

# Beaconsmind AG

Switzerland, Germany / Software services

Euronext, Xetra

Bloomberg: 81D GR

ISIN: CH0451123589

Initiating Coverage

**RATING****PRICE TARGET**

Return Potential

Risk Rating

**BUY****€ 22.00**

81.8%

High

## BEACONSMIND OFFERS A UNIQUE VALUE PROPOSITION FOR RETAIL

Beaconsmind is a young technology company offering retail clients location-based marketing (LBM) solutions. The company's product consists of intelligent beacons and an in-house developed software suite deployed at retailers' stores. The retailers can implement LBM campaigns, in which consumers receive advertising with highly relevant and personalised notifications on their mobile phones throughout their time at participating retail locations. Following COVID-19 retail shutdowns, experts agree the most successful reopening strategies are those that transform the customer's shopping experience through the use of LBM. The beacon technology developed by Beaconsmind provides shoppers with customised buying opportunities and personalised recommendations, leading to ~15% higher revenues for retailers according to the company's current track record. The company's key client Adidas, which has a >16k store fleet worldwide, is rolling out the Beaconsmind solution. Besides substantial future revenue, this client validates the platform's potential and may attract the attention of further prominent retail players as clients. The current pipeline includes five large candidates from three verticals, each of which owns between several hundred and four thousand stores and has the potential to add CHF 5-50m in revenue. On 21 November, Beaconsmind took a 51% controlling stake in the highly complementary German-based provider of corporate Wi-Fi and hotspot solutions FREDERIX GmbH for a price of €2.0m paid in shares. FREDERIX brought an attractive portfolio with a high cross-selling potential of 530 clients and ~10,400 points-of-sales, including the food retailers Lidl and Kaufland. We thus see attractive sales growth potential coming from Adidas, FREDERIX and the client pipeline. We anticipate substantial revenue growth acceleration over the next few years. We initiate coverage of Beaconsmind with a Buy rating and a €22 price target.

**We expect EBIT break-even in 2023** We project that Beaconsmind will deliver substantial sales growth in the next 12-18 months, allowing it to achieve a positive EBIT of CHF 0.4m in FY/23. (p.t.o.)

### FINANCIAL HISTORY & PROJECTIONS

	FY 19/20	FY 20/21	FY 21/22E	H2 22E	FY 23E	FY 24E
Revenue (CHF m)	0.50	0.78	1.55	1.79	8.71	16.09
Y-o-y growth	n.a.	56.4%	99.1%	15.3%	386.8%	84.7%
EBIT (CHF m)	-0.54	-2.09	-2.67	-0.66	0.40	4.42
EBIT margin	n.a.	n.a.	n.a.	n.a.	4.6%	27.5%
Net income (CHF m)	-0.55	-2.10	-2.68	-0.68	0.09	2.91
EPS (diluted) (CHF)	-0.30	-1.05	-1.14	-0.25	0.03	1.02
DPS (CHF)	0.00	0.00	0.00	0.00	0.00	0.00
FCF (CHF m)	-0.49	-2.30	-2.83	-0.91	-0.50	2.67
Net gearing	-9.3%	-95.0%	-95.3%	-40.4%	-32.8%	-48.5%
Liquid assets (CHF m)	0.07	0.68	3.72	2.99	2.52	5.17

### RISKS

Risks include, but are not limited to execution, client satisfaction and commercial risks, negative COVID-19 impact, competition, and financial risks.

### COMPANY PROFILE

Founded in 2015, Beaconsmind is a leading technology company offering location-based marketing (LBM) software for retail chains. The company is headquartered in Switzerland and has branches in Germany, United Arab Emirates and China. Through the combination of Beaconsmind's Bluetooth beacons and its proprietary software suite, retail stores can precisely locate and identify customers, enabling brand-new marketing opportunities for retailers.

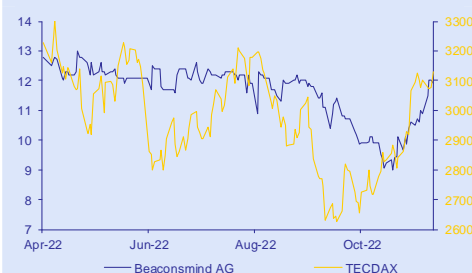
### MARKET DATA

As of 25 Nov 2022

Closing Price	€ 12.10
Shares outstanding	2.84m
Market Capitalisation	€ 34.42m
52-week Range	€ 9.00 / 13.00
Avg. Volume (12 Months)	2,000

Multiples	FY 20/21	FY 21/22E	H2 22E
P/E	n.a.	n.a.	n.a.
EV/Sales	37.0	18.6	n.a.
EV/EBIT	n.a.	n.a.	n.a.
Div. Yield	0.0%	0.0%	0.0%

### STOCK OVERVIEW



### COMPANY DATA

As of 31 Dec 2021

Liquid Assets	CHF 5.55m
Current Assets	CHF 5.79m
Intangible Assets	CHF 0.18m
Total Assets	CHF 5.99m
Current Liabilities	CHF 0.44m
Shareholders' Equity	CHF 5.53m

### SHAREHOLDERS

Anchor investor	20.4%
Max Weiland	17.6%
Board & employees	4.4%
eKomi	3.2%
Free Float	54.4%



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## INVESTMENT CASE

**Leading location-based marketing (LBM) software provider offering revenue-enhancing solutions to retail companies** Founded in Switzerland in 2015, BeaconsMind AG has developed a software suite that is used in combination with customised intelligent Bluetooth beacons (special tracking sensors) deployed at retail stores. The Bluetooth beacon transmitters can locate customers in the store via their mobile phones. The data is then processed and analysed on BeaconsMind's cloud suite providing relevant information such as consumer purchasing behaviour, preferences, engagement, etc. BeaconsMind's internet of things (IoT) solution enables the implementation of an omnichannel strategy (combining physical, online and mobile shopping) and the execution of high-performing LBM campaigns that transform the in-store shopping experience. Retail customers receive advertising with highly relevant and personalised notifications such as customised offers on their mobile phones throughout their time in the store. Through these marketing tools, BeaconsMind has added substantial value to its clients, reflected in a 40% enhancement in customer-visit frequency, a 40% increase in purchase motivation, and 15% higher sales.

**The global LBM market set to grow at a CAGR of 17.4% through 2027** The global LBM market was valued at USD 62.4bn in 2019 and is expected to grow at an annual rate (CAGR) of 17.4% from 2020 to 2027. Other market intelligence firms such as Reportlinker anticipate that the retail LBM market will grow even faster, delivering a 46% CAGR in 2020-2027. The main factors triggering the growth in demand for LBM include rapidly increasing digitalisation across industries with higher adoption of advanced technologies such as IoT, the ever higher penetration of mobile and internet devices, and increasing importance of consumer data in marketing (source: Grandviewresearch).

**Pandemic triggered omnichannel adoption** The pandemic that started in early 2020 has dramatically changed customers' buying patterns. The consulting firm McKinsey considers the implementation of omnichannel to be a necessity rather than an option in order for retailers to recover in the post-pandemic era after being hit hard in the lockdowns brought on by COVID-19. The retail lockdown in Germany caused €36bn in lost sales in 2020 and a further €40bn in lost sales from January to May 2021 (source: German retail association). Experts agree that the use of LBM and beacon technology represent the most successful way for retailers to open stores post-pandemic. Young buyers are particularly enthusiastic about new forms of shopping, which can include both customised experiences and personalised recommendations.

**BeaconsMind's anchor client Adidas has a network of >16k physical stores worldwide** In 2017, BeaconsMind won its largest pilot client, the German clothing retail group Adidas, with >16k stores globally. A retail client of Adidas' calibre reflects the marketing value of the BeaconsMind IoT solution. The company's business relationship with Adidas is currently at the international rollout stage, although the peak of the pandemic in 2020 triggered temporary store closures and delays in the implementation of this rollout. In 2021, Adidas reopened stores, where possible, in accordance with local regulations. In these reopened stores, the retailer pushed the implementation of digital tools (BeaconsMind's products may be among them) and omnichannel services to offer customers an engaging shopping experience (source: Adidas financial statements 2020 & 2021). Digitalisation has been a key strategy of Adidas in adapting to the new post-Corona environment, which indicates that BeaconsMind may benefit from a growing rollout dynamic in the coming years.

**Sound client pipeline, including five global retail players, suggests strong sales expansion**

Besides Adidas, Beaconsmind's seasoned management has proved its marketing strength by winning further reputable clients, such as the Swiss subsidiaries of the retailers Marc O'Polo, GUESS, the Gallery, Unilever, Depot and Roberto Cavalli. Management also envisages acquiring new clients with large global retail store portfolios. The current pipeline includes five candidates from three verticals who own several hundred to up to 4k stores each, with a potential to add CHF 5-50m revenues each. We thus see attractive sales growth potential coming from additional verticals.

**49% joint venture (JV) with Dubai's royal family investment company Seed Group will give Beaconsmind significant exposure to potential clients in the UAE**

In May 2021, Beaconsmind closed a partnership with the Seed Group, a company of the Private Office of Sheikh Saeed bin Ahmed Al Maktoum in Dubai, United Arab Emirates (UAE). This joint venture gives Beaconsmind access to the companies of the royal family of Dubai, such as Emirates Airlines and the Jumeirah Group, the latter of which owns hotels, dining, retail and wellness locations. This commercial subsidiary in Dubai will allow expansion into the retail markets of both the UAE and the wider Middle East region. The first new clients acquired by the JV have been the fashion retail group Maison-B-More and the BFL Group, with 80 stores in UAE and other countries. Due to the fast-paced adoption of new technology in the UAE, we anticipate this region will become an additional driver of growth for Beaconsmind in the near future.

**51% controlling stake in Wi-Fi and hotspot specialist FREDERIX offers a substantial cross-selling opportunity of >10k points-of-sales**

The German provider of enterprise Wi-Fi and hotspot solutions FREDERIX brings a valuable customer portfolio of >10,400 point-of-sales (POS), including large food retailers such as Lidl (~12,000 stores worldwide) and Kaufland (>1,450 stores worldwide). Due to the low overlap of product offerings and existing clients, both verticals have significant cross-selling potential. The 51%-stake in FREDERIX was acquired for €2.0m paid in shares (155k at €13 p/s, 19% premium to the previous working day XETRA closing). FREDERIX is a profitable company with a current annual EBITDA run-rate of €0.5m and an excellent fit for Beaconsmind.

**We initiate coverage of Beaconsmind with a Buy recommendation and a price target of €22**

The rollout of its software in the store network of its current clients, including Adidas, cross-selling with FREDERIX, and the acquisition of new clients will allow Beaconsmind to achieve strong revenue acceleration during the next 18 months and beyond. We thus anticipate the company will achieve a positive EBITDA of CHF 480k in FY 2023 (FY 21/22E: CHF -2.6m) and CHF 4.5m in FY 2024. The strong anticipated gains in financial performance warrant a higher valuation in our view. Our proprietary DCF valuation model suggests a fair value for Beaconsmind of €22 per share. We initiate coverage with a Buy rating.



## SWOT ANALYSIS

### STRENGTHS

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- **Experienced management team** Mr Max Weiland (Founder & CEO), Mr Jörg Hensen (COO), and Mr Jonathan Sauppe (Executive Board Member and CEO of the Wi-Fi/hotspot vertical) are all highly qualified executives with extensive experience in their respective positions within digital marketing, technology and other industries.
- **Innovative proprietary software suite for in-store location marketing enabling a superior customer experience in retail** The company's intelligent Bluetooth beacons coupled with its software platform represent a breakthrough for conducting in-store customer monitoring and interaction through mobile phones, enabling targeted real-time marketing campaigns, such as offers through push notifications, improved customer experience, and higher revenues.
- **Key client Adidas with over 16k shops worldwide** Adidas is a key pilot & rollout client for the company's beacons and software suite. After implementing Beaconsmind's products and the successful "Bring It To Me" marketing campaign in ~100 flagship stores, Beaconsmind decided to scale up. Besides substantial future revenues, this deal, in our view, validates the platform's potential and can attract the attention of further prominent retail players as clients.

### WEAKNESSES

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- **Young small-cap with a short track record** Founded in 2015, the company is relatively young and small. It still has to prove its ability to monetise its cloud-based suite for location-based marketing (LBM) and operate sustainably in the long term.
- **Dependence on key clients** Beaconsmind depends on its 25 clients for successful sales expansion, particularly on the largest of these, sportswear giant Adidas. Therefore, the company plans to diversify its client base by winning several global clients from at least three new verticals. The recently acquired 51% stake in FREDERIX brings a client portfolio of ~10,400 points-of-sales (POS), mainly in the food retail vertical, and significantly lowers the dependence on Adidas.
- **Low entry barriers** No specific licenses or permits are required to enter the location-based digital marketing market, which facilitates the entrance of new potential competitors.



## OPPORTUNITIES

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- **Sound client pipeline, including five global retail players, suggests strong sales expansion** Management sees potential to grow the company's key client base beyond Adidas by acquiring new, non-competing clients of similar size as well as global retail store portfolios. The current pipeline includes five candidates from three verticals who own several hundred to up to 4k stores each, with revenue potential of CHF 5-50m each.
- **Regional expansion from the European home market into the rapidly growing Middle East** The company has a partnership with the Seed Group, a company of the Private Office of Sheikh Saeed bin Ahmed Al Maktoum with which it has founded a 49% joint venture in Dubai, United Arab Emirates (UAE). BeaconsMind will have access to the companies of the royal family of Dubai, such as Emirates Airlines, and the Jumeirah Group, which owns hotels, dining, retail and wellness locations. This will enable the expansion of the business into retail chains from the fast-growing UAE and the wider Middle East region.
- **FREDERIX offers substantial cross-selling potential** The acquired 51% stake in the Wi-Fi and hotspot specialist will give BeaconsMind rapid access to a POS portfolio of ~10,400. Similarly, BeaconsMind can sell FREDERIX's business solutions to its >16k retail stores, creating a substantial opportunity to expand group revenue.
- **Buoyant location-based marketing market** The global market for location-based marketing is projected to grow at double-digit percentage rates in the coming years, with the use of beacons gaining a greater market share as well. As advertising budgets move from offline media to the online and mobile world, BeaconsMind will be better able to commercialise its products.

## THREATS

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- **Execution risk, user adoption and commercial risks, as well as the potential negative impact of COVID-19 lockdowns** The company will have to translate current existing business contacts and pilot clients into large-scale service contracts, acquire new clients and upscale sales. We also see commercial risk. The products may fail to meet clients' expectations (i.e. increase sales per store), causing software rollouts across store chains to be delayed or stopped. We are also unable to rule out that COVID-19 may regain strength despite the latest advancements in vaccines, leading to new retail lockdowns. Such measures would reduce rollout demand from BeaconsMind's clients.
- **Competition risk in the mobile location-based marketing (LBM) market** The LBM market is at an early development stage with a few players offering beacons & software solutions (e.g. Swirl, Shopkick/Trax, Placed/Foursquare, InMarket) for retail. However, the market may become more competitive over time, attracting a growing number of larger players from Tech and Media, whose deep pockets would allow them to offer similar products and services.
- **Financing and dilution risks** If the planned marketing strategy does not achieve the anticipated customer satisfaction and revenue generation, market penetration and diversification into new segments, the company will need to raise funds in order to finance further marketing measures. A difficult financing environment, or negative news on the sales ramp-up could impede raising more capital.



## VALUATION

Our valuation is based on a discounted cash-flow model. We believe that a DCF valuation methodology is best suited to capture the value of Beaconsmind's operations, since this is leveraged to the longer-term nature of the technology industry. Taking into consideration typical life-cycle patterns in the industry, we have applied a two-stage growth model, which includes detailed projections of future sales, operating profit and free cash flows for the planning period 2022E-2033E. We have assumed a terminal free cash flow growth rate of 2.0%.

Using First Berlin methodology, which accounts for company-specific risk factors, we derive a cost of equity (COE) of 14.0% for Beaconsmind AG. Our calculation is based on a risk-free rate of 2.0%, a market risk premium of 5.0% and a company-specific risk factor. Based on our forecast of uninterrupted positive free cash flows from 2024, we believe that Beaconsmind will continue to operate with no debt in the long run, leading to a 100% long-term share of equity. Thus we estimate a WACC of 14.0%, which we use to discount the projected cash flows. Including net cash of CHF 5.9m, we value Beaconsmind at CHF 62.2m. Based on 2.9m fully diluted shares outstanding, we calculate a fair value per share of CHF 21.6 (EUR 22.0). The current funds are sufficient to fund operations until profitability is reached. We have thus not included any capital measures or dilution in the future.

Using our ten-factor risk analysis, we derive a High-risk rating for Beaconsmind AG. The main risk factors we identify are execution, client satisfaction and commercial risks, negative COVID-19 impact, competition, and financial risks.

Figure 1: DCF Model

All figures in CHF '000	H2/22E	FY 2023E	FY 2024E	FY 2025E	FY 2026E	FY 2027E	FY 2028E	FY 2029E			
Net sales	1,790	8,711	16,088	27,091	41,560	57,265	74,718	91,745			
<b>NOPLAT</b>	<b>-664</b>	<b>281</b>	<b>3,093</b>	<b>5,923</b>	<b>9,004</b>	<b>12,420</b>	<b>16,194</b>	<b>17,077</b>			
+ depreciation & amortisation	64	82	85	90	87	90	93	95			
Net operating cash flow	-600	363	3,178	6,013	9,091	12,510	16,287	16,766			
- total investments (CAPEX and WC)	-327	-884	-544	-1,059	-1,358	-1,418	-1,568	-1,734			
Capital expenditures	-155	-150	-130	-110	-92	-95	-98	-100			
Working capital	-172	-734	-414	-949	-1,266	-1,323	-1,470	-1,634			
Free cash flows (FCF)	-927	-521	2,634	4,955	7,733	11,092	14,718	15,438			
<b>PV of FCF's</b>	<b>-915</b>	<b>-451</b>	<b>2,001</b>	<b>3,300</b>	<b>4,517</b>	<b>5,681</b>	<b>6,610</b>	<b>6,080</b>			
<b>All figures in CHF '000</b>											
PV of FCFs in explicit period	42,383										
PV of FCFs in terminal period	13,963										
Enterprise value	56,346										
+ Net cash / - net debt	5,874										
Shareholder value	62,220										
Diluted number of shares	2,882										
<b>Fair value per share in CHF</b>	<b>21.59</b>										
<b>Fair value per share in EUR</b>	<b>22.02</b>										
		FX rate: 1 CHF =		1.02	EURO						
					<b>Terminal growth rate</b>						
					0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%
<b>Price target</b>	<b>22.00</b>										
Cost of equity	14.0%	11.0%	27.49	27.90	28.35	28.86	29.42	30.05	30.76		
Pre-tax cost of debt	10.0%	12.0%	25.15	25.46	25.80	26.17	26.59	27.05	27.56		
Tax rate	30.0%	13.0%	23.14	23.38	23.64	23.93	24.24	24.58	24.96		
After-tax cost of debt	7.0%	14.0%	21.41	21.59	21.80	<b>22.02</b>	22.26	22.52	22.80		
Share of equity capital	100.0%	15.0%	19.89	20.04	20.20	20.37	20.56	20.76	20.98		
Share of debt capital	0.0%	16.0%	18.55	18.67	18.79	18.93	19.08	19.24	19.41		
<b>WACC</b>	<b>14.0%</b>	17.0%	17.36	17.45	17.55	17.66	17.78	17.91	18.04		

\*Please note our model runs through 2033 and we have only shown the abbreviated version for formatting purposes

Source: First Berlin Equity Research

## COMPANY PROFILE

### OVERVIEW

**Leading location-based marketing software provider offering revenue-enhancing Internet of Things (IoT) solutions to retail companies** Beaconsmind AG has developed a software suite that is used in combination with customised smart Bluetooth beacons (special tracking sensors) installed at retail stores. This IoT solution enables in-store customer localisation and recognition through beacons that communicate with an app installed on customers' mobiles. The retailers can then conduct live personalised marketing activities directly on their customers' mobiles as they visit retailer stores. According to the company's current track record, these measures lead to ~15% higher revenues.

**Figure 2: Beaconsmind IoT solution**



Source: First Berlin Equity Research, Beaconsmind AG

**Swiss startup expanding globally** Beaconsmind AG was founded by Max Weiland (CEO and co-founder) in Häfa, Switzerland, in early 2015. Later that year, the company started promoting its early-stage software. The clothing retailer Hackett (London, UK – 160 stores globally) became its first pilot client in Q3/2015. In the period 2016-2022, the company improved the software suite, optimised the database architecture, and opened commercial subsidiary offices in Germany and the United Arab Emirates – UAE (49% joint venture with Dubai's royal family VC Seed Group), which enabled the expansion of its retail client portfolio. In 2017, the company won its largest pilot client, the German clothing retail group Adidas, with >16k stores globally. Further big-name clients followed, such as the Swiss subsidiaries of the retailers Marc O'Polo, GUESS, the Gallery, Unilever, Depot and Roberto Cavalli.

**49% Joint venture (JV) with Dubai's royal family investment company Seed Group will give Beaconsmind significant exposure to potential customers in the UAE** In May 2021, Beaconsmind closed a partnership with the Seed Group, a company of the Private Office of Sheikh Saeed bin Ahmed Al Maktoum in Dubai, UAE. The company founded a 49% joint venture with the Seed Group, which gives Beaconsmind access to the companies of the royal family of Dubai, such as Emirates Airlines, and the Jumeirah Group, the latter of which owns hotels, dining, retail and wellness locations. This commercial subsidiary in Dubai will drive the expansion into retail chains from the strongly growing UAE and the wider Middle East region. The first new clients acquired by the JV have been the UAE-based fashion retail group Maison-B-More and the BFL Group with 80 stores in the UAE and other







countries. Due to the high speed of technology adoption, we anticipate the buoyant UAE to become an additional driver of growth for Beaconsmind in the near future. In mid-2022, Beaconsmind founded a new subsidiary in China with the goal of better serving Adidas' local retail network of ~12k stores and winning new clients in the vast Chinese retail market. Following the international expansion, the company currently has 25 clients.

### Acquired 51% stake in corporate Wi-Fi and hotspot specialist FREDERIX provides an attractive cross-selling opportunity with its >10k points-of-sales

On 21 November, Beaconsmind took over 51% of the German-based provider of corporate Wi-Fi and hotspot solutions FREDERIX GmbH for a total price of €2.0m. The agreed price has been settled by issuing 155k shares at €13.0 p/s (19% premium to the previous working day XETRA closing price). eKomi Holding GmbH, a leading online review company in Europe and one of FREDERIX's key shareholders, will become a strategic shareholder in Beaconsmind. Michael Ambros, founder and CEO of eKomi, will be appointed to Beaconsmind's Board of Directors as Deputy Chairman. Jonathan Sauppe, FREDERIX's CEO and major shareholder, will join Beaconsmind's Executive Board to lead the Wi-Fi/hotspot business segment. FREDERIX is a profitable company with a current annual EBITDA run-rate of €0.5m. The hotspot specialist has built solid digital expertise over its 15 years of existence and brings a valuable client portfolio with >10,400 points-of-sales (POS), including large food retailers such as Lidl (~12,000 stores worldwide) and Kaufland (>1,450 stores worldwide). FREDERIX's clients represent a highly attractive target for Beaconsmind's location-based marketing solutions. FREDERIX is, in our view, an excellent fit for Beaconsmind. Beaconsmind will be able to become a one-stop-shop for solutions based on Wi-Fi/hotspot and BLE (Bluetooth Low Energy) technology. Due to the low overlap of product offerings and existing clients, both verticals have significant cross-selling potential.

**Figure 3: Overview of proforma KPI's following FREDERIX's acquisition**

In EUR TSD (except no. of customers and Point-of-Sales)	beaconsmind		FREDERIX hotspot		Combined
 Number of Clients	25	+	530	=	555
 Number of Point-of-Sales	375	+	10,400	=	10,775
 Run-Rate Revenues <sup>(1)</sup>	2,000-2,500	+	3,500	=	5,500-6,000
 Cost Synergies	230	+	266	=	496
 Cash	2,960 <sup>(2)</sup>	+	50 <sup>(3)</sup>	=	3,010

\*Notes: (1) Run Rates for Beaconsmind are based on FY 2021/2022E and for FREDERIX on Jan-Sep 2022 actuals (2) current cash Beaconsmind (3) cash post transaction

Source: First Berlin Equity Research, Beaconsmind AG

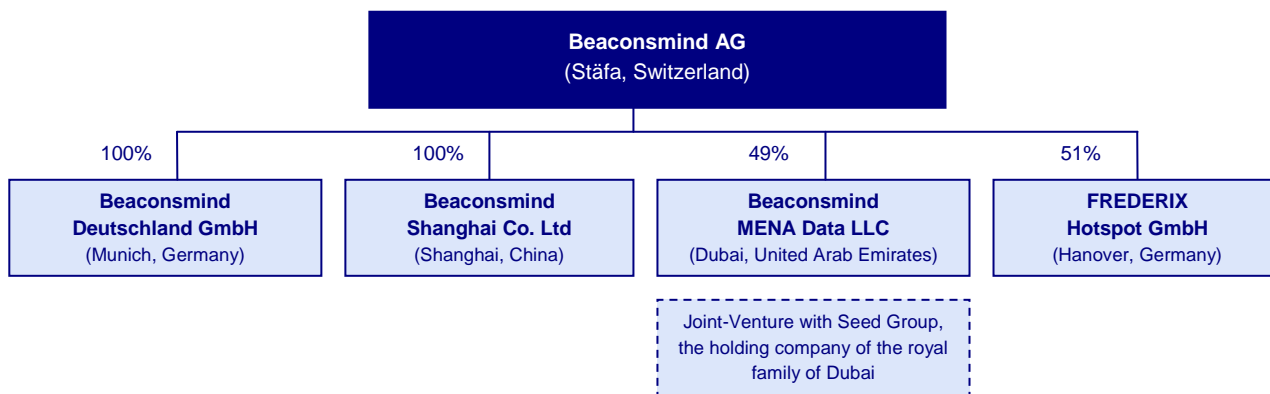
### The combination of the two companies will lead to an annual revenue run-rate of €5.5-6.0m

FREDERIX brought an additional annual revenue run-rate of ~€3.5m to the group, more than doubling the combined group's revenue from Beaconsmind's current annual revenue run-rate of €2.0-2.5m. We expect significant value generation through the sale of Beaconsmind's highly scalable IoT solutions to FREDERIX's clients. Following the transaction, Beaconsmind also expects cost synergies close to €500k p.a., chiefly through a reduction in personnel expenses (i.e. merging resources for key positions) and sharing of business tools and technologies in both organisations. The group can expect to reap significant benefit in future product development from the combination of the two companies.



**Acquisition also provides Beaconsmind with a second footprint in Germany** The acquired company added an established subsidiary in Hanover, Germany, with >20 specialised staff. FREDERIX's main fields of expertise are the implementation, control and monitoring of Wi-Fi networks, as well as enabling the clients to gain new insights into their customers and new points of contact with them. We give an overview of the group's structure in figure 4.

**Figure 4: Beaconsmind AG structure**



Source: First Berlin Equity Research, Beaconsmind AG

**IoT solution has received several awards** Beaconsmind has received several awards, including Best Enterprise solution in 2016 and Best-In-Store Solution and Top Retail Supplier 2017 from Reta Europe. The company also won a Microsoft BizSpark Plus Program sponsorship amounting to USD 120K in software services from Microsoft. Following these awards, Fluxunit, the venture arm of the industrial smartlighting German conglomerate OSRAM, acquired a stake in Beaconsmind in 2017.

## MARKET STRATEGY FOCUSED ON INTERNATIONAL ROLLOUT OF THE PLATFORM

**Goal to become a global leading location-marketing player in retail** The current client base is primarily headquartered in the company's core Swiss and German markets. To grow the business, Beaconsmind intends to implement the following measures:

- Roll out its smart beacons and the software suite across the retail chains of its existing anchor clients, the largest of these being Adidas. They alone own a network of about 16k stores globally.
- Reduce dependence on Adidas by winning further large European clients across several retail verticals. The main target sectors are the Electronics, Food & Beverage, Fast Moving Consumer Goods (FMCG), Cosmetics and Fashion verticals. The company's current pipeline includes five TOP potential accounts that own chains totalling >8.6k stores. They represent a total sales potential of ~CHF 85-115m.
- Maximising cross-selling potential between the client portfolios of Beaconsmind and FREDERIX.
- Push the group's expansion in the UAE and the wider Middle East, a rapidly-growing region keen on adopting new digital technologies.

We give an overview of Beaconsmind's regional expansion plan for its anchor IoT clients in figure 5 overleaf.

**Figure 5: Overview of Beaconsmind's anchor IoT client stores installation status**



Source: First Berlin Equity Research, Beaconsmind AG

## DUAL LISTING

**Euronext-Paris listing in February 2021 opened doors for access to new funds** To further finance business development and global commercial expansion, the company went public on the Access+ segment of the Euronext Stock Exchange in Paris on 10 February 2021. The company conducted a listing of 2.1m shares at a reference price of €23.0 p/s, equating to a market cap at admission of €48.5m. However, in preparation for the listing, the company had conducted the following capital measures:

1. In the period 2019-H1 2020, the company had raised funds totalling CHF 1.1m.
2. In December 2020, a private placement of 116.8k shares at €23.0 p/s (or CHF25 at a CHF/EUR exchange rate of 0.92), raising €2.7m (CHF2.9m).
3. In May 2020, Beaconsmind launched an employee stock option plan to pay consultants, which granted rights to 180.6k shares of the company. All shares had been converted at the time of the listing.

In addition, on 14 December 2021, Beaconsmind conducted a further capital increase. The company placed 580k shares at CHF 10.0 p/s (€9.40), raising CHF 5.8m (€5.3m). On 21 November the company issued 156k shares for the acquisition of the 51% stake in FREDERIX, increasing total shares outstanding to 2.9m. The current funds will finance an expansion of the distribution network and installation capacity which will allow the company to enter new markets. In the future, it is possible that the company may implement a small package of performance-related options for management and employees. There is no specific plan yet, but we have included minor share dilution in our model.

**Secondary listing on the Frankfurt Stock Exchange should provide exposure to a broader investor pool** On 13 April 2022, Beaconsmind conducted a secondary listing on the Scale segment of the Frankfurt Stock Exchange, which should expand its access to investors and increase stock liquidity (trading volume). The stock will thus be traded on the Exchange's XETRA system. Hauck & Aufhäuser Lampe Privatbank AG is the Designated Sponsor.



# IOT SOLUTIONS TO ENHANCE CUSTOMER EXPERIENCE AT RETAIL STORES

## THE PRODUCT – BLUETOOTH BEACONS CONNECTED WITH A SOFTWARE SUITE

**BeaconsMind IoT solutions for retail** BeaconsMind’s IoT solution consists of intelligent beacons and an in-house developed software platform which are deployed at retailers’ stores. The IoT solution enables the implementation of so-called location-based marketing (LBM) campaigns, through which consumers receive advertising with highly relevant and personalised notifications on their mobile phones during their time at a retail store. The product is accompanied by consulting and support services to ensure proper functioning and client satisfaction (see figure 6 below).

**Figure 6: BeaconsMind's IoT solution for retail stores**



Source: First Berlin Equity Research, BeaconsMind AG

### Beacon technology set to enhance the in-store shopping experience through the application of LBM campaigns

Beacons are low-powered sensors or signal transmitters equipped with Bluetooth Low Energy (BLE) smart technology capable of computing the proximity of mobile devices. Beacons are installed in a retail store to determine the customer’s exact location in the store by tracking his/her mobile device. For this purpose, the consumer must have already installed the retailer’s mobile app; with notifications allowed. With smart beacons, retail stores can track the customers’ signals, obtaining insights into shopping behaviour and demographics. The stores can collect and analyse data on users entering a location; such as the length of a typical stay, products that receive the most interest, what discounts they prefer, and trigger a location-based marketing (LBM) action on the mobile device. LBM campaigns intend to address their consumer in real-time at the moment they enter the store with highly relevant and personalised notifications based on past or present behaviour of the client at the location. The retailer can send personalised alerts to smartphones to encourage them to purchase something in-store. Additionally, this digital personalisation creates an enhanced customer service experience: LBM is perceived as highly effective in boosting sales and marketing ROI in retail (source: Factual location-based marketing report, 2018).

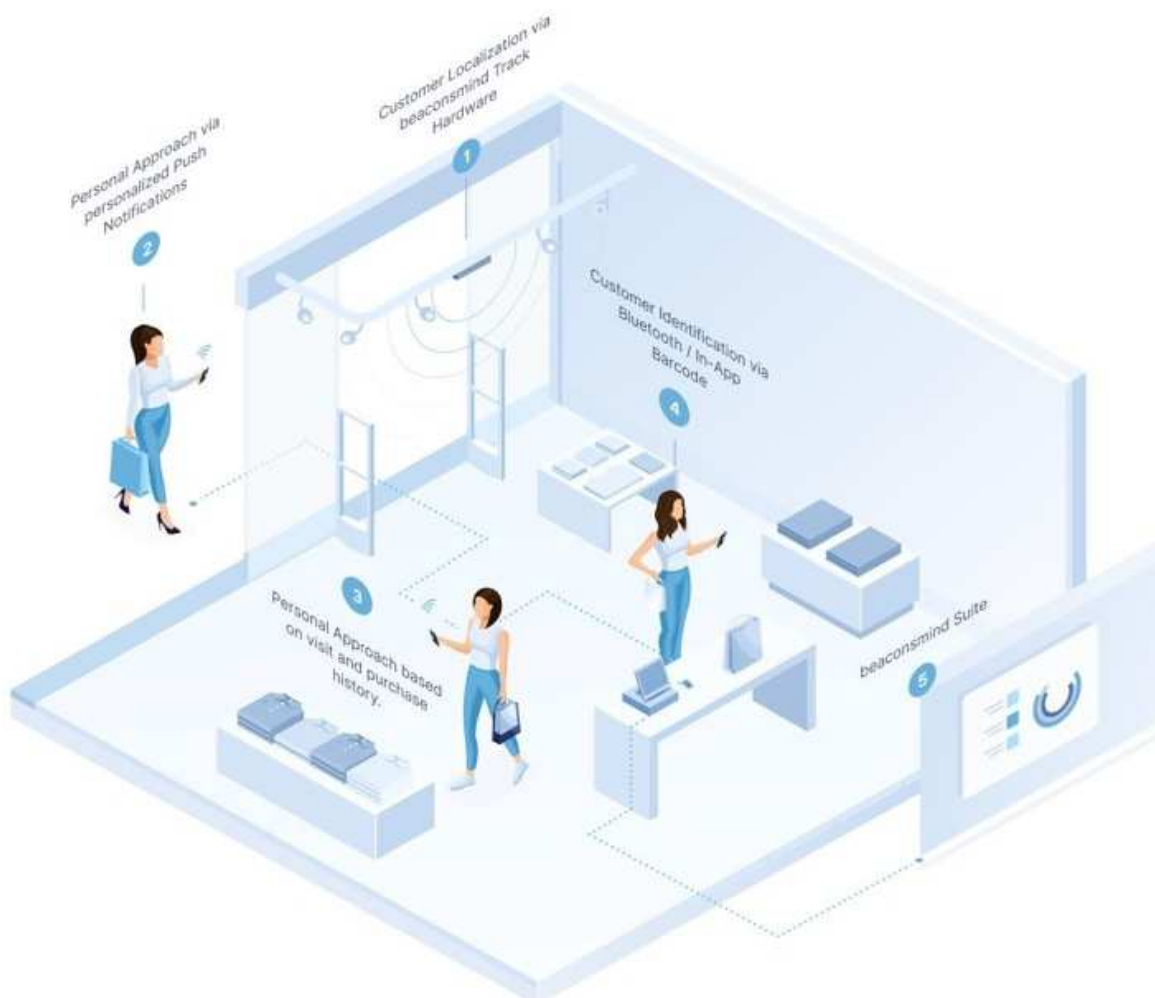
**BeaconsMind's maintenance-free Track Bluetooth-Beacons (TBB) are superior to most products offered by peers**

BeaconsMind's industrial-grade TBBs work with the iBeacon technology initially developed by Apple back in 2013 which has now been adapted for the company's specifications and needs. They have four suppliers, based in Germany, Poland and the US. Once ordered, the TBBs can be deployed and fully operational at retailer stores within about two months. Notably, because the company's TBBs are power-supplied and integrated directly into the store's existing lighting rails; they do not require maintenance. This presents a huge advantage for retailers; as competitors' beacons are predominantly battery powered and require costly maintenance. At present, the company can outfit about 100 stores per week (up from the previous 30) in its home market. For global projects, BeaconsMind conducts TBB deployment and maintenance through one of two leading international sub-contractors, Kinettix Inc and IRON Systems Inc.

**Beacons are the optimal option for in-store tracking at retail**

BLE technology is the best option for precise in-store tracking of mobile devices and customers. Their localisation accuracy, range and ability to function indoors surpass the other two alternatives, Near Field Communication – NFC, whose range is too narrow, and Global Positioning System – GPS, whose range is too broad and experiences frequent signal issues. BLE beacons have an optimal detection range of up to 70m with an accuracy of 50cm.

**Figure 7: Overview of customer journey using beacons and the software suite**



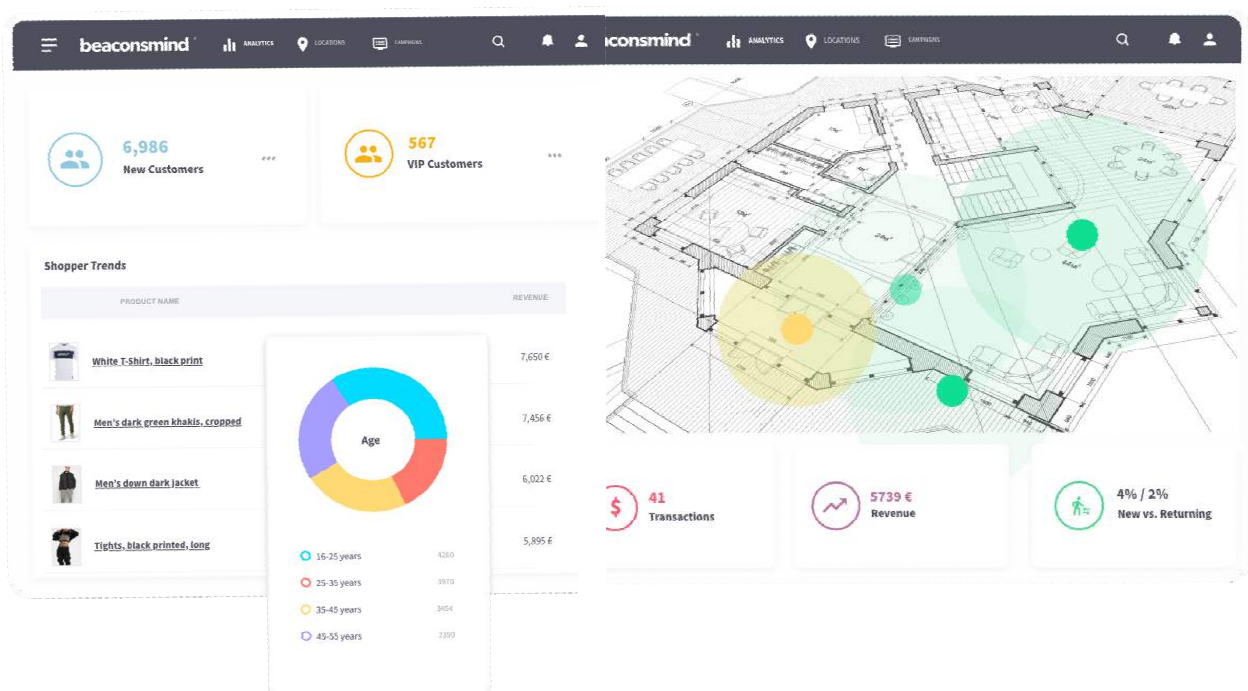
Source: First Berlin Equity Research, BeaconsMind AG

**In-house developed software suite enables data storage and analysis to implement revenue-generating marketing campaigns** Beaconsmind's software allows companies to analyse and measure valuable data from their customers during their store visits. The software was developed on the highly competitive Microsoft Azure cloud platform. The Beaconsmind suite (BS) catalogues the TBB-specific data about the customers and their shopping behaviour. The system provides an overview of information such as:

- customer visits,
- time spent in store
- purchase history,
- average basket size,
- physical and digital customer paths, and
- heat maps (imaging showing traffic volume to each store area).

The suite enriches the customer data already owned by the retailer, further enabling valuable customer segmentation and marketing campaigns. Dashboards and customised reporting help retailers understand their data, find patterns, identify revenue-generating initiatives and deliver personalised proximity-based advertising messages. The BS also offers purchasable add-ons that can be tailored for specific customer KPIs and are compatible with the client's existing internal IT system (e.g. CRM, POS). The BS is easy to integrate for retailers as it provides an Application Programming Interface (API) that links the systems and shows all data in one user interface.

**Figure 8: Snapshot of the software suite dashboard displaying customer segmentation and traffic analysis**

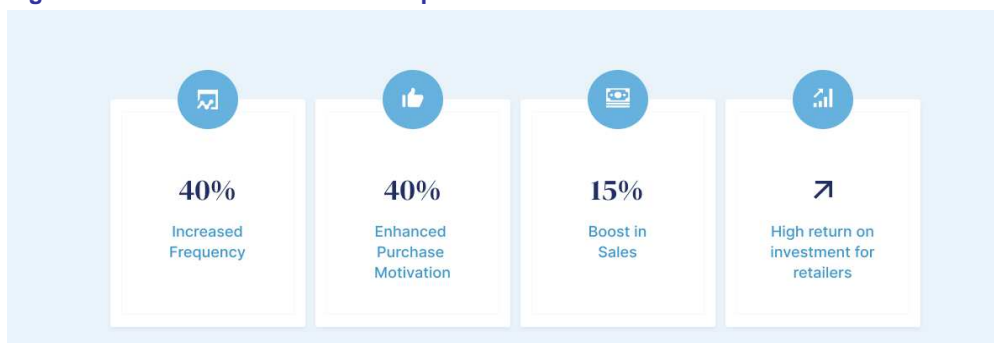


Source: First Berlin Equity Research, Beaconsmind AG

Furthermore, the suite enables retailers to optimise their marketing strategy both at the Point of sale (POS – the store) and Digital Out of Home (DOOH- customer's laptop). As a result, Beaconsmind can provide retailers with a tool able to transform the customers' in-store shopping experience and deliver a unique omnichannel proposition.

**Superior marketing campaigns through the BS lead to more frequent customer visits and higher sales** Beaconsmind project managers conduct consulting and customer support ahead, during, and after the deployment of the TBBs and the BS. The project managers provide their clients with data analysis and reporting quarterly, giving them insights and recommendations to conduct performance-enhancing marketing campaigns through the BS. So far, this customer-oriented strategy has proven successful. After implementing marketing campaigns, Beaconsmind has added substantial value to its clients, reflected in a 40% enhancement of customer-visit frequency, a 40% purchase motivation increase, and 15% higher sales (see figure 9 below). Such success has led to high client satisfaction and a high client retention rate of about 95%.

**Figure 9: Beaconsmind historical impact at the POS**



Source: First Berlin Equity Research, Beaconsmind AG

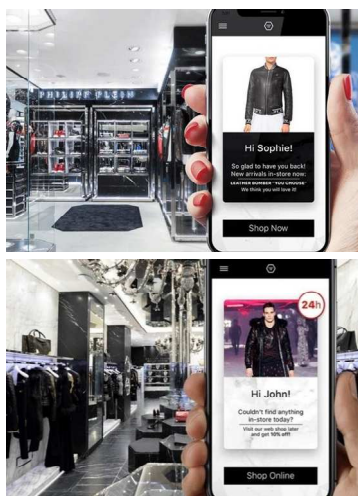
**Examples of typical use cases of the Beaconsmind solution** Based on the valuable data captured by the software, the BS solution enables a broad range of marketing campaigns for personalised advertising interaction with the customers. The campaigns may influence customers to enter a store instead of walking past it, to make an online purchase at a specific time, to buy a specific product in store, to take advantage of a discount, or to go to a particular area of the store that is relevant to them. We give an overview of potential use cases in figure 10.

**Figure 10: Overview of use cases of BS for a clothing retailer**

**Examples of use cases**

- Increasing footfall at Point of sale (POS), through local, targeted customer activation at the right moment
- Increasing return visits and purchase motivation at POS thanks to relevant push notifications based on visit and purchase data (e.g. rabatte coupons)
- Connecting POS and online shop cross-channel optimisation and conversion growth at the right time
- Connecting POS and Social Media to turn store visitors into fans and followers
- Using the physical shop windows as digital retail space. Local contact with customers after closing time to increase revenue and sales in the online shop
- Local customer identification via smartwatch so that loyal customers become even better customers

**Personalised real-time campaigns**



Source: First Berlin Equity Research, Beaconsmind AG

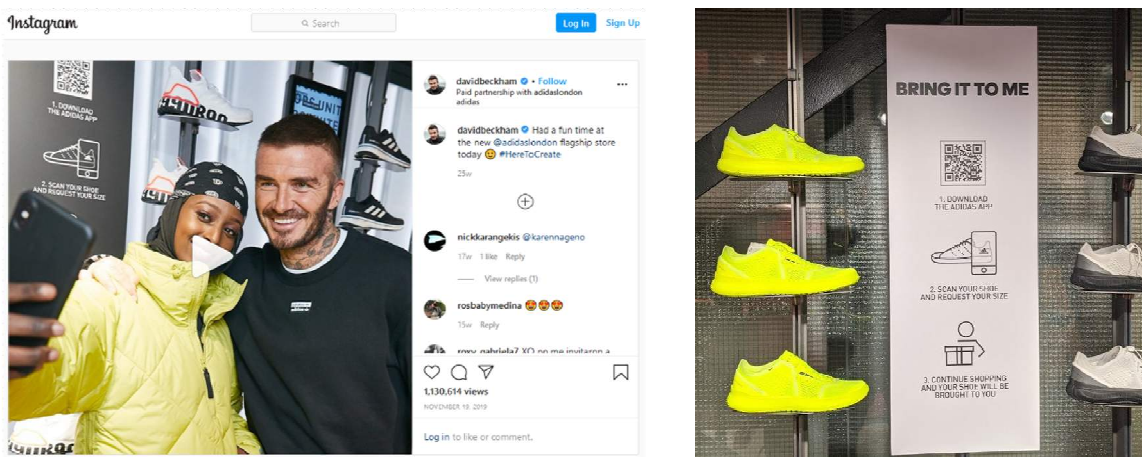
## ADIDAS CASE STUDY DEMONSTRATES THE PLATFORM'S ATTRACTIVENESS

Beaconsmind's most important client is Adidas, with a network of more than 16k physical stores worldwide. We believe the resulting cooperation with a retail client of Adidas's calibre reflects the marketing value of the Beaconsmind IoT solution. The partnership with Adidas transitioned from the initial pilot testing to the current international rollout stage within about five years:

**Stage 1: Launch of the "Bring It To Me" marketing campaign at the global headquarters demo store in Germany** In 2017, Adidas started its initial testing with Beaconsmind at the demo store located within its global headquarters in Herzogenaurach, near Nuremberg, Germany. In the demo store, which typically serves as a retail laboratory for new projects, Adidas chose to test the Beaconsmind IoT solution on their app with an initial focus on the "Bring It To Me" function. After scanning a particular type of shoe with their mobile phones, customers can select their size and click a button, causing a sales representative to bring the requested pair of shoes to be tried on. The test was successful; the Beaconsmind IoT solution enabled tracking of the customers with an accuracy of 10cm.

**Stage 2: Commercial rollouts to the company's five main flagship stores in France, New York, Los Angeles, Moscow and London** By the end of 2017, the top management of Adidas extended the solution to a leading customer flagship store in Paris (France) on the Champs Elysees. In 2018, Adidas continued to roll out Beaconsmind's IoT solution in the US (New York and Los Angeles) and Russia (Moscow). Finally, Adidas launched it in the 26,900-square-foot London flagship store on Oxford Street. The launch campaign had the celebrity soccer player David Beckham as the sales representative delivering pairs of shoes to customers. The London store represents Adidas' last testing ground for products intended to be implemented in other stores, clubs and spaces inside retail partners. As a result of the very successful marketing campaign, Adidas decided to continue implementing Beaconsmind IoT solution in more locations.

Figure 11: "Bring-it-to-me campaign" with Beckham in London



Source: Beaconsmind AG

**Stage 3: Rollout to the ~100 top global flagship stores** Adidas management requested the rollout of the Beaconsmind IoT solution in an additional ~100 selected top flagship stores globally. So far, Adidas has implemented the Beaconsmind IoT solution in stores located in the following countries:





- Europe: UK, France, Germany, Italy, Spain, Portugal, Austria, Sweden, Poland, Czech Republic, Bulgaria, Romania, Russia
- North America: USA, Canada
- Asia: Japan
- Middle East: UAE

**Stage 4: Integration of BeaconsMind IoT solution into Adidas' SAP procurement platform** BeaconsMind has achieved >USD 1m in cumulative commercial orders with the retailer, who included the BeaconsMind SaaS solution in its SAP Ariba19 procurement platform. As a result, any Adidas country marketing manager globally can request the implementation of the BeaconsMind solution in a store network. This represents the final step in the global rollout of the BeaconsMind solution. BeaconsMind is the sole provider of a location-based marketing solution using Track Bluetooth-Beacons listed on the Adidas procurement platform.

**Following implementation slowdown during the pandemic peak in 2020, rollout through Adidas stores has potential for high demand in the coming years** More than 70% of Adidas' global 16k store fleet was closed at the peak of the worldwide lockdown measures in 2020. In 2021, Adidas reopened stores where this was allowed by local authorities. Notably, the retailer started to push the implementation of digital tools such as those of BeaconsMind's and omnichannel services to offer engaging shopping experiences for customers returning to reopened stores. Digitalisation is a key strategy of Adidas to adapt to the new post-Corona environment, which suggests that BeaconsMind may benefit from retail digitalisation demand in the coming years (source: Adidas' financial statements 2020 and 2021).

## OVERVIEW OF THE SOFTWARE SUITE PRODUCT TYPES

**Two-stream revenue business model** BeaconsMind will generate revenue through the commercialisation of the two components of its IoT solution:

- Firstly, one-off revenue from the installation fee and sale of the Track Bluetooth Beacons. The strategic study and configuration of the systems and the beacons are included in this fee.
- Secondly, recurring revenue from the software suite fees. The level of recurring revenue depends on the product type purchased by retailers.

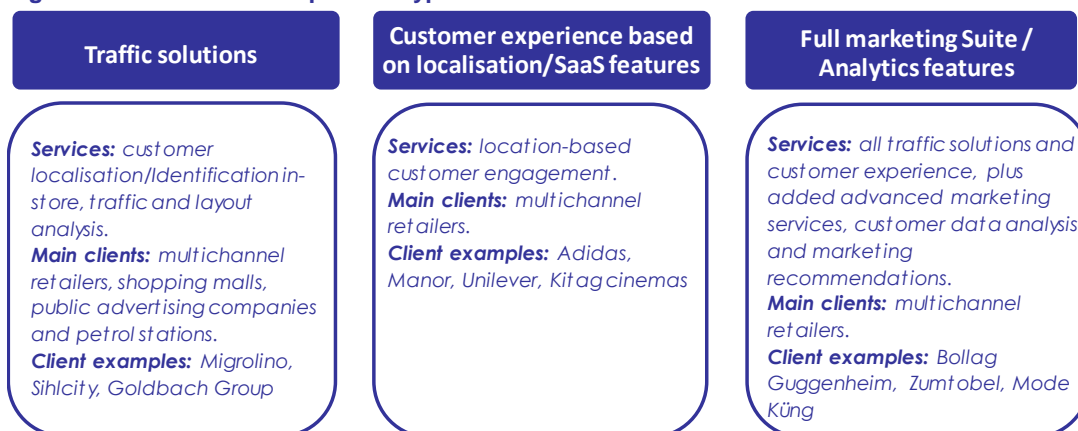
**Three SaaS product offering** The company offers three products with different levels of data access:

- The most basic product, TRAFFIC SOLUTIONS, includes customer in-store identification, traffic and layout analysis.
- A more structured product, CUSTOMER EXPERIENCE, provides location-based customer engagement marketing campaigns (e.g. Adidas' "bring-it-to-me" campaign).
- The most complex product, the FULL MARKETING SUITE, adds data analytics features and advanced marketing services to the two previous products. Powered by programmed algorithms, this product offers personalised advertising such as invitations, special offers or discounts based on customers' purchasing habits.

Overall, the three product levels consider the different preferences that clients usually have. Some clients may require only traffic data to analyse (e.g. shopping malls, airports). Other users will prefer to purchase higher-value analytics information to conduct revenue-enhancing marketing campaigns. We give an overview of the three products in the figure overleaf.



**Figure 12: The three SaaS product types accessed via BS**



Source: First Berlin Equity Research, Beaconsmind AG

## CLIENT PIPELINE REFLECTS FUTURE DIVERSIFICATION

In parallel to the progressive rollout within the Adidas store network, Beaconsmind aims to win additional non-competing large clients with global retail store portfolios. Beyond the sportswear vertical, the company is focused on potential clients from at least three different verticals. The main target sectors are Electronics, Food and Beverage, Fast-moving consumer goods (FMCG), Cosmetics and Fashion. All these sectors are mature, involving global retailers with large physical store networks and online presence. Beaconsmind already has small-scale experience in several of these sectors. The most prominent pipeline candidates represent a store network of several hundred or even thousands and potential revenue in the CHF 5-40m range each. We give an anonymised overview of the top 5 pipeline candidates in table 1.

**Table 1: Overview of contracts pipeline large accounts**

Potential clients	Client revenue	Number of stores	Number of beacons per store	Potential revenue
Prospect 1	USD 346m	312	~ 10	CHF 5-10m
Prospect 2	USD 1.2bn	~1'400	~30	CHF 5-10m
Prospect 3	USD 4bn	~2'600	~40-50+	CHF 40-50m
Prospect 4	USD 40bn	330	~500+	CHF 20-25m
Prospect 5	USD 60bn	~4'000	30-50	CHF 15-20m

Source: First Berlin Equity Research, Beaconsmind AG

**On track to scale up revenues** Based on the pipeline, we recognise client interest in Beaconsmind's solutions. We expect that attracting more clients of this calibre will expand its reputation into other industries. We also believe that these events will trigger the attention of many potential customers and facilitate the acquisition of new clients, which will in turn accelerate revenue generation.



## GLOBAL COMPETITIVE ENVIRONMENT

### BEACONS ENABLE OMNICHANNEL STRATEGY

**BeaconsMind's solutions empower omnichannel retail strategy** BeaconsMind is focused on offering location-based marketing solutions (i.e. intelligent beacons and marketing software suite) for the retail market, which enable the implementation of an omnichannel marketing strategy. This retail strategy involves employing multiple channels, from the physical bricks-and-mortar store to online and mobile channels, and integrating activities within and across these channels to correspond with how customers shop (Ailawadi & Farris, 2017). The customer data and insight from the multiple channels are interconnected through the integration of inventory, customer service, and sales, forming a unified customer profile. This valuable information makes it possible to offer the customer a fully personalised offer: precisely what they need, the moment they need it, from the physical or the digital world.

**Pandemic triggered omnichannel adoption** The pandemic that started in early 2020 has changed consumer buying patterns dramatically. During the lockdown, customers increasingly had to shop online due to store closures, as additionally their expectations of stationary shopping changed. Reopening of stores led to a trend towards omnichannel shopping based on what the consumer finds most convenient, such as seeing the product in-store and shopping online, researching online and then buying in-store to touch and feel the product, or buying online and picking up a product in person. Since the pandemic began, more than one third of US citizens have made omnichannel features such as buying online for in-store pickup part of their regular shopping routine, and nearly two thirds of those individuals plan to continue doing so (source McKinsey, 2021). Moreover, recent developments in IT infrastructure & data analytics have facilitated omnichannel adoption, as they have enabled tracking a customer's journey across multiple channels, from social media ads and interactions to the website, app, chat, and the physical store.

**Omnichannel is here to stay, and beacon technology can pave the way** The consultant McKinsey thus considers the implementation of omnichannel in the post-pandemic era not just an option but vital for survival. Retail was hit hard through lockdowns during the pandemic; the retail lockdown in Germany caused €36bn in lost sales in 2020 and a further €40bn in lost sales from January to May 2021 (source: German retail association - Handelsverband Deutschland). Experts agree that the most successful reopening strategies are those that transform the customer's shopping experience through the use of LBM and beacon technology. Younger buyers are particularly enthusiastic about the new ways of shopping which include customised experiences and personalised recommendations.

**Beacon technology (BT) offers multiple benefits to retailers** BT enables retailers to create more tailored, and consequently deeper, customer experiences. The main advantages are:

- **Advertising Tool:** Nowadays, shoppers expect tailored advertising and messaging, with personalisation that meets their needs. Beacon technology can provide all of these, triggering ads based on a customer's proximity to the store. This means that customers receive marketing messages at the right time and place.
- **Personalisation:** Just as e-commerce businesses like Amazon offer customers personal shopping recommendations based on previous purchases or customer searches, beacon technology provides this personalisation in physical stores. Retailers can customise coupons, deals, and product recommendations to



individual demographics, customer preferences and shopping habits. This contributes to developing long-term customer loyalty and a more engaging shopping experience.

- **Accessing customer data:** Tracking shopping habits and preferences allows retailers to access relevant consumer data such as the day of the week and time shoppers are more likely to buy or use certain coupons. They can also look at demographics and products that each customer is typically interested in.

### **First launched in 2013, beacons have been deployed mostly by selected US retailers**

Apple first launched Bluetooth iBeacons in 2013. Beacon technology has been cautiously adopted by selected US top retailers, including Macy's (installed 4,000 shopBeacons across all its US stores), Rite Aid (deployed beacons at more than 4,500 of its US stores), Target (by 2017 it had installed beacons in more than 1,000 of its 1,800 locations in the US), Urban Outfitters (installed beacons at 15 of its US stores), Walmart and CVS. By 2017, about 75% of the top 20 retailers in the US had already implemented beacon technology (source: Proximity.Directory report). We believe the pandemic and the phenomenon of digital native players such as Amazon adopting an omnichannel strategy by stepping into the physical retail arena with innovative technological features will further drive the adoption of beacon technology. Digital native brands and e-commerce startups (e.g. online eyewear company Warby Parker or beauty company Glossier) are committing to a "clicks to bricks" strategy by expanding their physical presence. A study in the US found that opening one new physical store in a market results in an average 37% increase in overall traffic to that retailer's website, compared with web traffic before the store's opening. Physical stores can offer customers a unique shopping experience and provide retailers the opportunity to build up their brands by showcasing their product quality and customer service. The property firm JLL predicted that online retailers in the US would open 850 stores over the next five years. These players will put pressure on physical retail to add a digital approach to the classic store.

### **Amazon sets the bar high for an omnichannel "clicks to bricks" strategy in physical retail**

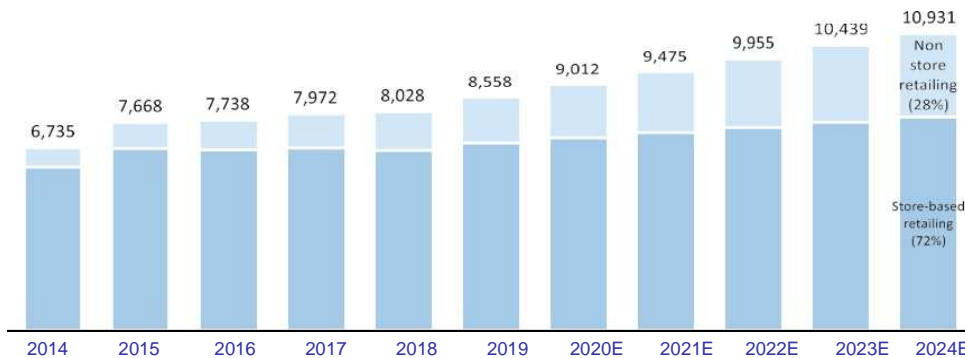
Amazon is an excellent example of the implementation of an omnichannel strategy. Besides its strength in e-commerce, the company has opened physical stores such as Amazon bookstores, Amazon Go convenience stores, Amazon Fresh grocery stores & Whole Food markets (through the acquisition of Whole Foods), Four star outlets and pop-up locations. The company has deployed in-store technology similar to one used in self-driving cars, which combines computer vision, multiple sensors each recording different aspects of an object, such as its weight or form, and deep learning to analyse this stored data. Amazon is thus pioneering a new shopping experience in retail stores aiming to set new trends through its "Just Walk Out" cashierless technology, which enables customers to pay for their purchases while skipping the checkout line, as well as the multifunction "Amazon Dash Cart" smart shopping cart, which allows users to find items, track purchases and skip the checkout line.

## **THE RETAIL AND THE LOCATION-BASED MARKETING MARKETS**

**Physical retail is projected to grow by about 3% p.a. until 2024** Store-based retailing remains the dominant shopping channel, amounting to up to 80% of the total €8.6bn global retail sales in 2019. Modern consumers perceive stores as places where they can experience products and brands, and eventually access additional services. Consumers expect stores to provide unique and valuable features which online shops/mobile applications cannot offer, including face-to-face customer service and the possibility to see and touch the products. As a result, in the period 2019-2024, retail sales in physical stores are expected to remain relevant and continue to grow at 2.73% p.a. Non-store retailing,

which includes E-commerce, is expected to grow at 12.71% p.a. until 2024 (source Euromonitor & BeaconsMind). However, the negative impact of the Coronavirus pandemic on retail due to lockdowns has been substantial. According to Statista, global retail sales declined by 5.7% in 2020. Nevertheless, stores that reacted quickly by shifting selling efforts to e-commerce and later to omnichannel saw a positive business performance. Hence, Statista forecasts retail sales growth of 6-7% p.a. in the years 2021 and 2022.

**Figure 13: Overview of the Global retail sales 2014 – 2024E (€bn)**



Source: BeaconsMind AG, Euromonitor

### The global location-based marketing (LBM) market set to grow at a CAGR of 17.4% through 2027

LBM targets customers on their mobile phones. The main goal is to drive foot traffic for local businesses such as retail stores by encouraging them to visit the store if they are nearby, enhancing the shopping experience and enticing customers with a personalised offer. The global LBM market was valued at USD 62.4bn in 2019 and is expected to grow at an annual growth rate (CAGR) of 17.4% from 2020 to 2027. The main factors triggering growth in demand for LBM include rapidly increasing digitalisation across industries with higher adoption of advanced technologies such as Internet of Things (IoT), the ever-higher penetration of mobile and internet devices, and increasing importance of consumer data in marketing (source: Grandviewresearch). Other market data firms such as Reportlinker anticipate an even stronger growth dynamic for the LBM market in retail delivering a 46% CAGR in 2020-2027. According to Statista, mobile marketing has a 60% share in ad spending worldwide and is anticipated to continue playing a relevant role. Retailers are expected to continue to enhance customers' shopping experience by making it easier and more enjoyable to shop in physical stores, with the complete inclusion of shoppers' mobile devices in the process by developing their own apps. According to Factual, almost 9 out of 10 marketers said location-based advertising and marketing resulted in higher sales, followed by growth in their customer base (86%) and higher customer engagement (84%).

**The rising popularity of IoT technology is driving beacon adoption** Beacon producers benefit from rising demand for their product. According to the intelligence provider Fortune Business Insights, the beacon market amounted to USD1.36bn in 2018 and is projected to reach USD 31.61bn by 2026, reflecting a CAGR of 48.9% in the forecast period.

## MAIN COMPETITORS

**Location-based marketing using beacons still at early development stage** At present, there are only a few tech players offering a full software solution for location-based marketing using beacons. Figure 14 overleaf gives an overview of the leading players offering beacon-based analytics & marketing solutions according to CB Insights.

Figure 14: Overview of the competitive environment



Source: CB Insights, BeaconsMind AG

From the competitive universe, BeaconsMind sees six US and European companies as its direct peers, having the most significant relevance in the market and being the closest to BeaconsMind in terms of value proposition. Management has rated the peers based on five key features, which we summarise in table 2 below:

Table 2: BeaconsMind's competitive position against six key peers

Company	Software	Hardware	Ease of Implementation	Clients	Price	Total
<b>BeaconsMind</b>	****	****	****	****	*****	****
Swirl Networks	***	*	***	*****	***	***
Sensorberg	***	*	***	***	***	***
Moca Platform	****	*	****	**	**	***
Minodes	****	*	***	***	***	***
Placed	****	*	***	****	***	***
Kontakt io	**	****	****	****	***	****

Source: BeaconsMind AG, First Berlin Equity Research

**BeaconsMind's value proposition is among the strongest within the peer group**

BeaconsMind offers the most competitive value proposition, followed by Kontakt.io, Swirl Networks and Placed, if we assume that all criteria are of equal importance. One of the main advantages of the BeaconsMind product is the hardware, since competitors' beacons are battery-powered, and frequently generate high maintenance costs and require specific power supplies, adaptors, and ethernet connections, making them impractical in retail stores.

**Eight peers offering beacon-based software solutions worth watching**

According to the previous analysis, the main six peers to keep an eye on are Swirl Network, Sensorberg, Moca Platform, Minodes, Placed and Kontakt io. Within this group, we see Swirl, who installed beacons at 15 Urban Outfitters locations in the US, as the most relevant peer. We additionally view the two US players Shopkick and inMarket, which are capable of providing large retailers with beacon and software solutions, as relevant BeaconsMind peers.



Shopkick outfitted Macy's with 4,000 shopBeacons, and inMarket deployed beacons at more than 4,500 of Rite Aid's US stores. In 2019, Shopkick was acquired by the Singapore-headquartered company Trax, a leading provider of computer vision solutions and analytics for retail digitalisation. The same year, Swirl was also acquired by the large US retailer BestBuy. The remaining players are primarily focusing on small and medium retailers, and none of them has announced the completion of a global rollout so far. We discuss these players below.

**1) Shopkick (acquired by Trax)** was founded in Silicon Valley, US, in 2009. The company has created a shopping app for smartphones and tablets that offers users rewards (called kicks) for shopping activities both online and in-stores, such as entering stores, scanning items, making in-app or in-store purchases and submitting receipts. The main goal of the app is to bridge the gap between online and offline shopping by driving incremental traffic, increasing the shopping basket, and creating customer engagement and loyalty. Shopkick has brought US leading retailers such as Macy's, Best Buy, Sports Authority, Target, TJ-Maxx, Marshalls, BevMo, Old Navy, Carter's, OshKosh, Reebok, and Disney Stores, into its programme. To localise customers, Shopkick uses its audio/iBeacon hybrid solution called shopBeacon (Apple iBeacon-compatible), which it deployed at its customer Macy's. In 2019 Shopkick was acquired by the Singapore-based firm Trax, the world's leading provider of computer vision solutions and analytics for retail. Trax aims to become a leading player in creating the store of tomorrow, whereby the physical and digital worlds combine in new ways. Before being acquired, Shopkick had raised USD 26.7m. The Unicorn Trax has so far raised USD 1bn over 14 rounds (source: Crunchbase).

**2) Swirl Networks (acquired by Best Buy)** is a US provider of proximity-based mobile marketing platform services helping large-scale retailers and brands leverage the power of mobile to engage consumers while they shop in stores. Swirl has developed a platform that allows retailers to capture digital location signals, including geofences, Wi-Fi, VLC and Bluetooth beacons, in order to obtain and analyse customer behavioural data. The company uses this data to influence shoppers in-store, on their mobile devices and online. Top companies such as Lord & Taylor, Urban Outfitters, Hudson's Bay, Marriott, Alex and Ani, Timberland and Kenneth Cole use Swirl's patent-pending technology to increase foot traffic, customer engagement and sales conversion. Swirl raised total funds of USD32m before it was acquired by the leading US electronic retailer Best Buy in FY 20/21 (source: Crunchbase).

**3) InMarket** was founded in 2010 in the US. Based on its digital marketing platform, the company offers real-time advertising solutions for brands to reach consumers via their mobile devices with full-screen content at retail stores. The company's location-based suite uses GPS, beacon, and Wi-Fi signals connected with its proprietary software analytics platform to create branded consumer experiences based on their physical location. The company is capable of producing ad units across digital devices and mobile phones to reach consumers before and after their store experience. InMarket identifies and engages consumers at every stage of the shopping cycle to create exciting experiences. The company has driven campaigns to increase ROI for the world's top brands, including the retailer Rite Aid (beacons at 4,500 US stores). The company offers a solution for the retail, automotive, consumer, health and finance industries. InMarket so far raised USD 12.5bn in two rounds (source: Crunchbase).

**4) Sensorberg** is a German-based company offering intelligent hardware and software for digitising and automating all types of buildings, particularly in co-working spaces, commercial and residential real estate, hotels and self-storage. In addition to intelligent access systems, Sensorberg equips facilities with a comprehensive digital infrastructure to



provide users with the highest levels of security, comfort and productivity while enabling operators and owners to manage and utilise their buildings with maximum efficiency. The company has raised total funds of USD 9.3m over six rounds (source: Crunchbase).

**5) Moca Platform** is a Spanish company offering an Artificial Intelligence Marketing Platform which uses location technologies to build "customer journey maps" and connect with customers in real-time to deliver personalised experiences. The company currently focuses on events, shopping malls, supermarkets, retail shops, and airports. The company has launched retail campaigns using Moca's geolocation and notification capabilities to send mobile-to-store campaigns through the app. Moca's platform is connected to more than 10m mobile devices and has been used by companies from different industries such as GSMA Mobile World Congress in Barcelona, Port Aventura (theme parks), Euroleague (basketball club competition), Ogilvy (marketing agency), Benidorm (municipality and seaside resort), Zutphen (municipality). Moca has raised total funds of USD 2.0m over two rounds (source: Crunchbase).

**6) Minodes (acquired by Telefónica NEXT Germany)** is a German company offering a unique platform of in-store analytics, marketing and iBeacon services that enable retailers to maximise the potential of their stores through the integration of digital tools and technologies. The company's SaaS-based marketing analytics platform allows physical-store and omnichannel retailers to track customer behaviour. The company has three solutions: Minodes Answers (Retail Analytics), Minodes TargetAd (Omnichannel Retargeting) and Minodes Interactions (Beacon Campaigns). The company had raised total funds of USD 7.6m over four rounds when it was acquired in 2017 by Telefónica NEXT for a "low eight-figure euro amount" (source: Crunchbase). Telefónica NEXT offers three different technologies for retail, consisting of video cameras, Wi-Fi sensors and beacons to provide various marketing analyses such as visitors' statistics by store and period, socio-demographic profiling, comparisons with competitors, analysis of mobility and customer permanence by store zones, strategies to improve conversion rates and customer satisfaction and loyalty.

**7) Placed (acquired by Foursquare)** is a US company offering location-driven insights and a mobile ad intelligence platform that provides reports on consumers' offline behaviour. The company analyses data to create campaigns inducing customers to visit a chain or location after viewing an advertisement. Placed was founded in 2011 and raised USD 13.4 m before being acquired by Snap in 2017 and finally by its main competitor Foursquare in FY 20/21 (source: Crunchbase). Foursquare started as a social media app that lets users broadcast their favourite bars or restaurants online by "checking in," evolving into a company that provides location-based data to some of the biggest companies in the world, such as Apple, Microsoft, Uber, Twitter and Samsung. Following the acquisition, more than 50% of the Fortune 100 companies have partnered with Placed or Foursquare. Foursquare has raised total funds of USD 390.4m over nine rounds (source: Crunchbase).

**8) Kontakt.io** is a leading US-based provider of beacon-based IoT devices and indoor location solutions which connect people, locations, and things. The company focuses on IoT solutions for smart buildings, including hospitals, shopping malls, airports, manufacturing & industrial space, office buildings and workspaces. In office spaces, for example, the company's room sensors allow for live space occupancy monitoring, as well as monitoring of light, air quality, temperature, humidity, carbon monoxide and other environmental data. The company's solutions help quantify spaces and the interactions with the people, things and buildings they occupy. Kontakt.io has raised total funds of USD 8.3m over five rounds (source: Crunchbase).





## FINANCIAL HISTORY AND OUTLOOK

### Transition of fiscal year to calendar year underway; our financial projections include the acquired company FREDERIX

There are two key relevant historical events to consider in order to better understand Beaconsmind's reported figures. I) Thus far, the company has reported in accordance with Swiss accounting standards based on a fiscal year from 1 July to 30 June. In April 2022, to align better with investor requirements, the company announced that it was adopting IFRS standards and the calendar year (CY) as its fiscal year as of CY 2023. During the transition year 2022, the company reported unaudited H1 21/22 figures, and it will report audited results for FY 21/22 and for a short fiscal year H2/22 (1 July to 31 December). We have aligned our analysis and projections with the company's reporting plans. II) On 21 November, Beaconsmind acquired 51% of the privately held specialist FREDERIX for which the company did not disclose financial statements. Our financial projections reflect our estimate of the acquisition's parameters.

### FY 20/21 AND H1 21/22 RESULTS

**Income Statement FY 20/21** Beaconsmind's financial statements are typical of an early-stage technology company. Revenues are still at a low level and the company is loss-making. In FY 20/21, group revenues increased by 56% y-o-y, amounting to CHF 779k (FY 19/20: CHF 498k). The pandemic had a negative impact on business, and it grew more slowly than management had anticipated. Worldwide, many retailers had to close their stores temporarily, and they were more cautious in investing during this period. As described in the Adidas chapter (page 16), Beaconsmind's main client Adidas had more than 70% of its global 16k store fleet closed at the peak of the worldwide lockdown measures in 2020. In 2021, Adidas reopened stores where and when allowed by local authorities.

In FY 20/21, the company's gross profit increased by 73% to CHF 745k (up from CHF 430k in FY 19/20), equivalent to a gross margin of 95.5% compared to 86.2% in the previous year. In our view, this margin improvement reflects the highly profitable software revenue participation gain. Personnel expenses almost doubled to CHF 599k (FY 19/20: CHF 309k) due mainly to staff expansion from three to four and higher salaries. Other operating expenses also rose substantially to CHF 2.2m (FY 19/20: CHF 592k) chiefly because the company incurred higher consulting costs related to the listing on the Euronext in Paris. The company's EBIT came in at CHF -2.1m in FY 20/21 (FY 19/20: CHF -539k). Beaconsmind reported a net loss of CHF -2.1m (FY 19/20: CHF -550k), and a loss per share of CHF -1.05 (FY 19/20: CHF -0.30).

**Table 3: Income Statement FY 20/21 and FY 19/20 proforma (selected items)**

All figures in CHF '000	FY 20/21	FY 19/20	Delta
Total revenues	779	498	56%
Gross profit	745	430	73%
OpEx	-2,833	-968	n.a.
Operating Income (EBIT)	-2,088	-539	n.a.
Net income / loss	-2,098	-550	n.a.
Margins in %			
Gross profit	95.5%	86.2%	

Source: Beaconsmind AG

**H1 21/22 income statement figures – sound sales growth** Beaconsmind's published H1 results were encouraging. Group revenues rose more than fivefold to CHF 1.0m (H1 20/21: CHF 0.15m). During the reporting period, the company acquired six major new clients. Recurring revenue from the software suite accounted for about 90% of total

revenues, which led to a gross margin of 89.9%. EBITDA improved to CHF -776k in H1 21/22 (H1 20/21: CHF -938k). The operating loss was CHF -824k (H1 20/21: CHF -913k). The company reported a net loss of CHF -835k (H1 20/21: CHF -959k).

**Balance Sheet FY 20/21 and H1 21/22** The main changes to the FY 20/21 and the H1 21/22 balance sheets were to the cash and equity positions. In connection with the listing in February 2021, the company raised gross proceeds amounting to CHF 2.9m in FY 20/21. Beaconsmind's equity position improved to CHF 630k (CHF -181k at the end of FY 19/20). The company's cash position also increased to CHF 0.7m (FY 19/20: CHF 0.1m). In a next step, Beaconsmind raised a further CHF 5.8m in December 2021. These funds are sufficient to finance operations until the company reaches profitability (FBe: positive EBITDA in FY 23 and positive FCF in FY 24). Beaconsmind's cash position amounted to CHF 5.5m at the end of H1 21/22. Receivables increased from CHF 33k in FY 19/20 to CHF 117k in FY 20/21 and CHF 220k in H1 21/22, reflecting the positive sales momentum. Intangible & other assets increased from CHF 58k in FY 19/20 to CHF 139k in FY 20/21 and CHF 177k in H1 21/22 chiefly due to capitalised software suite development costs.

**Table 4: Balance Sheet FY 20/21 vs FY 19/20 and H1 21/22 (selected items)**

All figures in CHF '000	FY 20/21	FY 19/20	Delta	H1 21/22	FY 20/21	Delta
Cash and cash equivalents	675	68	886.3%	5,549	675	721.7%
Inventories	16	18	-15.0%	22	16	44.2%
Receivables	117	33	251.1%	220	117	87.6%
Prepaid expenses & others	52	18	185.9%	2	52	-96.9%
<b>Current assets, total</b>	<b>860</b>	<b>135</b>	<b>537.3%</b>	<b>5,793</b>	<b>860</b>	<b>573.3%</b>
Intangible & other assets	139	58	136.9%	177	139	27.7%
Property, plant & equipment	19	23	n.a.	17	19	n.a.
<b>Non-current assets, total</b>	<b>158</b>	<b>81</b>	<b>93.8%</b>	<b>194</b>	<b>158</b>	<b>22.7%</b>
Accounts payable	101	154	-34.2%	231	101	127.7%
Financial debt (ST+LT)	77	85	-9.6%	71	77	n.a.
Shareholders' equity	630	-181	n.a.	5,528	630	n.a.
<i>Equity ratio</i>	<i>61.9%</i>	<i>-83.6%</i>	<i>n.a.</i>	<i>92.3%</i>	<i>61.9%</i>	<i>n.a.</i>
<b>Balance sheet, total</b>	<b>1,018</b>	<b>216</b>	<b>370.4%</b>	<b>5,987</b>	<b>1,018</b>	<b>488.0%</b>

Source: Beaconsmind AG

**Cash Flow FY 20/21** In FY 20/21, cash flow from operating activities came in at CHF -2.2m (FY 19/20: CHF -0.4m) and CAPEX increased slightly to CHF -133k (FY 19/20: CHF -73k), mainly related to the investment in the software suite (capitalised development costs). Cash flow from financing activities amounted to CHF 2.9m (FY 19/20: CHF 0.6), with the increase being due to capital financing measures in connection with the listing. Net cash flow thus came in at CHF 607k (FY 19/20: CHF 65k). Beaconsmind did not publish a cash flow statement for H1 21/22.

**Table 5: Cash flow statement FY 20/21 and FY 19/20 (selected items)**

All figures in CHF '000	FY 20/21	FY 19/20	Delta
<b>Operating cash flow</b>	<b>-2,169</b>	<b>-416</b>	<b>n.a.</b>
CapEx	-133	-73	n.a.
<b>Free cash flow</b>	<b>-2,302</b>	<b>-489</b>	<b>n.a.</b>
Cash flow from financing	2,909	554	n.a.
<b>Net cash flow</b>	<b>607</b>	<b>65</b>	<b>n.a.</b>

Source: Beaconsmind AG



## FINANCIAL OUTLOOK

**Sales and Gross Profit** Given that Beaconsmind will switch to calendar year (CY) reporting next year, we have prepared our sales projections overview based on the CY starting in 2022. However, we have also calculated the sales and profit figures for the FY 21/22E. Beaconsmind's business model comprises two primary sources of revenue.

- **One-off installation revenue:** Beaconsmind charges ~CHF 90 for each Bluetooth-Beacon and ~CHF 180 for its installation. An average store requires ~10 beacons. According to the company, this product and service generate a combined gross margin of ~40-45%.
- **Recurring software revenue:** After installing the hardware, Beaconsmind generates a recurrent revenue stream from a subscription fee to the software suite. The fee can be paid monthly (most clients' choice) or yearly. Depending on the package purchased, retailers pay a subscription fee of ~CHF 1,080 per year. In addition, they can book several analytics features, which can generate up to an additional CHF 6,600 per year. According to management, this business is highly profitable and generates a gross margin of ~85-90%.

Since the beginning of operations, the company has rolled out its solution in a total of 225 stores as of the end of March 2022 (thereof 37 between January and March, and 55 in the period July-December 2021). We anticipate a rollout acceleration during CY 2022 and estimate that Beaconsmind will install beacons in 272 new stores in CY H1 2022, and 720 in CY H2 2022, bringing the cumulated number of outfitted stores to 1,180 by year-end 2022. We anticipate the cumulated number of implemented stores to grow to 6,265 at the end of CY 2024. We recall that the total number of stores from the anchor client Adidas amounts to ~16k. We have conservatively assumed that the total fee generated for the software suite (including analytics features) will increase from CHF 1.21k in 2022 to 2.06k in 2024. We project that Beaconsmind will increase group sales from CHF 2.4m in CY 2022E to CHF 16.1m in CY 2024E. Based on the current proforma annual revenue-run-rate of ~CHF 3.5m for FREDERIX, we project that consolidated revenue will grow from CHF 280k in the period 21 November to 31 December to CHF 3.8m in CY 2024E. See our group sales model in table 6.

**Table 6: Calculation of Group Revenue and Gross Profit forecasts**

Revenue and gross profit figures in CHF '000	H2 2021	H1 2022E	FY 21/22E	H2 2022E	2022E	2023E	2024E
FREDERIX Wi-Fi Hotspot Revenue	-	-	-	280	280	3,600	3,780
Beaconsmind Revenue Hardware & Installation	293	286	579	756	1,042	1,844	3,498
Beaconsmind Recurring Revenue Software	689	284	973	753	1,037	3,268	8,809
<b>TOTAL Group Revenues</b>	<b>981</b>	<b>570</b>	<b>1,551</b>	<b>1,790</b>	<b>2,359</b>	<b>8,711</b>	<b>16,088</b>
YoY (%)			99%	82%	47%	269%	85%
<b>Group Gross Profit</b>	<b>838</b>	<b>370</b>	<b>1,208</b>	<b>1,174</b>	<b>1,544</b>	<b>6,171</b>	<b>12,268</b>
Gross margin (%)	85%	65%	78%	66%	65%	71%	76%
<b>ASSUMPTIONS BEACONSMIND BUSINESS</b>							
Total # of Stores	188	460	460	1,180	1,180	2,935	6,265
# of New Stores	55	272	327	720	992	1,755	3,330
# of Beacons per store		10	10	10	10	10	10
# Installations		272		720	992	1,755	3,330
# Beacons		2,718		7,200	9,918	17,550	33,300
Installation price (in CHF '000)		0.18		0.18	0.18	0.18	0.18
Beacon price (in CHF '000)		0.09		0.09	0.09	0.09	0.09
Software average price per store (in CHF '000)		1.21		1.21	1.21	1.74	2.06
Gross margin FREDERIX				69.0%	69.0%	69.4%	77.8%
Gross margin Beaconsmind Hardware & Installation		45.0%		45.0%	45.0%	45.0%	45.0%
Gross margin Beaconsmind Software		85.0%		85.0%	85.0%	87.0%	88.0%

Source: First Berlin Equity Research estimates



We estimate that FREDERIX's gross margin is roughly similar to that of Beaconsmind. Triggered by the broader participation of Beaconsmind's highly profitable software revenues, we anticipate that the group gross margin will progressively rise from 64% in CY 2022E to 78% in CY 2024E.

**Income Statement - Costs and Profit** Considering the company's expansion process, we project that operating expenses will grow in the period FY 21/22E-FY 24E. The main drivers will in our view be personnel as well as other operating expenses. We expect these cost items to increase substantially in coming years, due to Beaconsmind's growth and the effect of the FREDERIX acquisition. Beaconsmind's operating expenses were unusually high in FY 20/21 as they included one-off costs related to the IPO. Capex plays only a minor role for Beaconsmind. In view of the anticipated small impact of the FREDERIX acquisition on this position, we project that depreciation and amortisation expenses will stay at a low level, growing from CHF 59k in FY 21/22E to CHF 85k in FY 24E. We conservatively forecast other operating income from Beaconsmind's JV in the UAE to grow from CHF 45k in H2 22E to CHF 637k in FY 24E.

We anticipate that Beaconsmind will achieve EBITDA and EBIT break-even in FY 23E. We further project that EBIT will improve from CHF -2.7m in FY 21/22E to CHF 4.4m in FY 24E (EBIT margin: 27.5%). In the long run, we project no financial debt on Beaconsmind's balance sheet and assume a 30% effective tax rate once the company reaches profitability. We forecast a net result of CHF -2.7m (EPS: CHF -1.14) in FY 21/22E and a net profit of CHF 2.9m (EPS: CHF 1.02) in FY 24E (see table 7).

**Table 7: Revenue, EBITDA, EBIT, net income forecasts (selected items)**

All figures in CHF '000	FY 19/20	FY 20/21	FY 21/22E	H2 22E	FY 23E	FY 24E
<b>Total revenues</b>	<b>498</b>	<b>779</b>	<b>1,552</b>	<b>1,790</b>	<b>8,711</b>	<b>16,088</b>
COGS	-69	-35	-344	-616	-2,541	-3,820
<b>Gross profit</b>	<b>430</b>	<b>745</b>	<b>1,208</b>	<b>1,174</b>	<b>6,171</b>	<b>12,268</b>
Personnel expenses	-309	-599	-1,311	-1,072	-4,508	-5,000
Other operating expenses	-592	-2,177	-2,505	-747	-1,600	-3,400
Other operating income (JV - UAE)	0	0	0	45	418	637
<b>EBITDA</b>	<b>-472</b>	<b>-2,032</b>	<b>-2,608</b>	<b>-600</b>	<b>480</b>	<b>4,505</b>
Depreciation	-58	-57	-59	-64	-82	-85
<b>Operating income (EBIT)</b>	<b>-539</b>	<b>-2,088</b>	<b>-2,667</b>	<b>-664</b>	<b>398</b>	<b>4,420</b>
<b>Net income / loss</b>	<b>-550</b>	<b>-2,098</b>	<b>-2,677</b>	<b>-681</b>	<b>94</b>	<b>2,906</b>
<b>Margins in % from total revenue</b>						
Gross profit	86.2%	95.5%	77.8%	65.6%	70.8%	76.3%
EBITDA	n.a.	n.a.	n.a.	n.a.	5.5%	28.0%
Operating income (EBIT)	n.a.	n.a.	n.a.	-37.1%	4.6%	27.5%
<b>Y-Y Growth</b>						
Total revenues	n.a.	15.3%	386.8%	84.7%	68.4%	53.4%
Operating income (EBIT)	n.a.	n.a.	n.a.	1009.7%	91.5%	52.0%

Source: First Berlin Equity Research, Beaconsmind AG

Our FY 21/22E - FY 24E estimates were the baseline for our projections through 2033E. We have considered typical industry technology cycles. Due to Beaconsmind's improving operating performance, we project profitability, including EBIT and the net result, will increase steadily beyond FY 23E.

**Balance Sheet** We estimate the company will increase its receivables in FY 21/22E to CHF 170k (FY 20/21: CHF 117k), which we forecast to expand further to CHF 0.3m in H2/22E and CHF 1.3m in FY 24E. We also project inventories to grow from CHF 37k in



FY 21/22E to CHF 110k in H2 22E and CHF 405k in FY 24E. We forecast no financial debt on Beaconsmind's balance sheet by FY 24E year-end and going forward. Following its CHF 5.8m capital increase in December 2021 to finance the expansion process, we look for Beaconsmind's equity position to increase to CHF 3.8m in FY 21/22E (FY 20/21: 630k). In H2/22E, we project this position to expand to CHF 5.2m due to the €2.0m (CHF 2.0m) consideration paid for the FREDERIX acquisition through the issue of 155.5k shares at €13 p/s (CHF 12.75). We assume that Beaconsmind acquired total consolidated assets of CHF 4.0m, of which CHF2.0m are minority interests. At the end of H1/22, we forecast a cash position of CHF 3.0m. We expect these funds to adequately fund operations over the next two years until the company's business model becomes self-sustaining by FY 24E. At that point, the company will generate enough cash to finance further organic growth. This will be reflected in a progressively growing cash position from FY 24E (see table 8).

**Table 8: Balance sheet KPIs FY 19/20 - FY 24E**

All figures in CHF '000	FY 19/20	FY 20/21	FY 21/22E	H2 22E	FY 23E	FY 24E
Cash and cash equivalents	68	675	3,716	2,988	2,522	5,168
Inventories	18	16	38	101	278	419
Receivables	33	117	170	294	1,002	1,322
Prepaid expenses & others	18	52	63	80	96	115
<b>Current assets, total</b>	<b>135</b>	<b>860</b>	<b>3,987</b>	<b>3,464</b>	<b>3,899</b>	<b>7,025</b>
Property, plant & equipment	23	19	22	45	45	45
Intangible & other assets	58	139	182	250	318	363
Goodwill	0	0	0	3,853	3,853	3,853
<b>Non-current assets, total</b>	<b>81</b>	<b>158</b>	<b>204</b>	<b>4,147</b>	<b>4,215</b>	<b>4,260</b>
Accounts payable	154	101	48	64	216	262
Financial debt (ST+LT)	85	77	82	87	55	0
Minority interests	0	0	0	1,952	2,132	2,321
Shareholders' equity	3,816	630	3,816	5,222	5,384	8,326
<i>Equity ratio</i>	<i>1762.9%</i>	<i>61.9%</i>	<i>91.1%</i>	<i>94.2%</i>	<i>92.6%</i>	<i>94.3%</i>
<b>Balance sheet, total</b>	<b>216</b>	<b>1,018</b>	<b>4,190</b>	<b>7,611</b>	<b>8,114</b>	<b>11,285</b>

Source: First Berlin Equity Research, Beaconsmind AG

**Cash Flow Statement** In our scenario, Beaconsmind will generate a negative free cash flow (FCF) of CHF -2.8m in FY 21/22E, and we anticipate an initial positive FCF of CHF 2.7m in FY 24E. CAPEX plays a minor role in the company. Beaconsmind secured funding worth CHF 5.9m in FY 20/21E (equity and debt). Our H2/22 cash flow projections include other investments of CHF 1.9m due to the acquisition of goodwill in FREDERIX and the financing cash flow of CHF 2.1m (CHF 2.0m from the shares issued and CHF 70k in debt proceeds). Going forward, we project that the positive trend of strengthening operating performance and cash flow will continue to positively impact the company's free cash flow and net cash flow (see table 9).

**Table 9: Cash Flow Statement KPIs FY 19/20 - FY 24E**

All figures in CHF '000	FY 19/20	FY 20/21	FY 21/22E	H2 22E	FY 23E	FY 24E
<b>Operating cash flow</b>	<b>-416</b>	<b>-2,169</b>	<b>-2,721</b>	<b>-754</b>	<b>-353</b>	<b>2,797</b>
CapEx	-73	-133	-105	-155	-150	-130
<b>Free cash flow</b>	<b>-489</b>	<b>-2,302</b>	<b>-2,826</b>	<b>-909</b>	<b>-503</b>	<b>2,667</b>
Other investments	0	0	0	-1,911	0	0
<b>Cash flow from investing</b>	<b>-73</b>	<b>-133</b>	<b>-105</b>	<b>-2,066</b>	<b>-150</b>	<b>-130</b>
<b>Cash flow from financing</b>	<b>554</b>	<b>2,909</b>	<b>5,867</b>	<b>2,092</b>	<b>37</b>	<b>-20</b>
<b>Net cash flow</b>	<b>65</b>	<b>607</b>	<b>3,041</b>	<b>-728</b>	<b>-466</b>	<b>2,647</b>

Source: First Berlin Equity Research, Beaconsmind AG

## MANAGEMENT

### **Max Weiland, CEO and founder, Switzerland**



Mr Weiland is a German entrepreneur based in Switzerland since 2014 who has specialised in digital marketing for nearly 20 years. Mr Weiland founded Beaconsmind in 2015 and is currently the CEO and Chairman of its Board of Directors. Before this, Mr Weiland co-founded Eviom Group in 2010, a digital marketing and advertising agency with offices in Switzerland, Germany and China. Mr Weiland led Eviom Group to €2.5M revenue and 50 employees in 5 years, with key accounts like Nestle, Toyota, Tui, Fitness First etc. Prior to this, Mr Weiland was an Associate Professor of Online Marketing for three years at the Mediadesign University in Berlin, Germany, and he worked for the media conglomerate Scout24 in Munich and other leading media agencies.

### **Jörg Hensen, COO and Chief Human Resources Officer, Switzerland**



Mr Jörg Hensen is a German Retail Manager currently residing in Switzerland. He is a specialist in digital marketing and consulting with experience of close to 25 years. In January 2022, he stepped down from Beaconsmind's Board of Directors to become its COO and Chief Human Resources Officer. Before this role, he was CEO of Dress-For-Less GmbH in Frankfurt, Germany, a subsidiary of the German KARSTADT Kaufhof Group. Additionally, Mr Hensen co-founded Loomish SA, a Swiss-based investment management firm specialised in Lifestyle Tech and focused on the Fashion, Food, Travel and Design industries. Before this, Mr Hensen was CEO of Quelle Versand AG, a subsidiary of the German Quelle Versand and worked as a CEO for several well-known Swiss e-commerce and retail companies in Switzerland and Germany. Mr Hensen holds a German Diplom Kaufmann degree in economics from the EBS University for Economics and Law.

### **Jonathan Sauppe, Executive Board Member and CEO of the Wi-Fi/hotspot vertical, Germany**



Mr Sauppe is a German tech entrepreneur and manager of IT infrastructure and Wi-Fi retail solutions based in Hanover, Germany. He has 13 years of work experience and extensive know-how in the tech industry. He joined Beaconsmind in November 2022 as an Executive Board member and CEO of the new Wi-Fi business division. He is also the CEO and shareholder of Beaconsmind's recently acquired company FREDERIX. Over the past 10 years, he has built up the Wi-Fi and hotspot infrastructure business with FREDERIX. He has won large retail clients such as Lidl and Kaufland, continuously and enormously increasing sales and profits, particularly over the past 4 years. Mr Sauppe is a qualified manager with a German Diplom degree in economics, law and politics from the University of Göttingen.

## BOARD OF DIRECTORS

Beaconsmind's Board of Directors comprises four members, Mr Max Weiland, who is the Chairman of the Board and also the CEO of the company, Mr Michael Ambros, Deputy Chairman of the Board, Mr Edwin Navez and Mr Michal Krupinski.

### Michael Ambros, Deputy Chairman of the Board, Germany



Mr Ambros is a German citizen residing in Germany. He is a serial entrepreneur and investor. He has many years of experience in digital and online business, generating disruption across several fields such as online marketing, reputation management, customer experience (CX), blockchain technology and cryptocurrency. He has founded/co-founded or invested in several outstanding companies among the digital and venture capital industries, including eKomi Holding GmbH where he is currently CEO/co-founder (feedback, review and rating leading company), FREDERIX Hotspot GmbH (Wi-Fi & hotspot provider), Medici Living Group (Co-Living provider), Quarters Co-Living (Co-Living provider) and the blockchain venture builder and ICO accelerator Catena Capital. Furthermore, he is a Board member of several tech companies, including Banking Check (banking & insurance comparing portal), Review Center (consumer reviews & price comparison) and Medici Internet (ad network). Mr Ambros holds Master's degrees in business administration and European business studies from the École Supérieure de Commerce et de Management – ESCEM and the University of Applied Sciences Regensburg.

### Edwin Navez, Member of the Board of Directors, Switzerland



Mr Navez is a Swiss Manager based in Switzerland, specialised in finance, consulting and digital marketing for nearly 25 years. He is currently CEO of the Swiss cycling apparel e-commerce company, ASSOS. Prior to this, Mr Navez was CFO/COO of the Swiss Fashion Retailer PHILIPP PLEIN and advisor to the CEO of the Fashion Retailer VERSACE for special projects, finance and operations, after working for the Fashion Retailer MICHAEL KORS as VP Finance Europe and Finance Director Europe. Prior to this, Mr Navez worked as Manager of Internal Consulting and Vice President of Finance Graphite Division for Imerys, a world leader in mineral-based specialties for industry. He has also worked for well-known consulting companies such as KPMG. His qualifications include a Commercial Engineer Degree (combination of MBA and Engineering) from the Université Catholique de Louvain.

### Michal Krupinski, Member of the Board of Directors, Switzerland



Mr Krupinski is a Polish executive based in Switzerland and Poland. Until November 2019, Michal Krupinski served as CEO of Bank Pekao, the 2nd largest universal bank and leading corporate and investment bank in Poland. Before joining the bank, he held several senior managerial roles in leading financial institutions. Most recently, he was CEO of the PZU Group, the region's largest financial group, repositioning the firm for growth and strengthening its banking presence. Previously, from 2011, he was Head of Global Banking and Markets for Central and Eastern Europe at Bank of America Merrill Lynch.



Lynch, responsible for M&A projects, financing and capital advisory. He also has broad-based public sector experience. He was the Alternate Executive Director of the World Bank Group's Board of Directors in the period 2008-11 in Washington, US. Prior to this, he served as Undersecretary of State in the Polish Ministry of Treasury. He obtained MSc and MBA degrees from the Warsaw School of Economics (International Economics), the Université Catholique de Louvain (European Economy) and Columbia University (Business Administration & Finance).





## NEWSFLOW

In our view, Beaconsmind's stock price will be driven by news of its business progress as well as the achievement of financial milestones. We expect the company to make a number of announcements during the coming 12-18 months, which will act as catalysts for the stock. These include:

### Business

- Updates on the rollout of Beaconsmind solutions among the Adidas store network
- Announcements regarding new partnerships between Beaconsmind and large global retail players in 2022 and 2023
- Acquisition of new clients in the UAE and the Middle East region
- Expansion of the client base into new territories such as the US and South America

### Financial Schedule

FY 21/22 results: 16 December 2022

H2 2022 results: 31 March 2023

## SHAREHOLDERS & STOCK INFORMATION

Stock Information	
ISIN	CH0451123589
WKN	A2QN5W
Bloomberg ticker	81D GY
No. of issued shares	2,844,384
Transparency Standard	Scale
Country	Switzerland, Germany
Sector	Software
Subsector	Software

Source: Bloomberg, First Berlin Equity Research

Shareholder Structure	
Anchor investor	20.4%
Max Weiland	17.6%
Board & employees	4.4%
eKomi	3.2%
Free Float	54.4%

Source: Beaconsmind AG



## INCOME STATEMENT

All figures in CHF '000	FY 19/20	FY 20/21	FY 21/22E	H2 22E	FY 23E	FY 24E
<b>Segment revenues</b>						
Beaconsmind Revenue Hardware & Installation	251	445	579	756	1,844	3,498
Beaconsmind Recurring Revenue Software	248	334	973	753	3,268	8,809
FREDERIX Wi-Fi Hotspot Revenue	0	0	0	280	3,600	3,780
<b>Total revenues</b>	<b>498</b>	<b>779</b>	<b>1,552</b>	<b>1,790</b>	<b>8,711</b>	<b>16,088</b>
Cost of goods sold	-69	-35	-344	-616	-2,541	-3,820
<b>Gross profit</b>	<b>430</b>	<b>745</b>	<b>1,208</b>	<b>1,174</b>	<b>6,171</b>	<b>12,268</b>
Personnel expenses	-309	-599	-1,311	-1,072	-4,508	-5,000
Other operating expenses	-592	-2,177	-2,505	-747	-1,600	-3,400
Other operating income (JV - UAE)	0	0	0	45	418	637
<b>EBITDA</b>	<b>-472</b>	<b>-2,032</b>	<b>-2,608</b>	<b>-600</b>	<b>480</b>	<b>4,505</b>
Depreciation expenses	-58	-57	-59	-64	-82	-85
Impairment on other short-term receivables	-9	0	0	0	0	0
<b>Operating income (EBIT)</b>	<b>-539</b>	<b>-2,088</b>	<b>-2,667</b>	<b>-664</b>	<b>398</b>	<b>4,420</b>
Net financial result	-10	-9	-10	-7	-7	1
<b>Pre-tax income (EBT)</b>	<b>-549</b>	<b>-2,097</b>	<b>-2,677</b>	<b>-671</b>	<b>391</b>	<b>4,421</b>
Tax result	0	0	0	0	-117	-1,326
Minority interests	0	0	0	-10	-180	-189
<b>Net income / loss</b>	<b>-550</b>	<b>-2,098</b>	<b>-2,677</b>	<b>-681</b>	<b>94</b>	<b>2,906</b>
<b>Diluted EPS (in USD)</b>	<b>-0.30</b>	<b>-1.05</b>	<b>-1.14</b>	<b>-0.25</b>	<b>0.03</b>	<b>1.02</b>
<b>Ratios as % of total revenue</b>						
Gross margin	86.2%	95.5%	77.8%	65.6%	70.8%	76.3%
EBITDA margin	n.a.	n.a.	n.a.	n.a.	5.5%	28.0%
EBIT margin	n.a.	n.a.	n.a.	n.a.	4.6%	27.5%
Net margin	n.a.	n.a.	n.a.	n.a.	1.1%	18.1%
Tax rate	-0.1%	0.0%	3.0%	30.0%	30.0%	30.0%
<b>Expenses as % of of total revenue</b>						
Personnel expenses	62.1%	76.9%	84.5%	59.9%	51.7%	31.1%
Other operating expenses	118.8%	279.3%	161.4%	41.8%	18.4%	21.1%
Depreciation expenses	11.7%	7.3%	3.8%	3.6%	0.9%	0.5%
<b>Y-Y Growth</b>						
Revenues	n.a.	56.4%	99.1%	15.3%	386.8%	84.7%
EBITDA	n.a.	n.a.	n.a.	n.a.	n.a.	837.9%
Operating income (EBIT)	n.a.	n.a.	n.a.	n.a.	n.a.	1009.7%
Net income/ loss	n.a.	n.a.	n.a.	n.a.	n.a.	2993.3%



## BALANCE SHEET

All figures in CHF '000	FY 19/20	FY 20/21	FY 21/22E	H2 22E	FY 23E	FY 24E
<b>Assets</b>						
<b>Current assets, total</b>	<b>135</b>	<b>860</b>	<b>3,987</b>	<b>3,464</b>	<b>3,899</b>	<b>7,025</b>
Cash and cash equivalents	68	675	3,716	2,988	2,522	5,168
Inventories	18	16	38	101	278	419
Receivables	33	117	170	294	1,002	1,322
Prepaid expenses & others	18	52	63	80	96	115
<b>Non-current assets, total</b>	<b>81</b>	<b>158</b>	<b>204</b>	<b>4,147</b>	<b>4,215</b>	<b>4,260</b>
Property, plant & equipment	23	19	22	45	45	45
Intangible assets	58	139	182	250	318	363
Associated companies (Goodwill)		0	0	3,853	3,853	3,853
<b>Total assets</b>	<b>216</b>	<b>1,018</b>	<b>4,190</b>	<b>7,611</b>	<b>8,114</b>	<b>11,285</b>
<b>Shareholders' equity &amp; debt</b>						
<b>Current liabilities, total</b>	<b>261</b>	<b>328</b>	<b>306</b>	<b>360</b>	<b>519</b>	<b>579</b>
Short-term debt	0	62	65	68	35	0
Accounts payable	154	101	48	64	216	262
Accruals	72	136	164	196	236	283
Other current liabilities	35	28	30	31	33	34
<b>Long-term liabilities, total</b>	<b>136</b>	<b>60</b>	<b>68</b>	<b>78</b>	<b>79</b>	<b>60</b>
Long-term debt	85	15	17	18	20	0
Other liabilities and provisions	51	45	52	60	60	60
<b>Minority interests</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,952</b>	<b>2,132</b>	<b>2,321</b>
<b>Shareholders' equity</b>	<b>-181</b>	<b>630</b>	<b>3,816</b>	<b>5,222</b>	<b>5,384</b>	<b>8,326</b>
<b>Total consolidated equity and debt</b>	<b>216</b>	<b>1,018</b>	<b>4,190</b>	<b>7,611</b>	<b>8,114</b>	<b>11,285</b>
<b>Ratios</b>						
Current ratio (x)	0.5	2.6	13.0	9.6	7.5	12.1
Quick ratio (x)	0.4	2.6	12.9	9.3	7.0	11.4
Net debt/(net cash)	17	-598	-3,635	-2,902	-2,467	-5,168
Net gearing	-9.3%	-95.0%	-95.3%	-55.6%	-45.8%	-62.1%
Book value per share (in €)	-0.10	0.32	1.63	1.92	1.89	2.93
Return on equity (ROE)	303.7%	-332.9%	-70.2%	-12.8%	5.1%	37.2%
Equity ratio	-83.6%	61.9%	91.1%	94.2%	92.6%	94.3%



## CASH FLOW STATEMENT

All figures in CHF '000	FY 19/20	FY 20/21	FY 21/22E	H2 22E	FY 23E	FY 24E
<b>Net income</b>	<b>-550</b>	<b>-2,098</b>	<b>-2,677</b>	<b>-671</b>	<b>274</b>	<b>3,095</b>
Depreciation and amortisation	58	57	59	64	82	85
Changes in working capital	77	-171	-103	-147	-709	-385
Other adjustments	-1	43	0	0	0	2
<b>Operating cash flow</b>	<b>-416</b>	<b>-2,169</b>	<b>-2,721</b>	<b>-754</b>	<b>-353</b>	<b>2,797</b>
CapEx	-73	-133	-105	-155	-150	-130
<b>Free cash flow</b>	<b>-489</b>	<b>-2,302</b>	<b>-2,826</b>	<b>-909</b>	<b>-503</b>	<b>2,667</b>
Other investments and disposals	0	0	0	-1,911	0	0
<b>Cash flow from investing</b>	<b>-73</b>	<b>-133</b>	<b>-105</b>	<b>-2,066</b>	<b>-150</b>	<b>-130</b>
Debt financing, net	84	0	67	70	37	-20
Equity financing, net	470	2,909	5,800	2,022	0	0
<b>Cash flow from financing</b>	<b>554</b>	<b>2,909</b>	<b>5,867</b>	<b>2,092</b>	<b>37</b>	<b>-20</b>
Exchange differences	0	0	0	0	0	0
<b>Net cash flow</b>	<b>65</b>	<b>607</b>	<b>3,041</b>	<b>-728</b>	<b>-466</b>	<b>2,647</b>
Cash, start of the year	4	68	675	3,716	2,988	2,522
<b>Cash, end of the year</b>	<b>68</b>	<b>675</b>	<b>3,716</b>	<b>2,988</b>	<b>2,522</b>	<b>5,168</b>
<b>EBITDA/share (in €)</b>	<b>-0.26</b>	<b>-1.02</b>	<b>-1.11</b>	<b>-0.22</b>	<b>0.17</b>	<b>1.58</b>
<b>Y-Y Growth</b>						
Operating cash flow	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Free cash flow	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EBITDA/share	n.a.	n.a.	n.a.	n.a.	n.a.	837.9%

## FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

Report No.:	Date of publication	Previous day closing price	Recommendation	Price target
Initial Report	Today	€ 12.10	BUY	€ 22.00

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### ASSET RECOMMENDATION

The recommendations determined in accordance with the share price trend anticipated by First Berlin in the respectively indicated investment period are as follows:

Category		1	2
	Current market capitalisation (in €)	0 - 2 billion	> 2 billion
Strong Buy <sup>1</sup>	An expected favourable price trend of:	> 50%	> 30%
Buy	An expected favourable price trend of:	> 25%	> 15%
Add	An expected favourable price trend of:	0% to 25%	0% to 15%
Reduce	An expected negative price trend of:	0% to -15%	0% to -10%
Sell	An expected negative price trend of:	< -15%	< -10%

<sup>1</sup> The expected price trend is in combination with sizable confidence in the quality and forecast security of management.

Our recommendation system places each company into one of two market capitalisation categories. Category 1 companies have a market capitalisation of €0 – €2 billion, and Category 2 companies have a market capitalisation of > €2 billion. The expected return thresholds underlying our recommendation system are lower for Category 2 companies than for Category 1 companies. This reflects the generally lower level of risk associated with higher market capitalisation companies.

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- key sources of information in the preparation of this research report
- valuation methods and principles
- sensitivity of valuation parameters

can be accessed through the following internet link: <http://firstberlin.com/disclaimer-english-link/>

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