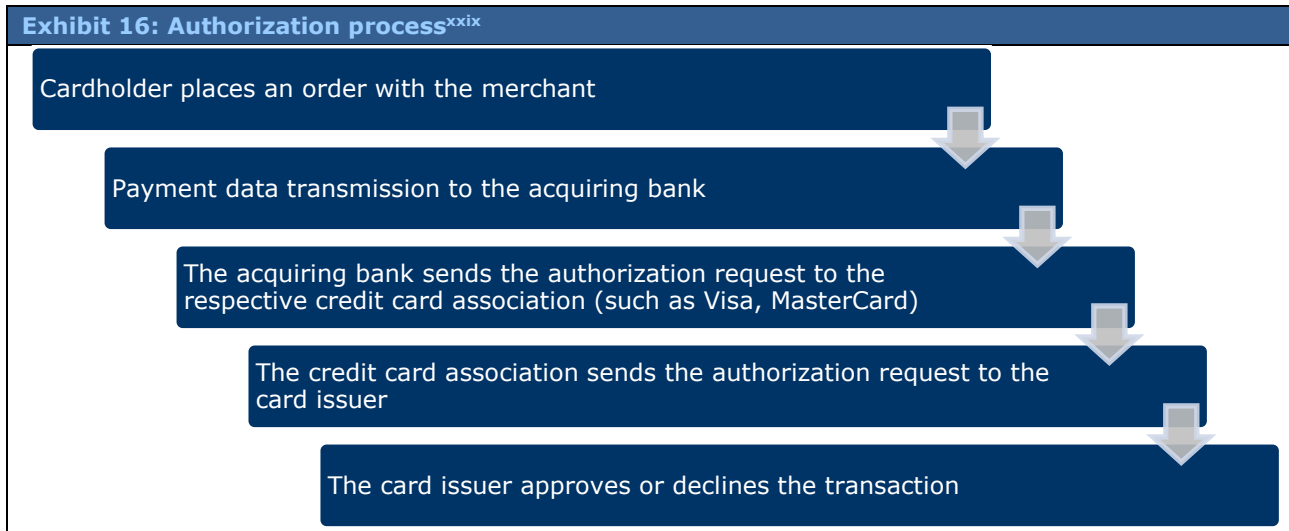
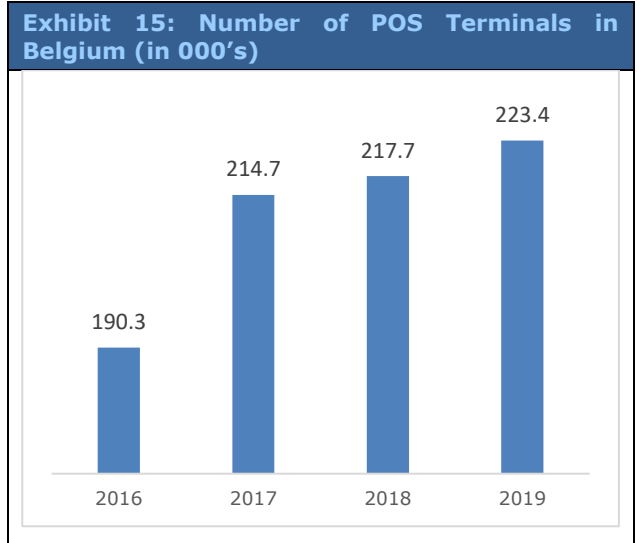
1. Point of sale (POS) terminals^{xxvii}:

POS or Payment Terminals constitute the interface needed to process the electronic transactions. These terminals are basically a combination of software and hardware which allows retail locations to accept card payments without updating their cash registers to read cards directly. Despite the popularity of digital payment methods and mobile wallets supported by the rise of AI, SaaS and cloud technologies, the number of POS terminals in Belgium increased to 223.4k in 2019 as compared with 217.7k in 2018.

The COVID-19 pandemic in FY 2020, along with related macro factors, subdued the sale of traditional POS terminals. These factors, however, are expected to encourage the adoption of a newer generation of terminals, namely mobile POS (mPOS) and cloud POS, in addition to other methods of contactless payments.

2. Authorization Services / Processing^{xxviii}:

This is essentially a process where permission is granted by the customers’ card issuing bank to the merchant to accept the card payment. Globally, the authorization services market is expected to reach EUR 1.4 bn by FY 2022 from EUR 0.5 bn in FY 2017, representing a CAGR of 21.1% in the period from FY 2017 to FY 2022. The activities involved in the authorization process vary from one card network to another. However, the general process involved in authorization is as follows:

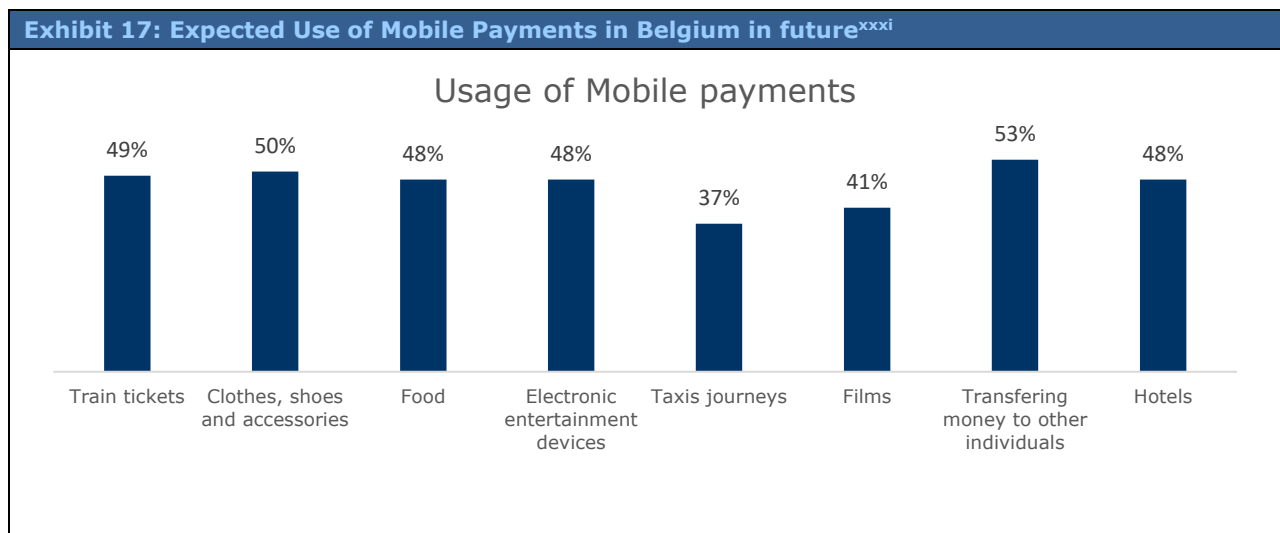


3. Payment Applications^{xxx}:

Payments which are made through mobiles for goods and services purchased are referred to as mobile payments and the technology which is used to make these payments is mobile payment technology. The Mobile Payment industry is expected to generate USD 3.7 trillion in transactional value in 2021, which is expected to grow to USD 4.6 trillion by 2025.

The COVID-19 pandemic helped increase the adoption rate of payment applications in Belgium, as per a study, with 35% people having made a mobile payment in a physical store (as compared with 30% in 2020). Additionally, 33% of people who have not used smartphones for payments plan to do so in the future, with cash becoming a less preferred mode of payment.

As per a report by PWC, mobile payments are expected to be one of the main modes of payments for several services/products by consumers.



In Belgium, Paypal is the most well-known payment application as 37% people prefer to use it. Paypal is ahead of the global giants such as Google, Facebook and Amazon.

4. Installment Solutions^{xxxix}:

It is essentially a credit system in which payment for the product or service is made in terms of installments over a fixed period. These applications have services such as invoicing and automatic payments already built in. Some of these applications pay the vendors for the purchase on behalf of the customer and assume risk for the customer. Other applications provide an option to integrate an installment plan in the payment options.

Moreover, these kinds of applications also allow retailers to choose how they prefer to use the system: with no prior conditions, with immediate receipt of full payment from the financial intermediary or with guaranteed receipts of deferred payments.

These applications form a part of the 'Buy Now Pay Later' (BNPL) industry, which has been strengthened by the COVID-19 pandemic affecting people's financial condition and their inclination to use cash. BNPL transactions grew by 292% between 2018 and 2020 with the market expected to account for 11% of e-commerce purchases in Europe by 2025. An up-and-coming industry, BNPL has attracted significant sums of investment amounting to EUR 1.1 bn (up 118% YoY) in 2020 and EUR 930 mn in Q1 2021 in Europe alone.

5. Payment tokenization^{xxxix}:

Tokenization is a process that adds an extra layer of security and protects sensitive data by replacing it with an algorithmically generated number called the token. For instance, in credit card tokenization, credit card fraud is prevented by replacing the customers' permanent account number with a randomly generated series of numbers.

The global market size of this segment is estimated to represent a growth from EUR 1.9 bn in FY 2020 to EUR 4.8 bn by FY 2025, representing a CAGR of 19.5% during the forecast period. Increasing regulatory requirements to ensure transparency and security and increasing demand for contactless payment and cloud-based payment are expected to fuel the growth. The COVID-19 pandemic has contributed to the increase and the shift to online payments and online shopping necessitate the need for it to prevent identity thefts and frauds.

Before tokenization, encryption with reversible cryptographic algorithms was the preferred method to protect sensitive data. However, because of the random assignment of tokens, it is almost impossible to reverse engineer a token. As a result, tokenization is a stronger method of preventing frauds. The ultimate motive underlying the process is to enable these tokens to be passed through internet or other wireless paths to initiate processing of payments without confidential bank details being exposed. This process is carried out to fight against online or digital breaches of security.

7.8 New Technological Trends in Payment Industry

1. IoT^{xxxiv}:

IoT has introduced a change to how businesses and consumers interact with connected devices. It is expected that 46 bn connected devices will be installed in the global economy in FY 2021. Similarly, IoT is expanding to the payment industry and is providing an opportunity to players to move beyond mobile phones, cards and POS devices. IoT is enabling payments to become a component of connected devices such as fitness bands, wearables, and cars. This development has led to the need for tokenization, embedded commerce and Application Programming Interfaces (APIs).

- 1) Tokenization programs have been launched to enable security and prevent data breaches.
- 2) To enable these payments, devices require embedded applications.
- 3) APIs: These APIs are required to communicate the request from the device for a service and to receive payment.

2. AI^{xxxv}:

AI is being used to identify fraud cases. The payment industry has undergone many reforms. Market players are also eagerly looking forward to implementing AI for efficient payment processing. As per International Data Corporation, a market intelligence firm, the expected spend on AI by payment companies is to increase to USD 14.5 bn by 2024 from USD 7.1 bn in 2020. AI is a valuable tool for payment companies and financial institutions as it helps to reduce fraud in the transaction space, specifically in E-Commerce transactions.

3. Blockchain and Cryptocurrency^{xxxvixxxvii}:

Globally, the blockchain market is expected to grow from EUR 3.1 bn in FY 2020 to EUR 104.1 bn by FY 2028 at a CAGR of 55.8%. Blockchain technology facilitates fast, secure, low-cost payment processing services by using encrypted forms of data. There are a large number of start-ups which are present in the market, which makes the market more fragmented. The spending in Blockchain in Europe is expected to reach EUR 350 mn by 2023. Blockchain technology will lead to savings of USD 25 bn by 2030 to the banking industry.

Cryptocurrency is the other new application of technology which is being used as a mode of payment. It provides the feasibility of improving the speed and security of international payments. The cost of holding a cryptocurrency in a wallet is mostly zero unless someone choose to transact. The acceptance of cryptocurrency has grown worldwide at a very nominal rate. Even accepting the cryptocurrency online has become convenient. Various vendors have started accepting cryptocurrency as a mode of payment.

4. E-Wallets^{xxxviii}:

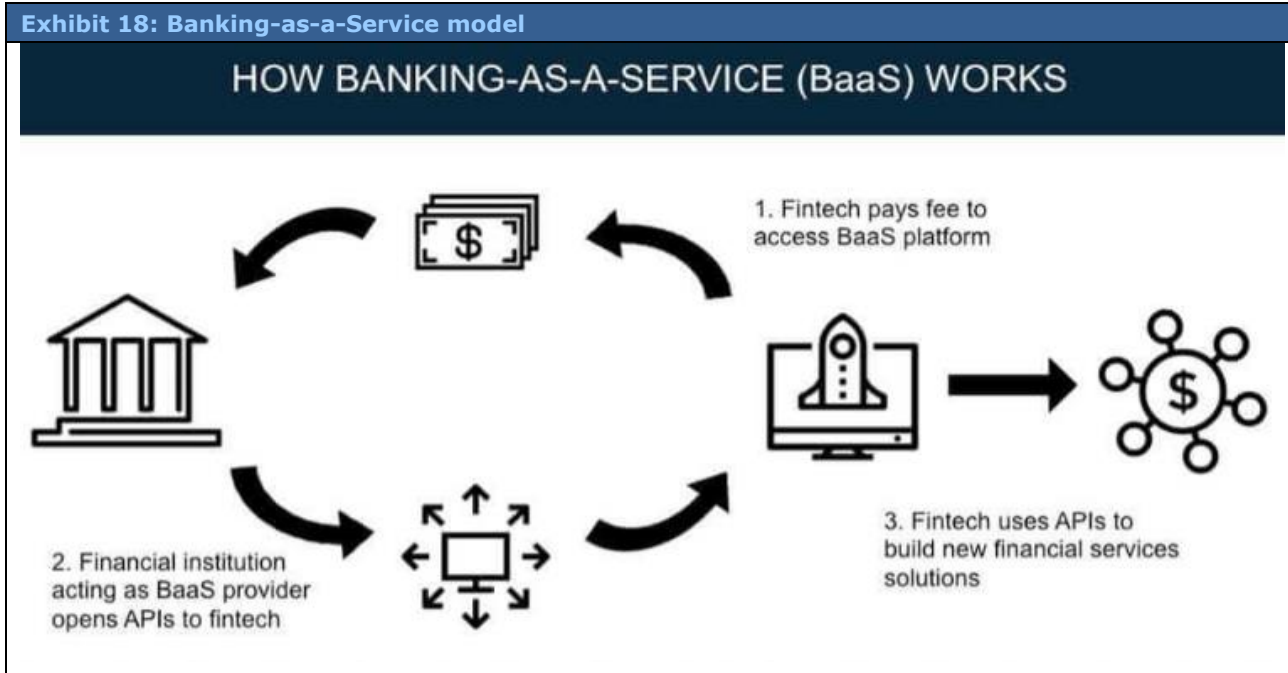
E-wallets are basically digital forms of debit cards, credit cards and prepaid card information on mobile. The number of users of e-wallets went up from 34.5 mn in 2017 to 51.7 mn in 2020; expected to be more than 63 mn in 2023 in Europe. The e-wallets market in Europe amounted to USD 17.4 bn in 2017 and USD 35.0 bn in 2019. It is expected to amount to 111.4 bn by 2023. Rising smart phone penetration and increasing awareness of mobile wallets along with their multiple benefits are the key drivers for the mobile wallet market. Mobile wallets are being used for regular payments such as utility payments and groceries, and are widely acceptable across sectors such as retail, utilities, telecom and transportation, etc. Giants like Amazon, Apple, Google, PayPal and Alibaba already offer wallet services.

5. Digital banking^{xxxix}:

Rising internet penetration has led to an increase in the use of digital devices such as mobiles and computers, which has further led to betterment of digital services in the banking space. The continuous developments in the technology, such as AI, Cloud services, SaaS, are driving the digital market by providing more comfort and ease to the customers. According to a research by a British firm, Juniper Research, the total number of users of digital banking will be in excess of 3.4 bn by 2024, up from 2.4 bn in 2020.

6. Embracing the Regulatory Technology (RegTech)^{xl}: RegTech helps the financial services providers to deal with regulations in a better way. It also helps to reduce the fixed cost and increases the efficiency. RegTech strengthens the compliance element and reduces risk. It makes use of technologies such as advanced analytics, robotic process automation, cognitive computing and cloud services to manage compliance and regulatory issues effectively and efficiently. Spending on RegTech will increase to USD 130 bn by 2025 from USD 33 bn in 2020. The spending will be backed by the increase in the number of new bank accounts opened through digital onboarding to 330 mn in 2025 from 184 mn in 2020.

6. Banking-as-a-Service^{xli}: It is a process in which banks provide integration with their IT systems through open API, smart contracts and distributed ledger technologies. The Banking-as-a-Service model resembles renting cloud resources from third-party providers. Banking-as-a-Service allows digital banks and other third-party companies to directly connect with bank systems via APIs to provide banking services to their clients. Banking-as-a-Service will help financial institutions to reach customers at a lower cost. The cost of acquiring a customer is typically in the range of USD 100 to USD 200. With a new Banking-as-a-Service technology stack the cost can range between USD 5 and USD 35. It will additionally allow distributors to offer financial products at attractive margins.

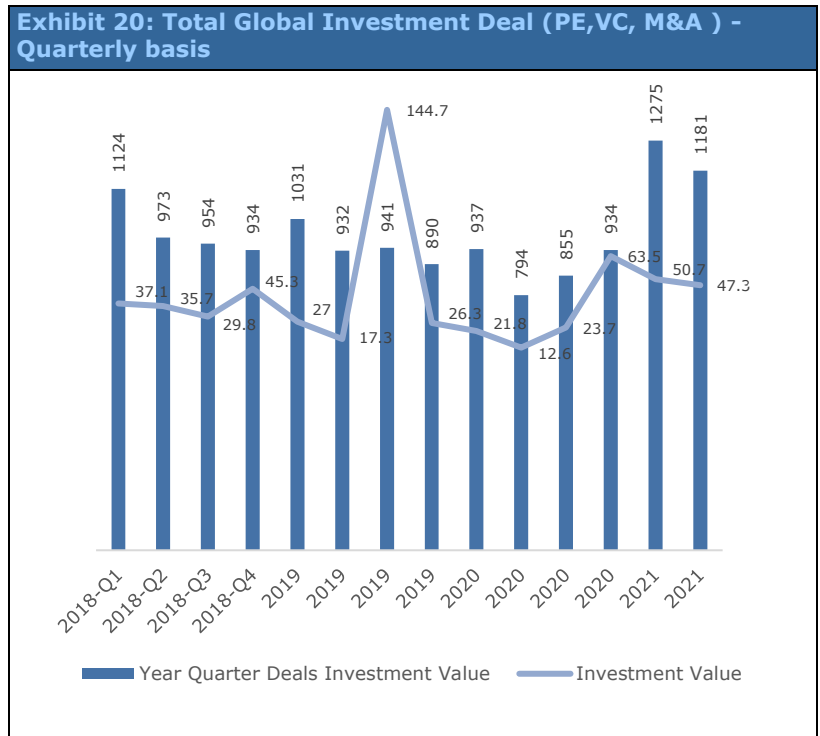
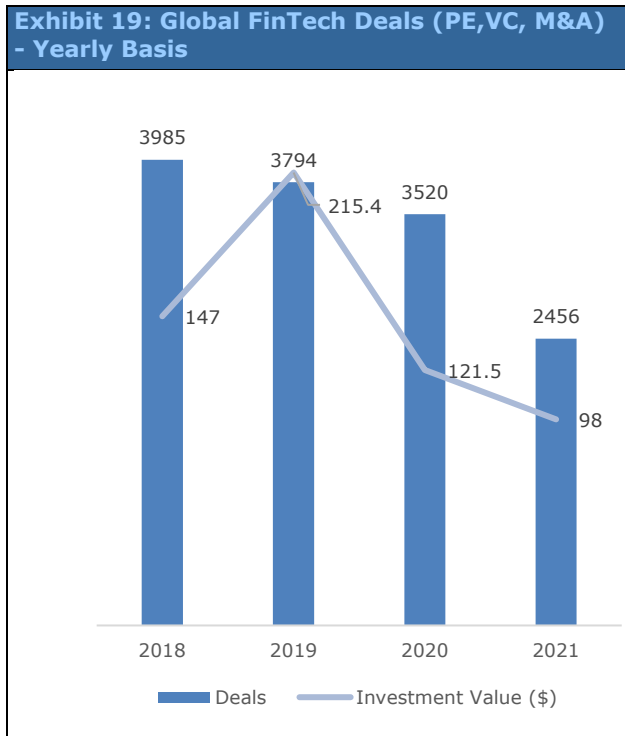


7.9 Global Landscape^{xliii}

In FY 2021, global investments in the FinTech sector reached EUR 210.1 bn with approximately 5,684 deals, with record-level deals signed in all major regions, while PE and VC investment levels also reached record highs.

VC investments amounted to USD 115 bn, a record high, beating the previous high of USD 53.2 bn in 2018. Corporate related VC investments more than doubled on a YoY basis to USD 50 bn. Seven startups in the sector raised more than USD 1 bn in venture capital funding rounds, including USD 2 bn raised by Generate, USD 1.1 bn raised by Nubank and USD 1.1 bn raised by Chime.

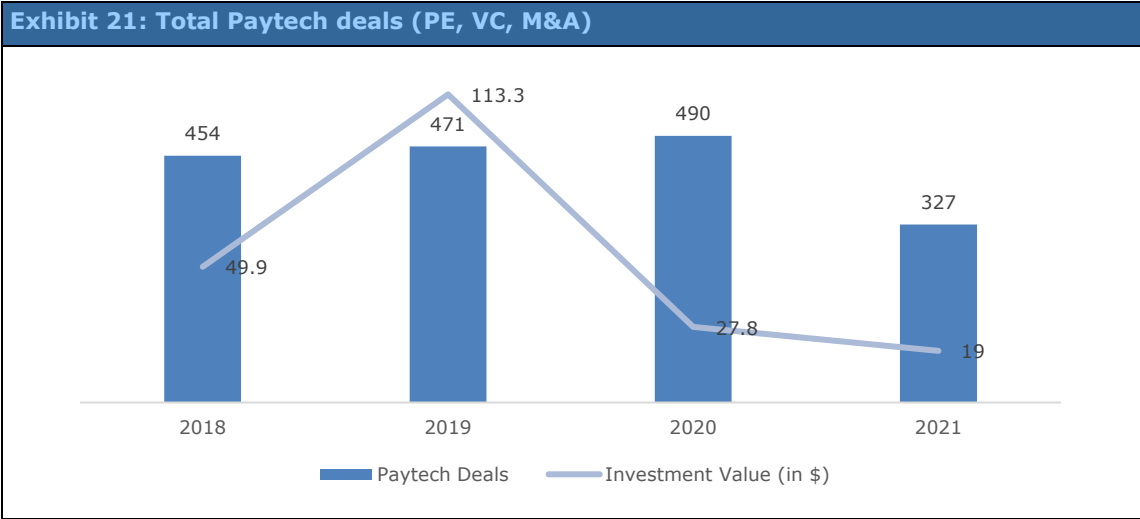
Similar level of activity was seen in the PE sector with a record 144 deals signed for a total value of over USD 12 bn (another record high more than double the previous record of USD 5 bn in 2018).



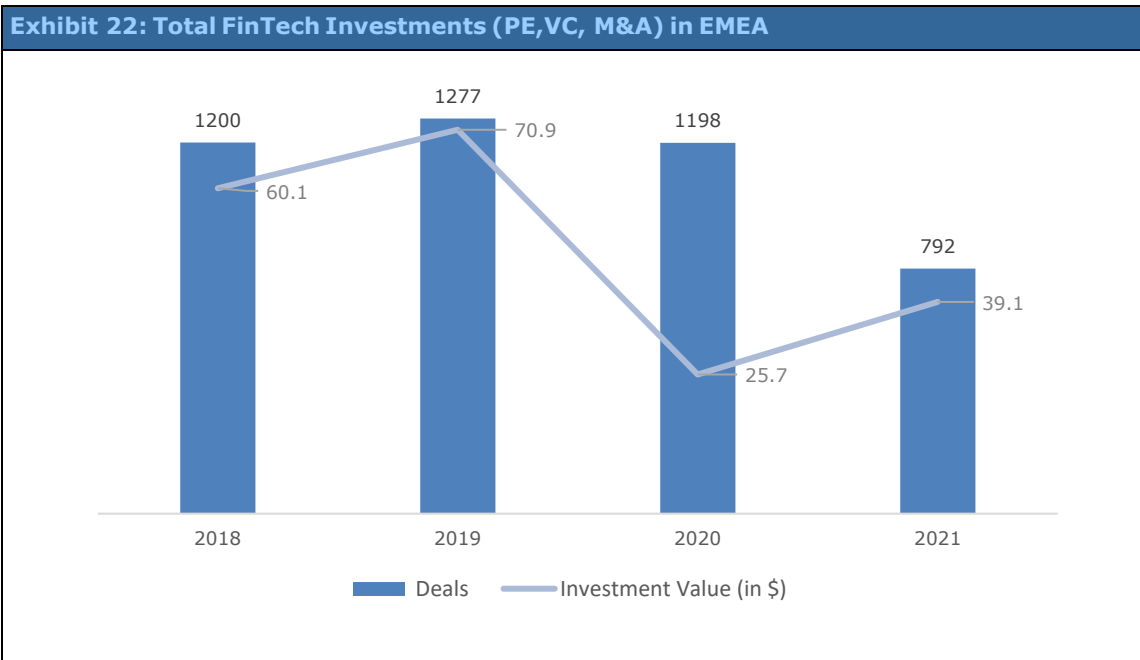
a. Top Payment Investments in H1 2021

In FY 2021, the Payment segment saw 777 deals completed for a total value of USD 51.7 bn. Major deals included the USD 9.2 bn acquisition of Nets and USD 2.7 bn acquisition of Paidy by Paypal.

Challenger banks were an attractive segment for investments as competition increased in the domestic market in the U.S. even though some firms exited the market. Firms such as Revolut and Varo led large funding rounds (worth USD 800 mn and USD 510 mn respectively) to improve their margins in response to the competitive nature of the market.



b. Investments in FinTech in EMEA (FY 2021)^{xliii}



- 1) In H1 2021, investment in FinTech companies soared to record-highs in EMEA with 1,859 deals worth USD 77.4 bn completed. M&A and VC activity accounted for majority of the total deal value.
 - a. 326 M&A deals worth USD 43.4 bn were completed, including the USD 14.8 bn acquisition of Refinitiv by LSE
 - b. 1,486 investments worth USD 30.7 bn were completed by VC firms (more than triple than that of the previous high of USD 9.9 bn in 2020)
 - c. 47 deals worth USD 3.3 bn were completed by PE firms
 - d. Digital banks and the overall payments space were a key area of investment, especially for VC firms

Exhibit 23: Top ten FinTech deals in Europe in H2 2021^{xliv}				
Acquirer/Investor	Acquiree/Target	Country	Deal Type	Deal Size (USD bn)
LSEG	Refinitiv	UK	M&A	14.8
Nexi	Nets	Denmark	M&A	9.2
Broadridge	Itiviti	Sweden	M&A	2.6
Visa	Tink	Sweden	M&A	2.2
-	Unit4	Netherlands	Buyout	2.2
Wipro	Capco Group	UK	M&A	1.5
Foley Trasimene Acquisition Group	Paysafe	UK	Reverse Merger	1.45
Softbank	Klarna	UK	Later VC	1.29
JP Morgan	Nutmeg	UK	M&A	0.98
Visa	CurrencyCloud	UK	M&A	0.93

LSEG completes acquisition of Refinitiv in a major deal valued at USD 14.8 bn^{xlvixlvi}









LSEG acquired Refinitiv in a deal valued at USD 14.8 bn in January 2021. The combined entity of LSEG & Refinitiv is expected to become the global financial infrastructure & data provider. Refinitiv, as a part of LSEG from February 1, 2021, will now provide more clear and rich data using Machine Learning & AI advanced technologies.

Worldline's completes acquisition of Ingenico in a major deal valued at USD 8.6 billion (bn)^{xlvixlviii}

Worldline acquired Ingenico in a deal valued at EUR 8.6 bn in October 2020. The deal was approved by the European commission in September 2020. The combined entity is expected to emerge as the fourth-largest player in payment services with more than 20,000 employees and a physical presence in around 50 countries delivering solutions to around 1 mn merchants and 1,200 financial institutions. A strong value creation is expected from this transaction. The consolidated company is not only likely to have economies of scale but also be able to fend off the competition from smaller FinTech companies and some of the e-commerce giants who have entered the payment space.

7.10 Competition

There are various services offered by the players in the payment terminal market. Different players provide different services along the extended payments value chain. The following table gives an overview of the presence of various players along the wide range of segments in the Payment services industry across Europe.

Exhibit 24: Services offered by various players in the market ^{xlix}								
Card Payment Services in Europe	Issuing transaction processing	Services to cardholders and issuers	Automated Clearing House	Credit/Debit transfers	Services to merchants	Acquiring transaction processing	Commercial Acquiring	Acceptance POS/eCommerce
					✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓
	✓	✓			✓	✓	✓	✓
					✓	✓	✓	✓
					✓	✓	✓	✓
	✓					✓	✓	✓
	✓	✓			✓	✓	✓	✓

* Note: The list of services may not be exhaustive. Additional services may be offered by the individual firms.

8. Valuation

The Fair Market Value (blended) for all the company shares stands between EUR 51.4 mn and EUR 54.0 mn on May 26, 2022. The Fair Market Value for one publicly traded share of the company stands between EUR 2.18 and EUR 2.29 on May 26, 2022, using blended valuation (DCF and EV/EBITDA (2022E) multiple).

8.1 DCF Method

Valuation	
WACC	
Risk-free rate	0.05% ⁱ
Beta	1.1 ⁱⁱ
Equity Market premium	8.60% ⁱⁱⁱ
Country Risk Premium	0.7% ⁱⁱⁱ
Cost of Equity	10.23%
Cost of Debt	3.68%
Terminal Growth Rate	2.0%
WACC (Discount Rate)	9.77%

Year Ending - Dec	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
FCFF (High)								
Net cash from operating activities	1,195	3,837	4,131	4,686	5,236	5,845	6,653	6,807
Capital Expenditure	(1,598)	(1,598)	(1,393)	(1,335)	(1,256)	(1,243)	(1,219)	(1,166)
Free Cash Flow to Firm	-403	2,239	2,738	3,351	3,979	4,602	5,433	5,641
Discount factor	0.95	0.86	0.78	0.71	0.65	0.59	0.54	0.49
Present Value of FCF	-381	1,929	2,149	2,396	2,592	2,731	2,937	2,778
FCFF (Low)								
Net cash from operating activities	1,193	3,770	4,008	4,498	4,972	5,503	6,213	6,302
Capital Expenditure	(1,576)	(1,569)	(1,363)	(1,304)	(1,227)	(1,213)	(1,192)	(1,144)
Free Cash Flow to Firm	-383	2,201	2,645	3,194	3,746	4,290	5,022	5,157
Discount factor	0.95	0.86	0.78	0.71	0.65	0.59	0.54	0.49
Present Value of FCF	-362	1,896	2,076	2,284	2,440	2,546	2,714	2,540

Arrowhead Fair Value Bracket	High	Low
Terminal Value (TV)	74,070	67,719
Present Value of TV	36,477	33,349
Present Value of FCF	17,131	16,132
Present Value of TV+FCF	53,608	49,481
Net Debt	(159)	(159)
Deferred Taxes	264	264
Equity Value (EUR '000)	53,713	49,586
Shares O/s ('000's)	23,544	23,544
Fair Share Value Bracket (EUR)	2.28	2.11
Current Market Price (EUR)	1.03	1.03
Upside/(Downside)	121%	104%
Current Market Cap. (EUR '000)	24,250	24,250
Target Market Cap. Bracket (EUR '000)	53,698	49,573

Sensitivity Analysis

Sensitivity Table - High		Growth Rate (%)				
		1.5%	1.8%	2.0%	2.3%	2.5%
WACC (%)	8.8%	2.53	2.60	2.67	2.75	2.83
	9.3%	2.34	2.40	2.46	2.53	2.60
	9.8%	2.18	2.23	2.28	2.34	2.40
	10.3%	2.04	2.08	2.12	2.17	2.22
	10.8%	1.91	1.94	1.98	2.02	2.07

Sensitivity Table - Low		Growth Rate (%)				
		1.5%	1.8%	2.0%	2.3%	2.5%
WACC (%)	8.8%	2.34	2.40	2.46	2.54	2.61
	9.3%	2.16	2.22	2.27	2.33	2.40
	9.8%	2.01	2.06	2.11	2.16	2.21
	10.3%	1.88	1.92	1.96	2.00	2.05
	10.8%	1.76	1.80	1.83	1.87	1.91

Approach for DCF Valuation

Time Horizon: The Arrowhead fair valuation for Keyware is based on the DCF method. The time period chosen for the valuation is 91 months (2022E-2029E).

Terminal Value: Terminal value is estimated using a terminal growth rate of 2.0%.

Prudential nature of valuation: It should be noted that this Arrowhead Fair Value Bracket estimate is a relatively prudential estimate, as it discounts the eventuality of any new products being launched in the market or any significant change in the strategy.

Key variables: The upper and lower bounds in the estimation correspond to the extreme positions taken by the following key variables:

Variable 1 – Installed Base (Terminals)

Exhibit 25: Number of terminals at the end of the year								
In '000s	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Low estimate	16.5	16.5	16.4	16.4	16.4	16.5	16.6	16.7
High estimate	16.7	16.7	16.7	16.8	16.8	16.9	17.0	17.1

Variable 2 – Terminals offering Authorized services

Exhibit 26: Number of terminals offering authorization services, at the end of the year								
In '000s	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Low estimate	15.4	15.5	15.4	15.4	15.4	15.4	15.5	15.6
High estimate	15.5	15.7	15.7	15.8	15.8	15.8	15.9	16.0

8.2 Relative Valuation

The Fair Market Value of one of Keyware's publicly traded regular shares stood between EUR 2.26 and EUR 2.30 on May 26, 2022, according to the relative valuation method.

Exhibit 27: Peer Set (Keyware) ^{lv}					
Companies	Country	Market Cap (in EUR mn)	Current Enterprise Value (in EUR mn)	EBITDA (in EUR mn)	EV/EBITDA (in EUR mn)
Worldline	France	10,768	15,075	1,119.80	13.46x
Global Payments	US	32,979	42,481	3,760.70	11.30x
Fiserv	US	58,811	77,827	6,620.60	11.76x
Glintt-Global Intelligent Technologies SA	Portugal	23	67	NA	NA
SysGroup PLC	UK	15	13	NA	NA
Simple Average					11.8x

	High	Low
Keyware EBITDA FY 2022	2,715	2,640
PEER EV/ EBITDA	11.8x	11.8x
Relative Valuation Premium / (Discount)	0%	0%
Adjusted EV/ EBITDA	11.8x	11.8x
FY2021 EV	31,912	31,039

*Adjusted EBITDA has been used

Exhibit 28: Peer Set (Magellan) ^{lv}					
Companies	Country	Market Cap (in EUR mn)	Current Enterprise Value (in EUR mn)	EBITDA (FY 2022E) (in EUR mn)	EV/EBITDA (FY 2022E) (in EUR mn)
RS2 Software PLC	Malta	307	295	N/A	NM
Gresham Technologies PLC	UK	157	147	10.80	13.65x
B+S Bankssysteme AG	Germany	15	23	2.20	10.54x
Asseco South Eastern Europe SA	Poland	535	523	59.80	8.74x
GPI SpA	Italy	226	373	49.80	7.48x
Verimatrix SA	France	65	86	-1.20	NA
NETinfo Plc	Cyprus	13	17	N/A	NA
Vetrya SpA	Italy	N/A	N/A	N/A	NM
CPU Softwarehouse AG	Germany	10	8	N/A	NA
msg life ag	Germany	124	85	N/A	NA
SinnerSchrader AG	Germany	194	223	N/A	NA
GHL Systems Bhd	Malaysia	369	322	17.90	17.98x
Bottomline Technologies DE Inc	US	2,414	2,449	N/A	NA
Silverlake Axis Ltd	Malaysia	582	408	60.80	6.71x
Wirecard AG	Germany	N/A	-1,983	N/A	NM
WEX Inc	US	6,698	7,905	927.10	8.53x
ACI Worldwide Inc	US	2,777	3,703	378.20	9.79x
PayPal Holdings Inc	US	86,607	87,562	6,110.90	14.33x

Global Payments Inc	US	32,979	42,481	3,760.70	11.30x
KGMobilians Co Ltd	South Korea	244	220	N/A	NA
Visa Inc	US	4,09,058	4,17,040	18,803.80	22.18x
Mastercard Inc	US	3,13,011	3,19,687	12,447.40	25.68x
Global Payments Inc	US	32,979	42,481	3,760.70	11.30x
Simple Average					8.7x

*Only B+S Bankssysteme AG, Asseco South Eastern Europe SA, GPI SpA, Verimatrix SA, GHIL Systems Bhd and Silverlake Axis Ltd have been used for average calculation

Relative Valuation for Magellan (All figures are in EUR '000, except percentage and multiple data)	High	Low
Magellan EBITDA FY 2022E	2,209	2,188
PEER EV/ EBITDA	8.7x	8.7x
Relative Valuation Premium	-15%	-15%
Adjusted EV/ EBITDA	10.1x	10.1x
FY 2021 EV	22,197	21,995

*Adjusted EBITDA has been used

Keyware and Magellan (Combined) (All figures are in EUR '000, except per share data)	High	Low
Total EV	54,109	53,034
Adjustment		
Less: Net Debt	(159.0)	(159.0)
Less: Deferred taxes	264.0	264.0
Implied Equity Value	54,214	53,139
Shares o/s ('000s)	23,544	23,544
Intrinsic Value per share	2.30	2.26
Current Market Price	1.03	1.03
Upside / (Downside)	224%	219%

8.3 Blended Valuation

Blended Valuation	High	Low
DCF	2.28	2.11
Relative valuation	2.30	2.26
Blended Value	2.29	2.18
Upside/(Downside)	123%	112%
Target Market Cap. (EUR '000)	53,963	51,363

Important information on Arrowhead methodology

The principles of the valuation methodology employed by Arrowhead BID are variable to a certain extent depending on the subsectors in which the research is conducted, but all Arrowhead valuation research possesses an underlying set of common principles and a generally common quantitative process.

With Arrowhead Commercial and Technical Due Diligence, Arrowhead extensively researches the fundamentals, assets and liabilities of a company, and builds solid estimates for revenue and expenditure over a coherently determined forecast period.

Elements of past performance, such as price/earnings ratios, indicated as applicable, are present mainly for reference purposes. Still, elements of real-world past performance enter the valuation through their impact on the commercial and technical due diligence.

Elements of comparison, such as multiple analyses may be to some limited extent integrated in the valuation on a project-by-project or asset-by-asset basis. In the case of this Keyware report, there are no multiple analyses integrated in the valuation.

Arrowhead BID Fair Market Value Bracket

The Arrowhead Fair Market Value is given as a bracket. This is based on quantitative key variable analysis, such as key price analysis for revenue and cost drivers or analysis and discounts on revenue estimates for projects, especially relevant to those projects estimated to provide revenue near the end of the chosen forecast period. Low and high estimates for key variables are produced as a tool for valuation. The high-bracket DCF valuation is derived from the high-bracket key variables, while the low-bracket DCF valuation is based on the low-bracket key variables.

In principle, an investor who is comfortable with the high-brackets of our key variable analysis will align with the high-bracket in the Arrowhead Fair Value Bracket, and likewise in terms of low estimates. The investor will also consider the company intangibles – as presented in the first few pages of this document in the analysis on strengths and weaknesses and other essential company information. These intangibles serve as supplementary decision factors for adding or subtracting a premium in the investor's own analysis.

The bracket should be understood as a tool provided by Arrowhead BID for the reader of this report and the reader should not solely rely on this information to make his decision on any particular security. The reader must also understand that on one hand, global capital markets contain inefficiencies, especially in terms of information, and that on the other hand, corporations and their commercial and technical positions evolve rapidly: this present edition of the Arrowhead valuation is for a short to medium-term alignment analysis (one to twelve months). The reader should refer to important disclosures on page 36 of this report.

9. Appendix

9.1 Keyware's Financial Summary

Exhibit 29: Financial Summary		<i>Low Bracket Estimates</i>						
<i>Year Ending - Dec</i>	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Revenue (EUR '000)	21,242	23,039	23,317	23,640	24,036	24,467	25,019	25,683
Operating Profit (EUR '000)	1,711	2,194	2,567	3,263	3,733	4,494	4,881	5,684
Net Income (EUR '000)	1,619	1,846	2,116	2,603	2,948	3,549	3,835	4,436
EPS	0.07	0.08	0.09	0.12	0.13	0.16	0.17	0.20
Growth rates (%)								
Revenue	16.5%	8.5%	1.2%	1.4%	1.7%	1.8%	2.3%	2.7%
Operating Profit	4720.1	28.2%	17.0%	27.1%	14.4%	20.4%	8.6%	16.5%
Net Income	166.8%	14.0%	14.6%	23.1%	13.2%	20.4%	8.1%	15.7%
EPS	166.8%	14.0%	14.6%	23.1%	13.2%	20.4%	8.1%	15.7%
Margins (%)								
Gross Margins	68.3%	68.0%	68.9%	69.9%	70.7%	71.5%	72.3%	73.1%
Operating Profit	8.1%	9.5%	11.0%	13.8%	15.5%	18.4%	19.5%	22.1%
Net profit Margin	7.6%	8.0%	9.1%	11.0%	12.3%	14.5%	15.3%	17.3%
Ratios								
ROA	4.0%	4.4%	4.9%	5.7%	6.1%	6.8%	6.9%	7.4%
ROE	5.5%	5.9%	6.3%	7.2%	7.6%	8.3%	8.3%	8.7%
Debt / Equity	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x
Interest Coverage	99.5x	509.3x	595.8x	757.5x	866.7x	1043.4x	1133.2x	1319.6x
Price / Earnings Ratio	14.4x	12.6x	11.0x	8.9x	7.9x	6.6x	6.1x	5.2x

Exhibit 30: Financial Summary		<i>High Bracket Estimates</i>						
<i>Year Ending - Dec</i>	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Revenue (EUR '000)	21,635	23,694	24,170	24,666	25,217	25,800	26,498	27,313
Operating Profit (EUR '000)	1,775	2,319	2,742	3,501	4,037	4,878	5,332	6,241
Net Income (EUR '000)	1,669	1,944	2,254	2,791	3,187	3,850	4,190	4,872
EPS	0.07	0.09	0.10	0.12	0.14	0.17	0.19	0.22
Growth rates (%)								
Revenue	18.6%	9.5%	2.0%	2.1%	2.2%	2.3%	2.7%	3.1%
Operating Profit	4899.6	30.7%	18.2%	27.7%	15.3%	20.8%	9.3%	17.0%
Net Income	175.0%	16.5%	15.9%	23.8%	14.2%	20.8%	8.8%	16.3%
EPS	175.0%	16.5%	15.9%	23.8%	14.2%	20.8%	8.8%	16.3%
Margins (%)								
Gross Margins	68.0%	67.7%	68.7%	69.6%	70.5%	71.5%	72.4%	73.2%
Operating Profit	8.2%	9.8%	11.3%	14.2%	16.0%	18.9%	20.1%	22.8%
Net profit Margin	7.7%	8.2%	9.3%	11.3%	12.6%	14.9%	15.8%	17.8%
Ratios								
ROA	4.1%	4.6%	5.1%	6.0%	6.4%	7.2%	7.3%	7.8%
ROE	5.6%	6.2%	6.7%	7.6%	8.0%	8.8%	8.8%	9.3%
Debt / Equity	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x
Interest Coverage	103.3x	538.5x	636.5x	812.8x	937.3x	1132.6x	1238.0x	1448.8x
Price / Earnings Ratio	13.9x	12.0x	10.3x	8.3x	7.3x	6.0x	5.6x	4.8x

9.2 Keyware's Balance Sheet Forecast

Exhibit 31: Consolidated Balance Sheet		<i>Low Bracket estimates</i>						
<i>Year Ending - Dec</i>	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Total current assets	15,313	17,345	19,461	22,429	25,879	29,702	33,926	38,648
Total non-current assets	24,828	24,409	23,935	23,314	22,605	22,197	21,723	21,423
TOTAL ASSETS	40,141	41,754	43,396	45,743	48,484	51,899	55,649	60,071
Total current liabilities	5,592	5,555	5,259	5,073	4,959	4,918	4,891	4,878
Total non-current liabilities	5,037	4,841	4,665	4,594	4,501	4,408	4,350	4,350
TOTAL LIABILITIES	10,630	10,397	9,924	9,667	9,460	9,326	9,241	9,228
Total shareholder's equity	29,511	31,357	33,472	36,076	39,024	42,573	46,408	50,843
TOTAL LIABILITIES & EQUITY	40,141	41,753	43,396	45,743	48,484	51,898	55,649	60,071

Exhibit 32: Consolidated Balance Sheet		<i>High Bracket estimates</i>						
<i>Year Ending - Dec</i>	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Total current assets	15,409	17,558	19,831	23,013	26,744	30,906	35,540	40,755
Total non-current assets	24,869	24,484	24,029	23,409	22,683	22,260	21,751	21,413
TOTAL ASSETS	40,278	42,042	43,860	46,422	49,427	53,166	57,291	62,168
Total current liabilities	5,680	5,695	5,436	5,278	5,188	5,170	5,163	5,168
Total non-current liabilities	5,037	4,841	4,665	4,594	4,501	4,408	4,350	4,350
TOTAL LIABILITIES	10,717	10,536	10,101	9,872	9,689	9,578	9,513	9,518
Total shareholder's equity	29,561	31,505	33,759	36,550	39,737	43,588	47,778	52,649
TOTAL LIABILITIES & EQUITY	40,278	42,042	43,860	46,422	49,427	53,165	57,291	62,168

10. Analyst Certifications

I, Natasha Agarwal, certify that all the views expressed in this research report accurately reflect my personal views about the subject security and the subject company, based on the collection and analysis of public information and public company disclosures.

I, Sumit Wadhwa, certify that all the views expressed in this research report accurately reflect my personal views about the subject security and the subject company, based on the collection and analysis of public information and public company disclosures.

11. Important disclosures

Arrowhead Business and Investment Decisions, LLC received fees in 2015-2022 and will receive further fees in 2022 and beyond from Keyware Technologies for researching and drafting this report and for a series of other services to Keyware Technologies, including distribution of this report and investor relations services. Neither Arrowhead BID nor any of its principals or employees owns any long or short positions in Keyware Technologies. Arrowhead BID's principals have received mandates for investment banking services from Keyware in the past and may seek to receive new investment banking mandates and compensation for investment banking activities from Keyware Technologies in 2022 or beyond.

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Any opinions expressed in this report are statements of Arrowhead BID's judgment to this date and are subject to change without notice.

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Investors are advised to gather and consult multiple sources of information while preparing their investment

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Arrowhead Business and Investment Decisions, LLC is not responsible for any loss, financial or other, directly or indirectly linked to any price movement or absence of price movement of the securities described in this report.

12. Notes and References

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