

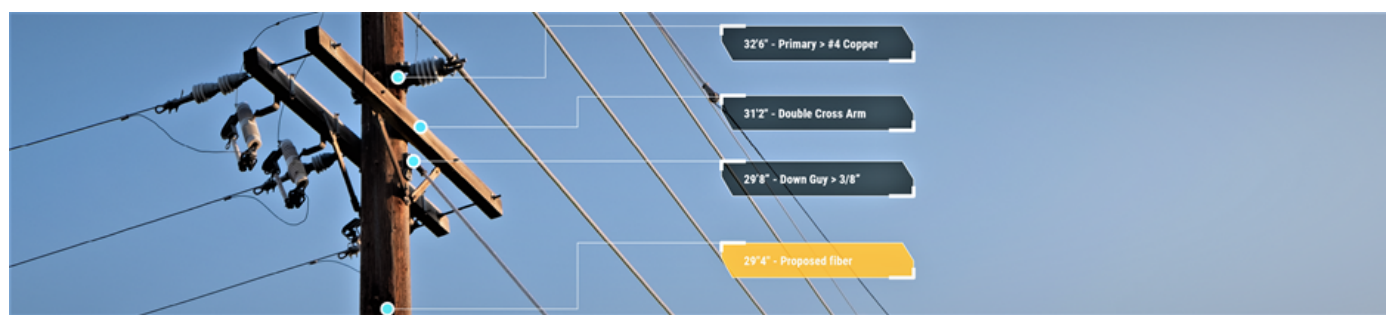
ikeGPS Group Ltd

Leading Pole Records and Analysis

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ikeGPS (IKE) is a productivity solutions company with products that enable the collection, measurement and engineering analysis of distribution pole data and distribution pole projects for electric utilities, telecommunications groups and related engineering firms. Its industry-leading solutions provide services to some of North America's most significant asset owners and consultants. Often replacing in-house or paper-based systems, its products uniquely combine technologies to create actionable engineering insights. Building and maintaining electric utility and communication network assets is complex, and sector participants seek ways to create efficiencies and speed up assessment, construction, and maintenance. Competition is fragmented, with IKE's clear niche focus and continued product innovation helping drive market awareness. The opportunity in front of IKE remains significant, with our assessment of potential and obtainable revenue at NZ\$190m long term. With IKE's market share at approximately 6.5%, there is plenty of scope for growth. IKE trades at a discount to peers on an EV/Sales multiple and offers +32% upside to our spot valuation of NZ\$1.07.

NZX Code	IKE	Financials: Mar/	22A	23E	24E	25E	Valuation (x)	22A	23E	24E	25E
Share price	NZ\$0.81	NPAT* (NZ\$m)	(7.9)	(7.0)	(2.6)	0.3	PE	n/a	n/a	n/a	n/a
Spot Valuation	NZ\$1.07	EPS* (NZc)	(4.9)	(4.4)	(1.6)	0.2	EV/EBIT	n/a	n/a	n/a	n/a
Risk rating	Medium	EPS growth* (%)	12.2	10.7	63.0	n/a	EV/EBITDA	n/a	n/a	83.6	24.2
Issued shares	159.3m	DPS (NZc)	0.0	0.0	0.0	0.0	Price / NTA	5.4	8.6	11.1	12.0
Market cap	NZ\$129m	Imputation (%)	0	0	0	0	Cash div yld (%)	0.0	0.0	0.0	0.0
Avg daily turnover	38.3k (NZ\$33k)	*Based on normalised profits					Gross div yld (%)	0.0	0.0	0.0	0.0

Momentum is growing

IKE has displayed robust sales growth recently as it gains market traction. FY22 revenue was up +71% and we anticipate +74% sales growth in FY23. Given estimated revenue growth and high gross margins, we expect the company will experience good operational leverage over the coming years. The company maintains a fortress balance sheet with enough cash to achieve cashflow breakeven in a few years. However, IKE may use its balance sheet to achieve scale more rapidly via acquisition.

Attractive opportunity trading at a discount to peers

Our Discounted Cash Flow (DCF) approach drives our NZ\$1.07 spot valuation. We forecast an organic-only, five-year revenue growth rate (CAGR) of +35%, underpinned by higher utilisation within existing customers and a ten-year target of market share to 18.5%. Our FY23 operating revenue estimates of NZ\$27.8m (+74%) place IKE on a forward EV/Sales multiple of 3.9x (after adjustments). Using a blended multiple of peers, we believe a fairer trading range is 5.5x to 7.0x EV/Sales. We see the company achieving monthly EBITDA breakeven late in FY23 and forecast positive EBITDA in FY24. Subsequent updates from the company are expected on or around 18 October 2022, for the Q2 performance update, and 25 November 2022, for the 1H23 announcement.

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ikeGPS Group (IKE)

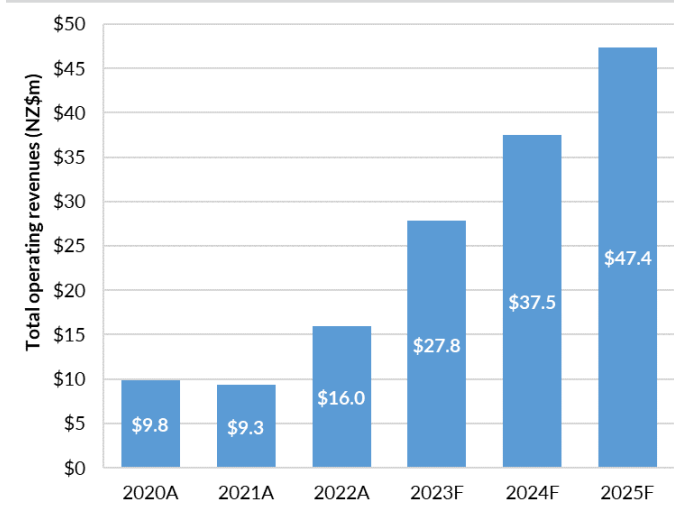
Market Data (NZ\$)						Spot valuation (NZ\$)					
Priced as at 13 Sep 2022						0.81					
52 week high / low						1.07 / 0.65					
Market capitalisation (NZ\$m)						129.0					
Key WACC assumptions						DCF valuation summary (NZ\$m)					
Risk free rate						4.00%					
Equity beta						1.30					
WACC						10.5%					
Terminal growth						2.0%					
Total firm value						150					
(Net debt)/cash						24					
Less: Capitalised operating leases						(5)					
Value of equity						170					
Profit and Loss Account (NZ\$m)						Valuation Ratios					
	2021A	2022A	2023E	2024E	2025E		2021A	2022A	2023E	2024E	2025E
Sales revenue	9.3	16.0	27.8	37.5	47.4	EV/EBITDA (x)	n/a	n/a	n/a	83.6	24.2
Normalised EBITDA	(5.5)	(5.3)	(3.6)	1.4	4.7	EV/EBIT (x)	n/a	n/a	n/a	n/a	>100x
Depreciation and amortisation	(1.9)	(2.5)	(3.4)	(3.9)	(4.4)	PE (x)	n/a	n/a	n/a	n/a	>100x
Normalised EBIT	(7.4)	(7.8)	(7.0)	(2.6)	0.3	Price/NTA (x)	13.6	5.4	8.6	11.1	12.0
Net interest	(0.1)	(0.1)	(0.0)	(0.0)	(0.0)	Free cash flow yield (%)	-4.3	-7.9	-6.5	-3.2	-1.5
Associate income	0	0	0	0	0	Net dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Tax	0	0	0	0	0	Gross dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Minority interests	0	0	0	0	0	Capital Structure					
Normalised NPAT	(7.5)	(7.9)	(7.0)	(2.6)	0.3	2021A	2022A	2023E	2024E	2025E	
Abnormals/other	0	0	0	0	0	Interest cover EBIT (x)	n/a	n/a	n/a	n/a	17.5
Reported NPAT	(7.5)	(7.9)	(7.0)	(2.6)	0.3	Interest cover EBITDA (x)	n/a	n/a	n/a	71.9	>100x
Normalised EPS (cps)	(5.6)	(4.9)	(4.4)	(1.6)	0.2	Net debt/ND+E (%)	-108.6	-176.5	-107.6	-67.5	-47.2
DPS (cps)	0	0	0	0	0	Net debt/EBITDA (x)	2.0	4.6	4.3	n/a	n/a
Growth Rates						Key Ratios					
	2021A	2022A	2023E	2024E	2025E		2021A	2022A	2023E	2024E	2025E
Revenue (%)	-5.2	71.2	74.3	34.7	26.5	Return on assets (%)	-24.4	-16.6	-17.1	-6.7	0.9
EBITDA (%)	n/a	n/a	n/a	n/a	>100	Return on equity (%)	-34.4	-20.6	-23.3	-9.4	1.2
EBIT (%)	n/a	n/a	n/a	n/a	n/a	Return on funds employed (%)	0.0	0.0	0.0	0.0	0.0
Normalised NPAT (%)	n/a	n/a	n/a	n/a	n/a	EBITDA margin (%)	-59.5	-33.4	-13.0	3.6	9.9
Normalised EPS (%)	n/a	n/a	n/a	n/a	n/a	EBIT margin (%)	-79.8	-48.8	-25.2	-6.9	0.7
Ordinary DPS (%)	n/a	n/a	n/a	n/a	n/a	Capex to sales (%)	21.8	22.4	16.0	12.7	11.4
Cash Flow (NZ\$m)						Operating Performance					
	2021A	2022A	2023E	2024E	2025E		2021A	2022A	2023E	2024E	2025E
EBITDA	(5.5)	(5.3)	(3.6)	1.4	4.7	Sale of products revenue (\$m)	4.7	6.4	7.1	7.8	8.4
Working capital change	(0.9)	(1.7)	(0.3)	(0.7)	(1.2)	IKE Platform revenue (\$m)	3.3	8.1	19.0	27.6	36.3
Interest & tax paid	(0.1)	(0.1)	(0.0)	(0.0)	(0.0)	IKE Structural revenue (\$m)	1.0	1.1	1.3	1.7	2.2
Other	3.0	0.5	0	0	0	Spike revenue (\$m)	0.3	0.4	0.4	0.4	0.4
Operating cash flow	(3.5)	(6.6)	(4.0)	0.6	3.5	Other revenues (\$m)	0.9	0.1	0.1	0.1	0.1
Capital expenditure	(2.0)	(3.6)	(4.5)	(4.8)	(5.4)	Total Revenues (\$m)	10.2	16.0	27.9	37.5	47.5
(Acquisitions)/divestments	(4.6)	0	0	0	0	Sale of products share of revenues (%)	51%	40%	26%	21%	18%
Other	(0.3)	(0.4)	(0.3)	(0.3)	(0.4)	IKE Platform share of revenues (%)	35%	50%	68%	74%	77%
Funding available/(required)	(10.4)	(10.6)	(8.7)	(4.5)	(2.3)	IKE Structural share of revenues (%)	11%	7%	5%	4%	5%
Dividends paid	0	0	0	0	0	Spike share of revenues (%)	3%	2%	1%	1%	1%
Equity raised/(returned)	18.5	23.1	0	0	0	Sale of products gross margin (\$m)	3.5	4.6	5.3	5.8	6.3
(Increase)/decrease in net debt	8.1	12.5	(8.7)	(4.5)	(2.3)	IKE Platform gross margin (\$m)	1.3	3.9	10.1	15.2	20.7
Balance Sheet (NZ\$m)						Total Gross margin (\$m)					
	2021A	2022A	2023E	2024E	2025E		2021A	2022A	2023E	2024E	2025E
Working capital	2.5	4.2	4.5	5.3	6.5	IKE Structural gross margin (\$m)	1.0	1.1	1.3	1.7	2.2
Fixed assets	1.1	1.8	2.1	2.6	3.0	Spike gross margin (\$m)	0.1	0.2	0.2	0.2	0.2
Intangibles	13.8	14.1	15.1	15.9	16.8	Total Gross margin (\$m)	5.9	9.9	16.8	22.9	29.5
Right of use asset	0.4	0.2	0.8	0.6	0.4	Sale of products gross margin (%)	73%	72%	74%	75%	75%
Other assets	0.4	0.5	0.5	0.5	0.5	IKE Platform gross margin (%)	41%	49%	53%	55%	57%
Total funds employed	18.2	20.8	23.1	24.8	27.1	IKE Structural gross margin (%)	100%	100%	100%	100%	100%
Net debt/(cash)	(11.3)	(24.4)	(15.6)	(11.1)	(8.8)	Spike Gross margin (%)	36%	51%	51%	51%	51%
Lease liability	0.2	0	0.8	0.6	0.4	Overall Gross margin (%)	64%	62%	61%	61%	62%
Other liabilities	7.5	7.0	7.8	7.8	8.0						
Shareholder's funds	21.8	38.2	30.1	27.6	27.5						
Minority interests	0	0	0	0	0						
Total funding sources	18.2	20.8	23.1	24.8	27.1						

* Forsyth Barr target prices reflect valuation rolled forward at cost of equity less the next 12-months dividend

Investment thesis

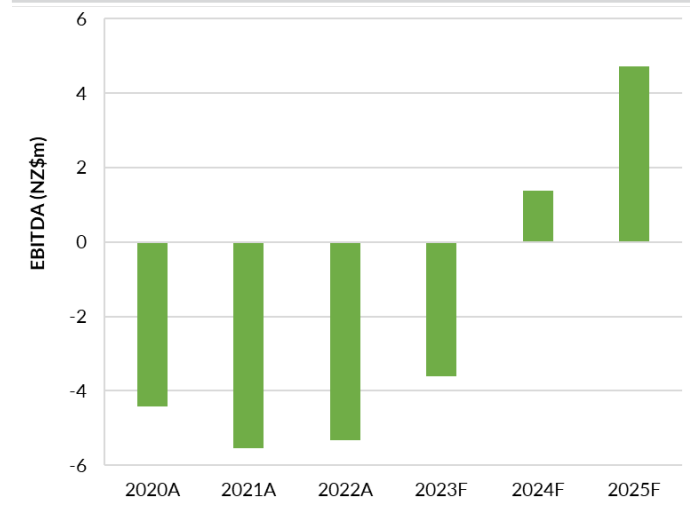
We consider IKE an appealing opportunity, driven by improving utilisation within existing customers and market share gains producing robust revenue growth. IKE has attractive gross margins, driving operating leverage over the coming years. IKE has carved out a niche in a large market that we consider has scope for growth.

Figure 1. IKE – Historical and forecast revenues (NZ\$m)



Source: Company data, Forsyth Barr analysis

Figure 2. IKE – Historical and forecast EBITDA (NZ\$m)



Source: Company data, Forsyth Barr analysis

1. Compelling valuation appeal

Our DCF approach drives our **NZ\$1.07 per share spot valuation**, equating to ~5.4x EV/Sales on our FY23 operating revenues (after adjusting for cash on the balance sheet and subtracting our assessment of the capitalised value of leases). Underpinning our assumptions is market share growth from 6.5% to 18.5% in ten years and expanding utilisation within existing customers. Given observed revenue growth and IKE's already high gross margins, we see operating leverage to flow into positive earnings over the coming years. Supporting our DCF valuation are assessments of where peer multiples are trading. We believe a fair trading range of 5.5x to 7.0x EV/Sales is applicable (IKE currently trades on 3.9x) and set our EV/Sales driven comparative valuation at NZ\$1.22, at the middle of the range. We consider IKE to be in an excellent financial position, with net cash of NZ\$24.4m at FY22. With more established peers trading on 8.0x EV/Sales, if IKE were subject to a takeover approach, we would consider a multiple higher than 7.5x EV/Sales on our FY23 numbers as possible – reflecting a takeover price above NZ\$1.43.

2. Utility asset management is complex. Technologies to speed up network assessment, construction, and maintenance are needed – IKE's as a productivity solution

Electric utility and telecommunications companies are planning, growing and maintaining a large and complex network of assets, requiring extensive data sets of accurate information for proper management. Technologies to speed up network assessment, construction, and maintenance are needed. As a productivity solution, IKE's product suite offers verifiable photo accuracy for faster and better-designed network engineering and planning, offering significant efficiencies to speed up aspects of the network deployment process. Vast sums are being spent on fibre and 5G network development in the US and Canada, and on electric network 'hardening' in the following decades, giving further reason for customer implementation.

3. Competitive landscape is scattered

IKE aims to offer seamless cross-platform operability and excellence – meaning its products integrate to cover a comprehensive workflow versus the standalone nature of competitor products. While numerous companies provide services to utilities, telecommunications and engineering firms, few compete with IKE's depth and width in pole data collection and analysis.

4. Addressable markets are large and growing

We assess the Total Addressable Market (TAM) available to IKE as a **NZ\$190m** potential and obtainable revenue opportunity. Given how large the software solutions market is for electricity poles and the telecommunication assets attached, we see the market potential for IKE as significant.

1. Compelling valuation appeal

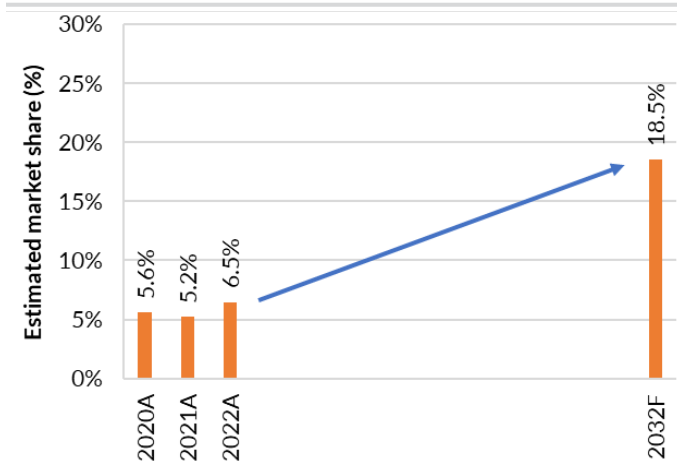
In valuing IKE we have undertaken a multi-pronged approach in assessing the business:

- (a) Discounted cash flow (DCF) valuation
- (b) Assessment against comparable companies on EV/Sales multiples
- (c) Supplementary inputs

(a) Discounted cash flow (DCF) valuation

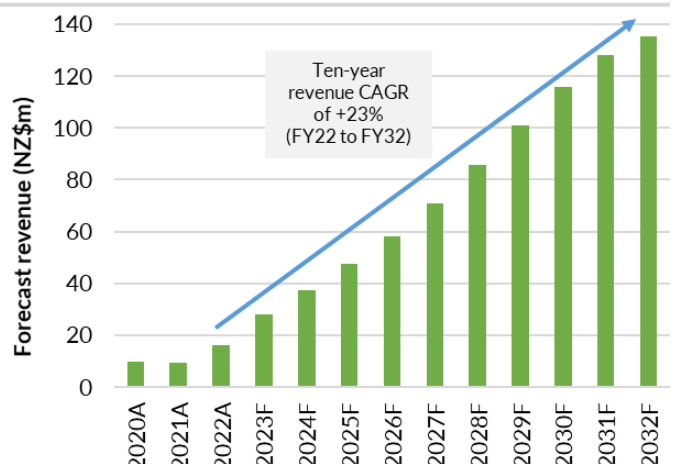
We have undertaken a thorough analysis of the financials and opportunity in front of the company in the electric utility and telecommunications markets across the US and Canada. We consider the use of DCF as most appropriate in assessing value as the multiple does not capture all future growth and timing. Our spot DCF valuation for IKE is NZ\$1.07, representing 5.4x EV/Sales (after adjusting for cash on the balance sheet and less our assessment of the capitalised value of leases) on our FY23 estimates. This ascribes no value to merger and acquisition (M&A) opportunities nor to development into markets outside the US and Canadian markets. Our DCF uses a weighted average cost of capital (WACC) of 10.5%, asset beta of 1.3, risk-free-rate (Rfr) of 4% and terminal growth of 2%.

Figure 3. IKE – Long-run market share estimates (FY20–FY32)



Source: Forsyth Barr analysis

Figure 4. IKE – Long-run revenue estimates (NZ\$m)



Source: Company data, Forsyth Barr analysis

Currency exposure and the removal of COVID restrictions benefitting near-term growth

IKE generates the vast majority (~99%) of its revenues in USD. Recent weakness in the NZD/USD cross rate, falling from 0.6947 as of 31 March 2022 (IKE's balance date) to today's spot rate of 0.6133, a ~12% fall, provides a significant additional tailwind for IKE during FY23. IKE does not undertake hedging. However, with ~72% of staff residing in the US and an estimated two-thirds of costs in USD, there is some natural offset against the revenue benefit. Given IKE's healthy margins, there is a substantial net benefit of a fall in the NZD/USD cross rate. From FY20 and into FY21 IKE experienced a degree of COVID-19 impact on the transactional part of the business, occurring as lockdowns closed down parts of North America. These work programmes are likely now in catch-up mode.

Financial milestones

We see the company targeting five key financial milestones over the coming years:

1. Monthly EBITDA breakeven late in FY23
2. EBITDA breakeven in FY24
3. NPAT breakeven in FY25
4. Net cash flow breakeven in FY26 (excluding acquisitions)
5. Maintenance of a fortress balance sheet throughout

As these milestones transpire, we believe the market and ourselves will lower our risk inputs. IKE may make acquisitions to improve scale, reduce product development timeframes and further expedite the transition across the above targets.

(b) EV/Sales comparison to relevant sector stocks

We reviewed a selection of comparable companies in our analysis. We consider comparing EV/Sales multiples as very relevant and insightful for the sector with an overlay to each company's relative growth and risk profile. The average of FY23 EV/Sales multiples of IKE's full peer group is 8.0x. Weighing up the factors we see IKE experiencing higher growth but also relatively higher risk. Using a blended multiple of peers, we believe a fair trading range of 5.5x to 7.0x EV/Sales is applicable – translating into a range of NZ\$1.08–NZ\$1.35 per share for IKE. Our EV/Sales driven comparative valuation is NZ\$1.22. Figure 5 below contains key metrics of relevant publicly-listed comparables. Segregated into two groups, the first four companies represent competitors that provide solutions with partially competing functionality to one or more of IKE's three lanes of products. The second group is a broader set of comparable companies in the technology space. We consider them relevant but not necessarily direct competitors within IKE's specific GIS/EAM market. A further in-depth review of a selection of comparable and relevant companies used for our analysis is in Appendix 3: Key sector competitors and partners.

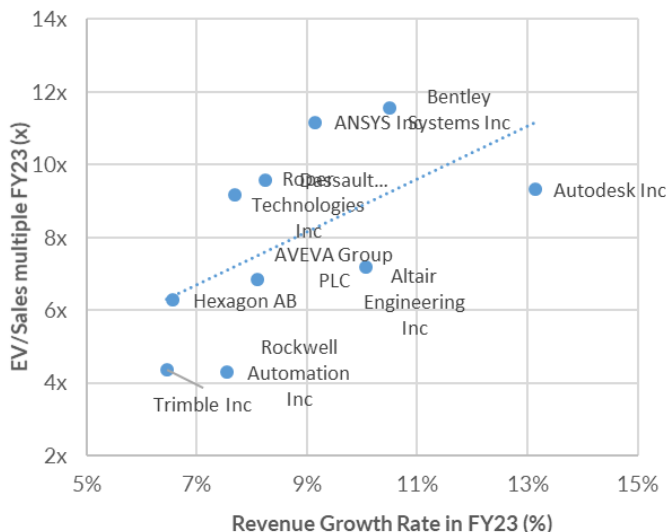
Figure 5. IKE – Table of competitor and comparable metrics

Ticker	Company	Head Office	Market Capitalisation (NZ\$m)	Gross profit margin	EBITDA margin	R&D / Sales	EV / EBITDA (x)	EV / Sales (x)	Previous FY revenue growth (%)
ALTR.O	Altair Engineering Inc	USA	\$6,757	72%	8%	28%	43.2x	7.2x	13%
BSY.O	Bentley Systems Inc	USA	\$18,148	75%	25%	23%	35.6x	11.5x	20%
HEXAB.ST	Hexagon AB	Sweden	\$46,787	65%	47%	6%	16.8x	6.3x	15%
TRMB.O	Trimble Inc	USA	\$25,556	54%	22%	15%	17.7x	4.4x	16%
ADSK.OQ	Autodesk Inc	USA	\$74,747	90%	20%	25%	24.2x	9.3x	16%
ANSS.O	ANSYS Inc	USA	\$36,861	86%	33%	21%	24.9x	11.2x	13%
AVVL	AVEVA Group PLC	UK	\$16,934	80%	27%	15%	24.2x	6.9x	44%
DAST.PA	Dassault Systemes SE	France	\$86,353	76%	33%	20%	26.3x	9.6x	9%
ROK	Rockwell Automation Inc	USA	\$48,225	41%	19%	6%	21.0x	4.3x	11%
ROP	Roper Technologies Inc	USA	\$71,129	68%	38%	9%	22.5x	9.2x	19%
Average of all comps				71%	27%	17%	25.6%	8.0x	18%
IKE.NZ	Ikegps Group Ltd	NZ	\$129	62%	-33%	36%		3.9x	71%

Source: Forsyth Barr analysis

Figure 6 below charts FY23 consensus revenue growth against EV/Sales multiples for those relevant comparables. A correlation exists between the sector's EV/Sales multiple ascribed by the market and growth. In Figure 7 below, we create a matrix for assessing value on a range of EV/Sales multiples and our estimated range of FY23 trading revenues.

Figure 6. Sector – EV/Sales multiple (x) versus FY23 revenue growth



Source: Refinitiv, Bloomberg, Forsyth Barr analysis

Figure 7. IKE – EV/Sales matrix on a range of FY23 trading revenue outcomes (NZ\$)

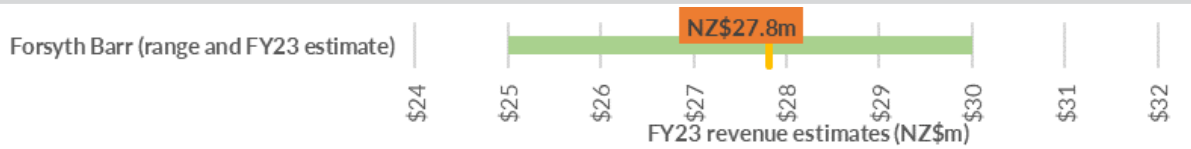
		EV/Sales multiple (x)				
		4.0	5.0	6.0	7.0	8.0
FY23	\$25	\$0.70	\$0.86	\$1.01	\$1.17	\$1.33
estimated	\$26	\$0.72	\$0.89	\$1.05	\$1.21	\$1.38
trading	\$27	\$0.75	\$0.92	\$1.09	\$1.26	\$1.43
revenue	\$28	\$0.77	\$0.95	\$1.13	\$1.30	\$1.48
range	\$29	\$0.80	\$0.98	\$1.16	\$1.35	\$1.53
(NZ\$m)	\$30	\$0.82	\$1.01	\$1.20	\$1.39	\$1.58

Source: Forsyth Barr analysis

FY23 Outlook

Our point estimate of operating revenues for FY23 is NZ\$27.8m, +74% on FY22 numbers and we consider a fair range for revenues over FY23 to be between NZ\$25m–NZ\$30m, see Figure 8 below. We estimate an FY23 EBITDA loss of NZ\$3.6m compared to the FY22 loss of NZ\$5.3m due to expenses growing slower than revenues, with a relatively stable gross margin (~61%) anticipated in FY23. Our NPAT forecasts anticipate a loss slightly better than last year at NZ\$7.0m.

Figure 8. Our revenue estimate range and FY23 point estimate



Source: Forsyth Barr analysis

Figure 9. IKE – Operating revenue FY22 actual versus FY23 estimates (NZ\$m)

	FY22A	FY23E	Change
Operating Revenue	16.0	27.8	+74%
Cost of sales	(6.1)	(11.0)	81%
Gross profit	9.9	16.8	+67%
Other income	1.8	0.1	
General & Admin expenses ("Corporate Costs")	(6.7)	(8.2)	+22%
Sales & marketing expenses	(6.5)	(7.5)	+16%
Research & Engineering expenses	(5.8)	(7.7)	+31%
Other operating expenses ("Support costs")	(0.5)	(0.5)	+14%
Finance costs	(0.1)	(0.0)	-74%
Total expenses	(19.5)	(23.9)	+22%
Profit before income tax	(7.9)	(7.0)	
Income tax	0.0	0.0	
Net Profit (Loss) for the Year	(7.9)	(7.0)	+11%

Source: Company data, Forsyth Barr analysis

(c) Supplementing inputs

Sector M&A activity: We have reviewed 137 takeovers undertaken by competitors in the segment over the last five years and analysed the multiples at which these transactions occurred. Most of these transactions did not disclose either the purchase price or revenues/earnings of the acquired company. If IKE were itself subject to a takeover offer, given its recent solid sales growth relative to comparables, a multiple more than 7.5x EV/Sales on FY23 appears possible and reflective of a takeover price above NZ\$1.43.

Total addressable market analysis: We assess our terminal revenue assumptions against our Total Addressable Market (TAM) calculation. Given how large the Industrial Technology, Global Information System (GIS) and Enterprise Asset Management (EAM) technology spaces are, we see the market potential for IKE as enormous. We currently assess a NZ\$190m revenue opportunity for IKE based on the long-term penetration into these markets. Held against our current terminal revenue assumptions of NZ\$135m in FY32, this appears to provide plenty of scope for IKE's management to grow into the opportunity and logically expand into adjacent markets, expanding the TAM. See our TAM analysis later in this document.

SWOT: Figure 10 below summarises our view of the company's key strengths, weaknesses, opportunities, and threats that would drive a higher or lower multiple that IKE would trade on. A fuller SWOT assessment can be seen in Appendix 5: SWOT.

Figure 10. IKE – Weighing up the SWOT factors

Factors driving higher multiple	Factors driving lower multiple
<ul style="list-style-type: none"> Operating across large markets with potential to grow penetration Product offers excellent performance outcomes against existing methods Experiencing higher growth relative to peers Strong financial position (with NZ\$24.4m cash on the balance sheet) Acquisitions may see company scale more quickly Customers will likely be 'sticky', once implemented 	<ul style="list-style-type: none"> Concentration risk to the US and Canada Lack of earnings as IKE invests heavily into R&D/market development Long sales process Demanding large global clients may instigate more power A super national enterprise software firm may push into the space

Source: Forsyth Barr analysis

2. Electric utility network asset management is complex. Technologies to speed up network assessment, construction, and maintenance are needed – IKE as a productivity solution

IKE targets two large segments, electric utilities and telecommunications infrastructure. IKE software products support poles, wires, and attached infrastructure applications, often with cross-ownership or usage. These are critical infrastructure assets with extremely low thresholds for acceptable downtime. Additionally, there is a chronic and growing shortage of skilled staff in these industries, requiring ongoing process and efficiency improvements.

Electric utility networks across the globe are large complex systems requiring detailed and lengthy **Enterprise Asset Management (EAM)** plans, along with enormous capital budgets to cope with expansion, weather, breakages and changing technology. EAM combines software, systems and services to maintain and control operational assets and equipment. The aim is to optimise the quality and utilisation of assets throughout their lifecycle, increase productive uptime and reduce operational costs. The components within the system (the poles/wires/transformers/mobile base stations/fibre cables) need asset management programmes in addition to accurate **Geographical Information Systems (GIS)** positioning for maintaining and testing reliability and resilience in the face of storms or climatic changes. A GIS creates, manages, analyses, and maps several data types. GIS connects data to a map, integrating location data with various types of descriptive information. Data loss and errors in these industries are common as manual processes using paper-based field notes need to be keyed into in-house bespoke systems post-site visits.

Modern solutions are required to fill the gap and improve visibility, efficiency and network integrity.

These solutions are needed to:

- Give precise geospatial data
- Aid in the design, construction, and maintenance of utility assets
- Reduce duplication of tasks and the number of lost data sets
- Improvement in the timeliness of data
- Manage asset lifecycle programmes
- Vegetation management
- Stress test networks for cold/heat/wind/storms/outages
- Visualisation for workers in the field undertaking workflows, inspections, maintenance and fault handling
- Automate tasks to reduce time and effort across the network
- Dashboards of relevant insights for decision makers

Where does IKE fit in?

Headquartered in Broomfield/Colorado (US), IKE has additional offices in Chelsea/Alabama (US) and Wellington (New Zealand). The current IKE business re-set itself in 2014. IKE targets North America's ~3,200 electric utilities, ~200 communications companies, and more than 2,000 engineering service providers providing services to these sectors, see Figure 11. Today IKE has >350 accounts or an estimated ~6.5% market share across North America, with ~97% of customers in the region (not including Spike customers).

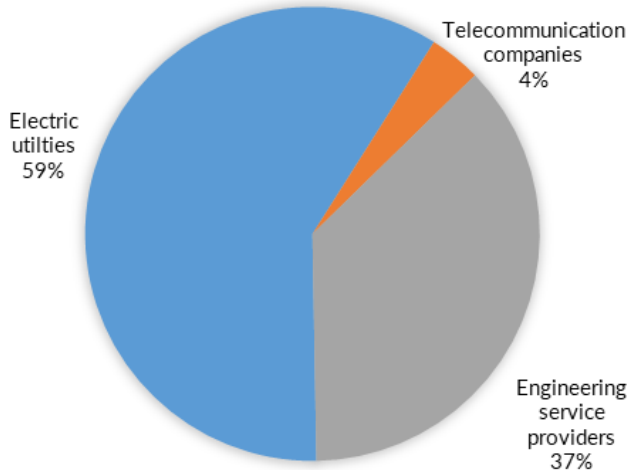
IKE has a good spread of customers and is not overly exposed to any particular customer concentration risk, see Figure 12. The percentage of revenue generated from IKE's top 10 customers is 44%, which we consider a reasonable spread. We understand IKE is experiencing success with several large customers and see these customers growing in relative significance.

Located across NZ and the US, with some offshore contractors in India, IKE's Research & Development (R&D) team is ~26 in terms of staff. The company has utilised outsourced R&D expertise to expedite product development when required. We consider this a logical way of flexing resources as needed. Further, IKE has made acquisitions where the build-or-buy decision has made sense, as occurred with IKE's acquisition of Visual Globe in May 2021. It bought AI-based capabilities to bring unified insights about pole information and future IKE Insight products. IKE's unparalleled access to pole data will significantly benefit training its AI systems.

We understand that three R&D projects are underway:

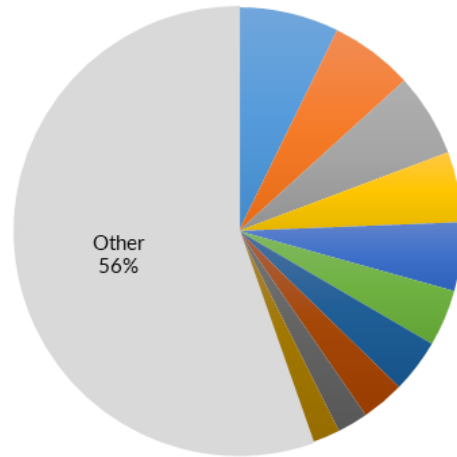
1. General system improvements
2. Upgrade of IKE Structural/PoleForeman over the next year
3. IKE Insight AI project over the next year or two

Figure 11. IKE – Potential customers by segment



Source: Various, Forsyth Barr analysis

Figure 12. IKE – Concentration top 10 customers (March 2022)

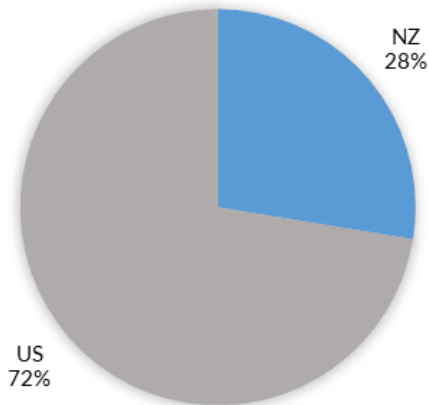


Source: Company data, Forsyth Barr analysis

IKE staffing

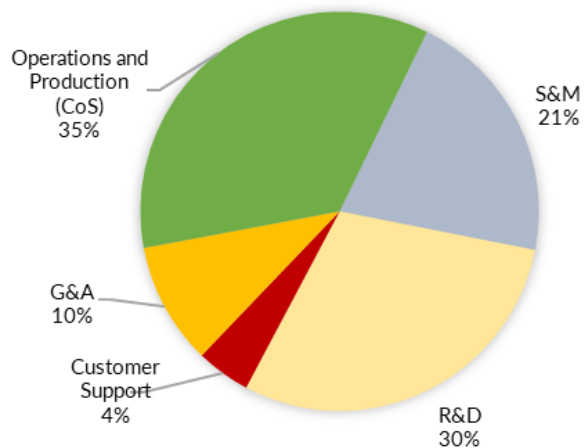
The IKE team grew +50% from ~58 full-time equivalents (FTEs) at the end of FY21 to 87 at the end of FY22. IKE had 24 staff in NZ and 63 in the US as at 31 March 2022, as seen in Figure 13 below. The staffing splits by operations can be seen in Figure 14 below, a little under one-third of staff are in R&D, a little over one-third in Customer Support and Operations, and one-fifth in Sales and Marketing. See Appendix 10: Management profiles for further information on staffing and profiles. From a Board perspective, the FY22 period saw the appointment of Eileen Healy as a non-executive director. Eileen is based in San Francisco and joins IKE with considerable industry experience as the founder of two high-growth technology companies that served tier-1 infrastructure companies. See Appendix 9: Board profiles for further information.

Figure 13. IKE – Staff by geographic location (March 2022)



Source: Company data, Forsyth Barr analysis

Figure 14. IKE – Staff by area of operations (March 2022)



Source: Company data, Forsyth Barr analysis

IKE's drive for security of data/Information Security Management System (ISMS) Implementation

The security of data remains a top priority for IKE. All organisations using third-party vendors (e.g. SaaS, cloud-computing providers) need to be acutely aware of information security, and IKE is no exception. IKE ensures that the proper security principles, policies and controls are implemented to ensure world-class safety of their customers' data within their systems and organisation. To do this, IKE has combined the requirements behind SOC2 and ISO27001 standards to ensure all areas are covered. This includes, but is not limited to, deploying new systems to control and monitor access, a robust and regular risk governance framework, third-party audits of products and processes (SOC2 Certification and Penetration Testing) and the subsequent changes required.

As noted above, IKE has obtained SOC2 Type I certification (and information security management system (ISMS) auditing mechanism). This verifies its credentials independently. It is undergoing Type II certification (audit pending end of September 2022). As SOC2 certification is viewed as the gold standard globally, this has had the added benefit of providing comfort to existing and prospective customers. While SOC2 compliance is not a requirement for SaaS and cloud computing vendors, its importance and role are crucial. This process, along with the substantial investment and executive buy-in by IKE, ensures customer data safety and security. Developed by the American Institute of CPAs (AICPA), SOC2 defines criteria for managing customer data based on five "trust service principles – security, availability, processing integrity, confidentiality and privacy". There are two types of SOC2 reports:

- Type I describes a vendor's systems and whether their design is suitable to meet relevant trust principles.
- Type II details the operational effectiveness of those systems.

We envisage IKE to be Type II qualified by the end of FY23. SOC2 is a very US-centric information security management system (ISMS) accreditation and is similar to ISO 27001, which is more European-focussed. IKE operates under the protocols of ISO 27001 while not accredited. In the future, as IKE expands out of North America, we envisage them obtaining this more international standard for information security. Additionally, IKE has partnered with some key suppliers to continue to enhance their security posture, some of which we have summarised below:

- **Authentication:** IKE has partnered with 'Auth0', the industry leader in access management, to provide a robust user authentication system, creating the IKE ID login system. IKE Platform APIs also use a similar level of authentication, ensuring all endpoints are protected. Providing Single Sign-On (SSO) capability, once a client has logged in via the SSO solution they can access all company-approved applications and websites without having to log in again.
- **AWS Well-Architected Framework:** IKE is partnering with AWS, taking advantage of the AWS-managed services and global infrastructure to provide its products to customers. The AWS Well-Architected Framework (WAF) helps IKE build secure, high-performing, resilient, and efficient infrastructure for applications and workloads. The framework provides a consistent approach to evaluating architectures and implementing scalable designs.
- **Microsoft Modern Workplace:** IKE recently embarked on a Microsoft Modern Workplace project. This is a critical project in post-COVID times – acknowledging that the way they work has now changed, and with that they need to increase security and collaboration. As part of this project, IKE has improved its MS 365 Security Posture by enhancing encryption, email filtering, and mobile device management processes.

IKE's revenue model and core product streams

IKE drives a multi-faceted revenue model with a combination of subscription, transactional fees and hardware sales. These are the revenue types; see Figures 15 and 16, and across the core product streams of IKE Office, IKE Structural via PoleForeman, IKE Insight and IKE Analyze. IKE University and Spike create the fifth part to revenues, albeit smaller. Subscription revenues are either monthly or yearly, with transactional revenues billed monthly. Transaction fees change depending on the rationale for the service, with lower fees for audit per pole (see Figure 18) and higher transactional fees for ordinary per site pole visits.

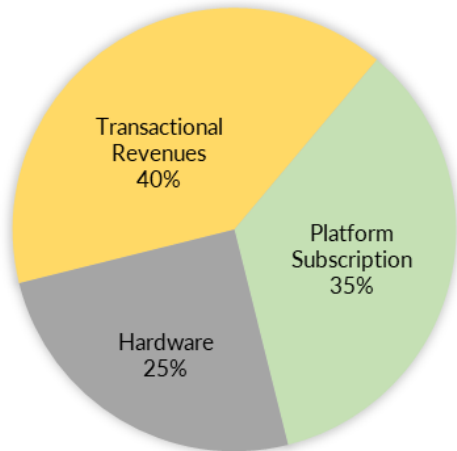
Figure 15. IKE matrix of revenue model against product streams

		Core product streams			
		i. IKE Office	ii. IKE Structural	iii. IKE Insight	iv. IKE Analyze
Revenue type	A. Platform transactions	X		X	X
	B. Platform subscription	X	X	X	
	C. Hardware and other	X			

Source: Company data, Forsyth Barr analysis

Pole audits are a critical component of maintaining a robust distribution system. The audit cycle varies between five and 12 years, depending on pole characteristics and regulations. The process verifies that the pole has been built according to design specifications and complies with NESC requirements. Audits also ensure the increasing loads attached to poles haven't adversely impacted its integrity while informing pole owners and users about joint use.

Figure 16. IKE – Revenue by type (FY22)



Source: Company data, Forsyth Barr analysis

Figure 17. IKE's US office in Colorado



Source: Google Maps

Figure 18. IKE – Types of Pole Audits

<p>Inventory</p> <p>An image-based inventory of poles and equipment used for decision making about pole condition, lifespan, and location.</p>	<p>Joint Use</p> <p>An audit used to determine the state of third-party attachments on a network. This type of audit can be used for joint use billing, identifying illegal attaches, and verifying existing attachments.</p>	<p>Post Construction</p> <p>An audit performed specifically to verify that poles or equipment were installed or constructed correctly per engineering work order, company construction standards, and governing safety code (NESC, GO-95,CSA).</p>
<p>GroundLine Inspection</p> <p>Identify pole deterioration due to shell or internal rot to determine if a pole should remain in service, be reinforced, or be replaced.</p>	<p>Guy</p> <p>Verify the presence of guy markers where required and proper placement of guy strain insulators and guy grounding.</p>	<p>NESC</p> <p>Identify compliance with NESC for mid-span clearance, communication worker safety, zone clearance, guying, pole loading, grounding, etc.</p>

Source: Company, Forsyth Barr analysis

IKE Product Summary

Overall, IKE's products enable the collection of pole data from the field and then measure and manage this infrastructure information in the cloud. Within IKE Office Pro, IKE Structural, IKE Insight and dashboards, customers can track projects and progress. For customers these tools increase efficiency, speed up construction, enhance team fieldwork safety, create more resilient data models of their networks, and aid risk management and liability reduction. IKE's products integrate into the GIS/EAM software space where computer-based systems capture, store, manipulate and analyse network data to solve complex asset management, planning and management problems using a combination of hardware and software. The core streams and two additional, albeit minor, other parts of the business, IKE University and Spike, are covered in more detail below. IKE has four core streams to its business:

- i) **IKE Office**, which operates as a pole asset assessment, analysis, management, and engineering processing tool
- ii) **IKE Structural via PoleForeman**, which enables pole loading analysis, obstacle clearance and wire sag analysis
- iii) **IKE Insight** uses AI/machine learning to automate image and data analysis to provide insights.
- iv) **IKE Analyze** processes customer-collected data on poles uploaded to the IKE cloud

IKE's current solutions will conceivably unlock future market value-added opportunities. We consider the current offering to be the start. The opportunities for process automation of engineering workflows appear significant and form a part of our medium-term revenue uplift. However, we may have underestimated the value-add to customers. Given the vast quantities of data on utility company processes and assets and the rapid developments in AI and 'big data', we envisage IKE offering data insights (without exposing trade secrets of individual customers) as a service in the reasonably near future. This could allow customers to manage their asset management, risk management, compliance and audit requirements, reduce costs via efficiencies, and harden up the network by enabling better data-driven decisions. Additionally, we see an extension of the product to below-ground utility/telco assets and other utilities (like water and gas networks) over an extended period of time.

i) IKE Office – pole asset collection, analysis, and management

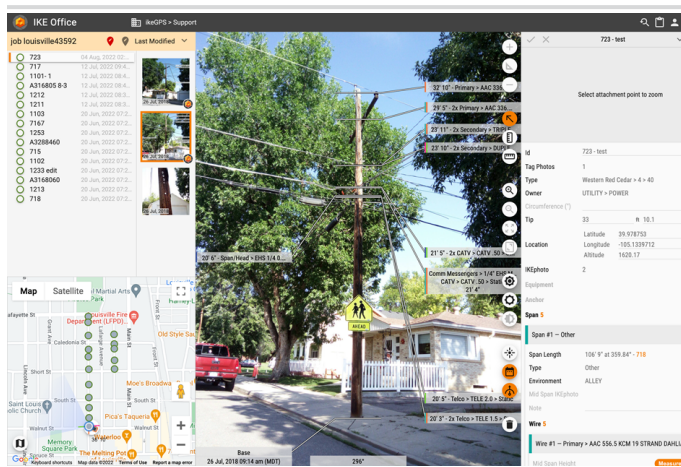
The IKE Office cloud platform enables customers to measure and manage pole projects and data. IKE Office allows users to export records to the customer’s native systems easily. IKE Office runs on Amazon Web Services (AWS) and, as such, is API native for customer data inputs and outputs. It also allows more accessible analysis of the data for other overlay services in the future.

The payment model includes an annual subscription plus transaction fees (on a per pole or asset basis).

IKE Office has three key solutions:

- Collection of data in the field using IKE Field Tools. The IKE Device is a field-hardened device that combines a GPS, laser rangefinder, and calibrated image capability with links to a user-friendly app (built on the Android platform). The data collected includes measuring poles, spans, equipment, and location. This creates a clear picture of a customer’s utility network using data from the IKE Device to annotate heights of attachment, identify equipment, and measure spans and anchors. Hardware is priced as an annual subscription.
- Measurement in the office via the IKE Office Pro cloud solution. Office Pro is designed to directly integrate with IKE Structural/PoleForeman, and competitor offerings like O-Calc Pro, SpidaCalc, and PLS CADD, making pole loading as simple as point and click.
- Exportation and automation into whatever system or format the customer needs. This can be an IKE Report or standard export formats like KML, EXCEL, JSON, raw and mark-up images, plus others.

Figure 19. IKE Office – mapping data onto photo and visualisation

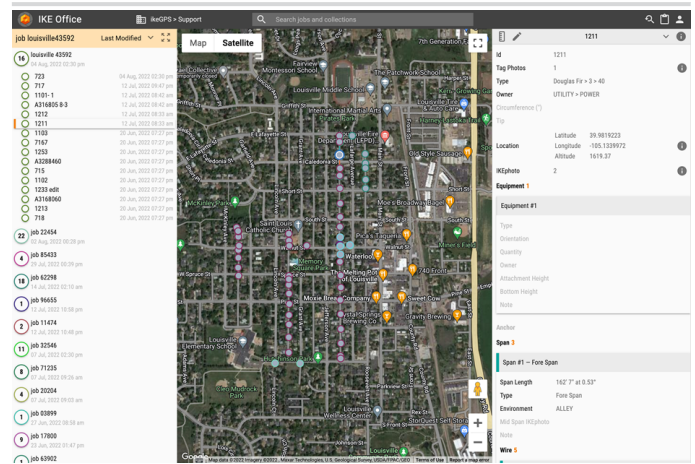


Source: Company

The core benefit of IKE Office is to drive down field data collection costs per pole by measuring and standardising the client data across its workforce and engineering partners. It is compatible with all other leading pole load analysis solutions and integrates smoothly with PoleForeman (see IKE Structural solutions) and all other structural analysis and GIS systems. Examples of usage include small cell and fibre build-out programmes, 5G infrastructure deployments, utility pole joint-use audit assessments, and inspections. Key clients include Bell Canada, Burns & McDonnell, Cyient, AT&T, Crown Castle International and more than 300 other enterprises.

See <https://ikegps.com/ike-office/> for more information.

Figure 20. IKE Office – specific pole placement and database



Source: Company

ii) IKE Structural – pole loading, obstacle clearance and wire sag analysis

IKE Structural gives customers access to PoleForeman, the industry-leading software solution for electric utilities and communication companies, performing pole loading, obstacle clearance and wire sag analysis. The software has been in the market for 20 years and, as such, has good market awareness across North America. PoleForeman builds 3D aerial infrastructure models, performs detailed analysis, and measures clearances. IKE's PoleForeman and SagLine (measuring sag in powerline and fibre cables) aid engineering designers at electric utilities, telecom groups, and engineering service providers wanting accurate and consistent analysis enforcing company-specific standards and compliance with minimum US National Electrical Safety Code (NESC) requirements. This type of analysis is essential because pole failures cause expensive power and communication outages, and have significant flow-on effects disrupting work schedules, irritating customers, loss of revenue, and can be a source of lawsuits. IKE Structural tests utility assets for extreme weather conditions such as wind and ice load cases. This aids storm hardening and system resiliency while lowering outages and restoration times. Today, five of North America's ten largest electric utilities rely on PoleForeman and SagLine for their distribution network design. PoleForeman is a desktop application but work is being undertaken to modernise the solution.

The business model is an annual subscription.

How IKE Structural works

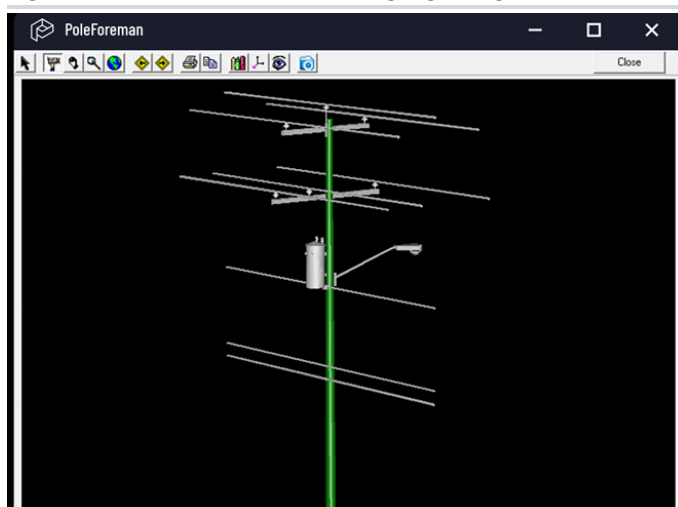
Customers can start by building 3D models on the topology screen, undertaken in three ways:

1. A pre-built construction template based on the company's standards (this creates consistency across the assets and workforce built to required specifications).
2. They are imported directly from IKE Office.
3. Building a pole from scratch.

Once the pole is uploaded, the customer can visualise the pole they want to analyse and any adjacent poles and the spans connecting them. Clicking the pole allows the user to enter data required for analysis, such as pole length, any Safety Codes (SC), loading district, and construction grade. Clicking on the spans allows the client to enter primary and secondary conductor data and communications cable parameters. The user can click and drag the adjacent poles to adjust the span length and direction from the topology screen. Viewing the 3D model on the model screen allows the customer to perform a detailed analysis. With a click of a button, clients can analyse the pole format and test the structure against varying wind directions to determine the worst-case loading scenario. From there, whether the structure passed or failed to meet the minimum SC requirements becomes clear.

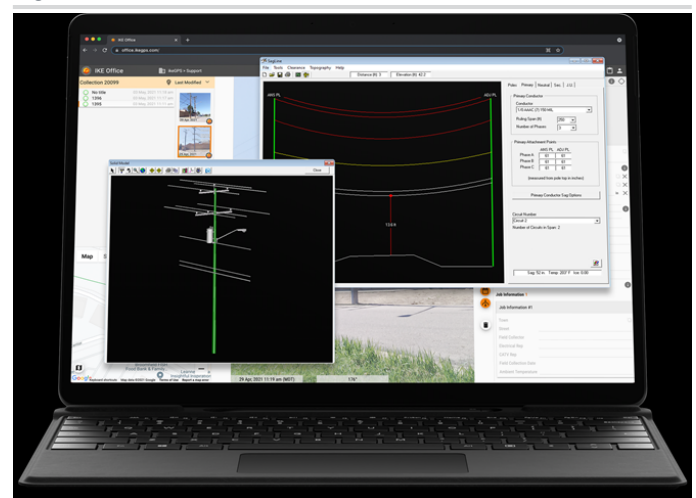
Additionally, measurement clearances are accessible with the sideline tools by clicking the span and opening the tool. The tool will automatically draw the line sag profile of the conductors. A user can enter a model of the ground profile beneath the span to measure clearances effectively. Once a 3D model is ready, with structural analysis and measure clearances done, the results are available for export to the user's platform of choice to create lasting records for SEC compliance requirements.

Figure 21. IKE – detailed pole strength grading



Source: Company

Figure 22. IKE – Pole Load Analysis (PLA) in action



Source: Company

See <https://ikegps.com/ike-structural/> for more information.

iii) IKE Insight – automation via AI and machine learning analysis of images and bulk data

IKE Insight is a solution that provides customers with actionable insights for utility, telecom, and engineering service providers – overlaying Artificial Intelligence (AI) and predictive analytics from bulk data and images. IKE Insight is at an early stage of its development but does offer the potential to drive margin gains via automation. It acts like middleware software, feeding intelligence, data, and imagery into existing applications, tools, and systems. It integrates into many key cloud platform providers (examples include Microsoft, Azure and AWS), databases (SQL and Oracle), and GIS systems (Google Maps).

In an AI/machine learning world where a data set is essential in building the best and most accurate learnings and algorithms, we see IKE having a clear advantage in implementation. Machine learning models require access to sizeable high-quality data training sets to learn. IKE arguably has one of North America's larger datasets of pole data that have been reviewed and/or engineered by an engineer.

The business model is via enterprise subscription or per pole transactional revenues.

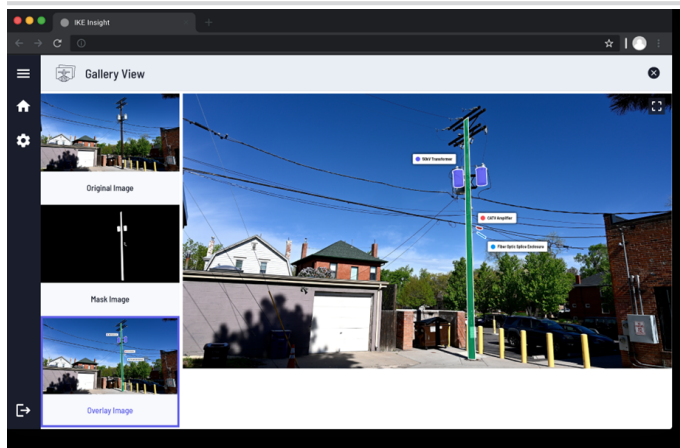
Use cases for IKE Insight include:

- Aiding utility pole audits
- Location validation
- Pole reconciliation
- Revisiting insights from legacy audits
- Vegetation and fire mitigation
- Line degradation and vulnerabilities

The audit applications include a National Electric Safety Code (NESC) violation assessment, joint-use assessments (between operators on common assets), as-built assessments for future network change detection, right-of-way safety and compliance assessment, and others. Core to the success of IKE Insight is the automation of manual analysis processes and allowing the use of a more comprehensive array of inputs, including LiDAR, thermal imaging, drone and aerial photography, and tablet and phone photos as examples. Because many of the inputs are automated, this should reduce error rates and allow easier data reconciliation. Common among utility asset owners is duplication of resources revisiting the same assets to retake lost imagery.

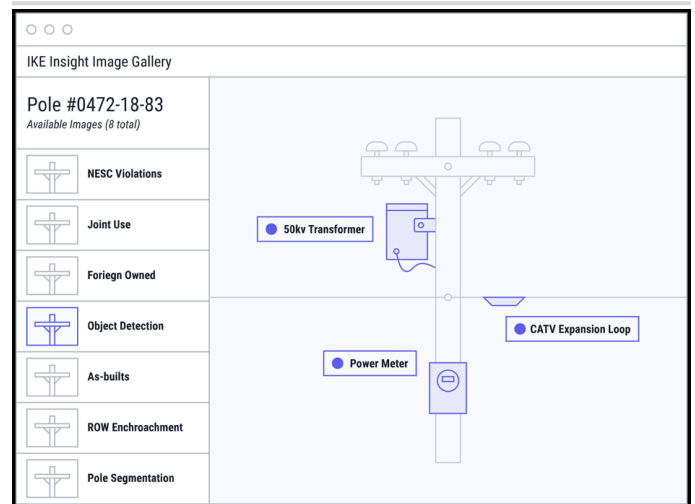
Key features of the product include the rapid building of an asset library using patented AI machine learning models. Solutions and outcomes are related to the subject matter with predictive analytics and data conciliation and pairing. A dashboard of relevant insights is available for customisation.

Figure 23. IKE Insight automated object detection



Source: Company

Figure 24. IKE Insight detailed pole anatomy from image gallery



Source: Company

See <https://ikegps.com/ike-insight/> for more information.

iv) IKE Analyze

IKE Analyze independently processes customer-collected data on poles uploaded to the IKE cloud. More than 400,000 poles have IKE Analyze records, including:

- Heights of attachment (HOA) records and reports for audits, site planning, and sales that include heights of attachment and basic pole information.
- Pole load analysis (PLA) provides industry-standard pole records with completed PLA in IKE Structural/Pole Foreman, O-Calc Pro, SpidaCalc, and PLS CADD.
- Make-Ready-Recommendations (MRR) leveraging the full depth of IKE Analyze in a consultative partnership to give you MRR for a project.

IKE Analyze customers typically enjoy a 50% reduction in project costs for pole audits, make-ready engineering, and permit application processes. Designed to work with IKE Office as a market offering, IKE Analyze, with its automation technology, has the capability for ongoing automation/efficiency for customers, which can be used internally at IKE initially. The business model is via transaction fees.

See <https://ikegps.com/ike-analyze/> for more information.

Figure 25. IKE Analyze in action



Source: Company

v) Other parts of IKE's operations

IKE University

IKE University has become a training asset for IKE customers. Customers consume content via a combination of live coaching, on-demand video and instructor-led channel training with IKE University. More than 3,000 engineers across the industry in North America have become certified IKE experts through the IKE University curriculum. In part, driven by the needs of COVID restrictions, the online courses decrease training times, certification of skills across the workforce, standardise industry best practices, and improve the ability to learn off-site and at times convenient to the workforce. The business model is via per-course fees.

See <https://ikegps.com/ike-university/> for more information.

Spike

Spike is a compact laser beam measurement device for users in the field. Spike is a relatively inexpensive product augmenting older LiDAR data to create 3D shapes and measurements. Measurements needed for signage design, permitting, quotes, planning, and installation can be undertaken with Spike using a smartphone or tablet. Spike does not require physical access to the object for measurements. Spike captures data about the position and target object from a single photo. The Spike laser device connects via Bluetooth with a mobile device and utilises the user's smartphone or tablet's camera, GPS, compass, and internet connection. Photos are uploaded directly to a secure account. In simple terms, it is an innovative laser measurement solution for field applications. It is a modern solution for gathering spatial data and has a customer base of 5,000 companies worldwide. Revenue comes from unit sales.

See <https://spike.ikegps.com/> for more information.

3. Competitive landscape is scattered

On the competitive front, numerous companies provide services to utilities, telecommunications and engineering firms. It is, therefore, easier to understand the relevant companies operating in each of IKE's three lanes categorised by the product lines. IKE's strategy is to build long-term differentiation via three interrelated 'swim lanes' that cover the following:

1. **Collection**
2. **Analysis and management**
3. **Customer experience (CX):** being the partner that customers cannot imagine living without

IKE aims to offer seamless cross-platform operability and excellence – meaning its products integrate to cover a comprehensive workflow versus the standalone nature of most competitor products.

IKE Office product

Within North America, the closest tech competitor is:

- Katapult Engineering (a small US group offers partial competing functionality <https://www.katapultengineering.com/>)

IKE Office is broader in terms of the IKE device technology, IKE Field apps for field workflows, and in the back office IKE's cloud software has broader integration and automation. A less sophisticated competitor is:

- LaserTechnology (a simple rangefinder and mobile app for the most basic inspection process <https://lasertech.com/>)

Beyond this, IKE Office primarily competes with existing and more manual historical work practices that have been honed by large engineering groups or within utilities themselves. This may be a more significant sales barrier than it sounds – as moving very large infrastructure companies into new work methods, no matter the productivity benefits, is often a lengthy process.

IKE Structural (PoleForeman)

Within North America, competitors in the structural analysis/Pole Load analysis (PLA) space for distribution poles are:

- **SpidaCalc** (acquired by listed company Bentley in 2021 <https://www.bentley.com/en/products/brands/openutilities>)
- **PLS-CADD** and **PLS-POLE** (acquired by listed company Bentley in 2021)
- **OCalc** (built/owned by US privately owned engineering group Osmose <https://www.osmose.com/o-calcpro>)
- **QuickPole** (a small Canada market only company <https://sonideft.com/>)

Once a customer selects a product in a category it is exceptionally 'sticky' as all network design and associated training flows through the specific software, so switching costs are very high. On this point, five of the ten largest investor-owned utility groups (IoUs) in the US have standardised on PoleForeman. This then provides favoured access to the 'standards functions' of these customers (the group that controls most network construction and product decisions) to cross/up-sell other products.

IKE Insight

The IKE Insight platform allows IKE to ingest various types of customer bulk data (from drones, phones, LiDAR, thermal etc.) and automate the specific network development processes that the software supports (pole audits, pole load analysis, make ready engineering as examples). On the competitive front, a lot is going on with AI for infrastructure, but little is specifically addressing IKE's niche focus. The relevant large enterprise groups are:

- **Esri** (privately held Esri is the global market leader in geographic information system (GIS) and spatial analytics software and a key IKE partner/integration point for platform AI <https://www.esri.com/en-us/home>)
- **Intel Geospatial** (a new venture from Intel being an open, cloud-based framework using AI to visualise, analyse, and manage geospatial data collected from various sources <https://intelgeospatial.com/platform-overview>)

Then other smaller companies with an AI-bent include:

- **AI Dash** (for vegetation management, not where IKE plays but related to distribution <https://www.aidash.com/>)
- **Precision Hawk** (a privately owned drone company aiming to get into AI analysis. <https://www.precisionhawk.com/precisionanalytics-energy>)

See Appendix 3: Key sector competitors and partners for further information on a selection of these competitor/partner companies.

4. Addressable markets are large and growing

Looking at the addressable market IKE is targeting, we have undertaken to review the three segments of the opportunity, being:

- i) Electric utility – poles and wires market
- ii) Telecommunications – fibre on electric company poles and 5G masts market
- iii) Engineering consulting – to the above sectors

Following this, we attempted to size the Total Addressable Market and subsequent revenue potential, shown in:

- iv) Total Addressable market analysis

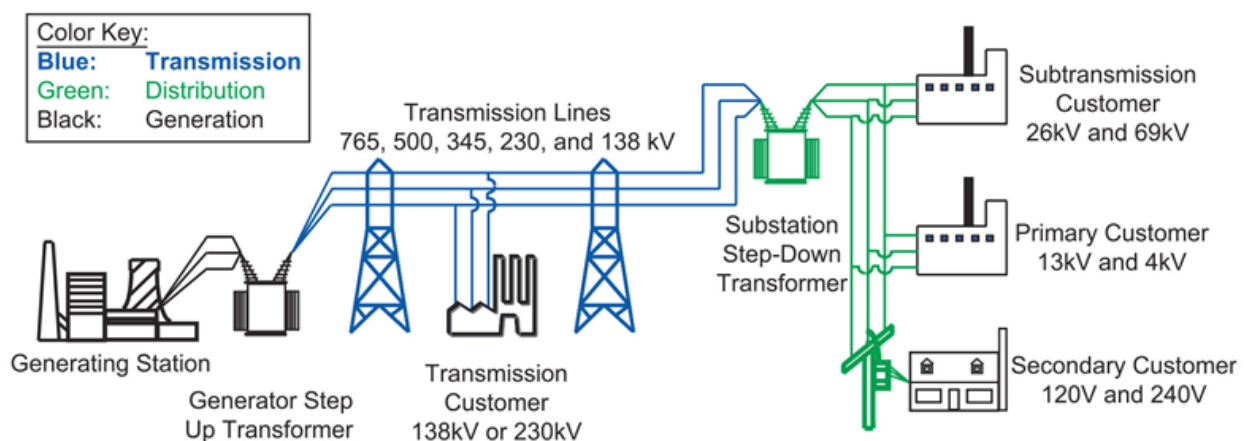
i) Electric utility – poles and wires market

Reliable electricity is seen by society as an essential service and a critical component in the economy, along with the health and welfare of its citizens and communities. Given its importance affecting all aspects of modern life, the need to appropriately manage the electricity networks is hugely complex but also technically challenging. The National Electric Reliability Council (also known as NERC) oversees reliability over all of the interconnected power systems of the United States, Canada and a portion of Mexico. Its mission is to "ensure the reliability of the North American bulk power system". The North American electricity infrastructure (from various sources) represents:

- In excess of US\$1 trillion in assets
- From 120k to 211k miles of transmission lines (>230 kilovolts)
- Around 5.5m miles of distribution lines
- In excess of 1.1m MW of generating capability
- Ownership by ~3,200 utility companies
- Serving ~334m people as users of power
- An estimated 2.7m workers employed in the industry
- Total electricity demand is around 830k MWs
- Significant investment is required to modernise the network to cope with the changing demands of the network

The schematic in Figure 26 below shows the components in the electricity market. IKE operates in the ‘last mile’ distribution assets providing the connection from substations via distribution lines - the street poles and wires to households.

Figure 26. Structure of the electric power system



Source: Federal Energy Regulatory Commission (FERC), Forsyth Barr analysis

ii) Telecommunications – fibre and 5G infrastructure on electric utility poles

There are a number of megatrends within the telecommunications market globally. Two of these have significant and direct positive implications for areas in which IKE operates.

They are:

- **The rollout of 5G networks.** Where 4G technologies relied on several large cellular towers, the next generation of wireless network infrastructure, 5G, will be built with small-cell base stations attached to other infrastructure, predominantly utility poles and buildings. For 5G to be successful, small cell technology requires significantly more antennas than its predecessors to be closer to end users, enabling significantly faster data transmission. Electric utility pole assets offer an ideal platform for placement.
- **The rollout of fibre to homes.** Fibre broadband is booming in North America, driven by public and private investments. Across the top five incumbent providers, huge investments are increasing the number of homes that fibre passes – estimated to grow by ~10% per annum over the next decade. While globally, the fibre rollout has been in full swing for some time, progress across North America has lagged the world. In its 2021 global telco survey of fibre investment decision-makers, media research group Kagan indicated a worldwide increase in fibre network expansions in 2022 and 2023 after a slowdown was experienced in FY20 and FY21 due to the COVID-19 pandemic. The study suggested that by 2025, in North America, fibre would become the dominant fixed broadband platform. Undergrounding fibre across cities is often prohibitively expensive. As such, electric utility poles are an essential enabling asset. Each of these on-pole connections requires new sharing agreements between the telco and electric utility, creating a need for asset auditing, a further round of load and stress testing, and site assessment to meet specific characteristics before attaching 5G small cells or attaching fibre cabling. Each new 5G small cell must have; fibre backhaul, load testing analysis, and electrical connections for each utility pole. Fibre span analysis is also required between adjacent poles and houses.

The North American telecommunications infrastructure (from various sources) represents:

- >55k miles of fibre across North America
- Circa 50k 5G base stations and ~300k 4G base stations currently in place
- >800k 5G small cell sites to be engineered and built, much of it attaching to poles
- Fibre broadband now passes ~43% of households and ~50% of households in Canada (in Aug 2022)

Figure 27. Fibre and 5G assets sharing electric network poles



Source: NECA

iii) Engineering consulting

Given the considerable **complexity** of utility projects, standards involved, multi-decade asset management plans, and the technical nature and scope of work scheduling and budgeting – specialists are essential. For asset owners, contracting-out part of these processes is commonplace. Engineering firms provide services across design, engineering, survey, permitting, testing and commissioning, construction and compliance solutions for complex initiatives.

If IKE's software suite can enable **efficiencies** within engineering firms this can be a powerful driver to adoption, saving considerable time and money, and improving tight industry margins at consulting firms.

For IKE, the engineering firms can act as a **distribution channel**, with one engineering firm having connections with a multitude of electric utility or telecommunications firms. These utilities may take on IKE for other asset management work.

With many companies experiencing **staff shortages**, asset owners have looked to outsource many tasks. Almost every industry in the United States has experienced a degree of pandemic-related labour shortages; however, the engineering sector appears to have been particularly hard hit. A study undertaken by the National Science Foundation (NSF), identifies that the talent shortage in the engineering industry is due to an ageing workforce and the lack of graduates seeking engineering degrees. NSF reported that ~30% of all engineering and science degree holders in the labour force are older than 50, with most expected to retire over the next 15 years. The labour force is particularly short those with project management experience in the mid-to-senior management layers. Younger staff want a career path with technology applied. Engineering consultants may be able to move their business models faster than the more significant asset owners.

Increasing **regulation** requires a regular audit of poles and shared infrastructure assets. Asset owners may consider outsourcing audits to have arms-length assessments of network safety and reliability as preferable.

Given the above trends, engineering firms have become an **increasingly large part of IKE's business**. We anticipate this trend will continue.

iv) Total Addressable Market (TAM) analysis

We consider IKE's management's historical shift in the business away from hardware toward a software-driven one is now evident in the recent growth and margin improvements. Hyper-focussed on the US and Canadian markets, IKE's software solutions for electric utilities, telecommunications and engineering firms are targeting big enough markets for plenty of growth. We consider these large markets to offer a solid pathway for growth for at least the next three to five years. Several key underlying trends include an ageing workforce among utilities, requiring new technologies to ensure efficiencies, and importantly, US infrastructure electricity networks requiring a substantial multi-decade capital improvement programme. These work programmes are ideally suited to IKE's software suite and its benefits. We consider six key factors are driving the market sizing:

1. Electric – Number of existing poles
2. Electric – Audit visit cycle requirements
3. Electric – Other service visit cycle for a) asset replacement cycle, b) grid hardening/resiliency/reliability, c) asset growth, d) storm remediation, e) other factors
4. Telecommunications – 5G cell rollout/deployment programme
5. Telecommunications – Fibre rollout/deployment programme
6. Revenues driven per asset visit

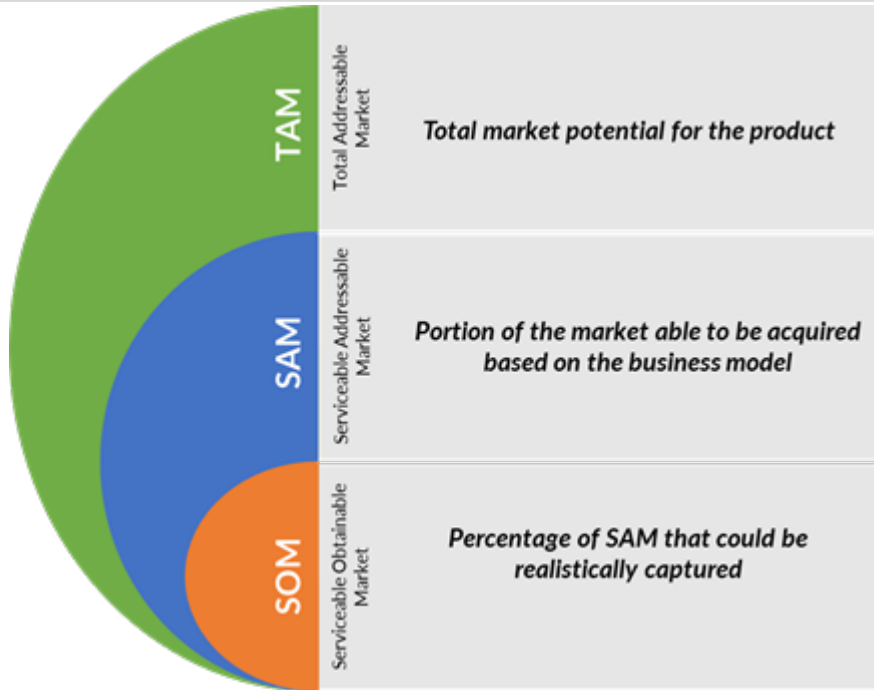
Massive network expenditures occurring over the next decade will drive demand for solutions to improve efficiencies

Over the next three to five decades massive monies will be spent on these critical service networks, driving demand for solutions to improve efficiencies. More than US\$350B is forecast to be invested into fibre and 5G infrastructure over the next five to ten years by telecommunications companies. Additionally, US\$60B of investment into rural broadband network development will be spent as part of Biden's \$1 trillion infrastructure bill. Core to the market, however, is the fact that more than 3,200 electric utilities need to address the substantial challenges of network hardening (reliability), development and maintenance over the coming years. Further pressures on electric utilities include, the regulatory requirement to allow communications companies to attach fibre and 5G antenna onto their power assets and an ageing workforce driving a need to introduce technology to replace people. Additionally, all these assets need to be audited for compliance with standards for reliability, health and safety. This requirement for monitoring, analysing, and testing these assets drives the demand for tools to assist and improve the efficiency in managing these complex assets. This is the opportunity for IKE.

Market sizing assessment framework

We assess the opportunity in front of IKE in a three-stage model. The assessment framework is shown in Figure 28 below.

Figure 28. Our TAM/SAM and SOM Framework for assessing market potential



Source: Forsyth Barr analysis

Total Addressable Market (TAM)

We have used various measures to assess TAM in each market segment. Where we have limited information or a general lack of segment drivers we have made relative assessments of industry potential and added-in significant risk factors and pushed out entry to provide a more conservative assessment. In segments where we hold greater confidence in our assessment methodology, electric utilities as an example, the risk assessment is much lower and provides a more reasonable assessment of possible outcomes.

TAM is an improbable level of revenue achievable across all industry participants with full market penetration including client in-house capability. As such, it creates a potential total market demand for the product, albeit we consider it unrealistically large. Our TAM calculation utilises global research and data, segmented by industry. We, however, conservatively only assess TAM across North America and do not ascribe any value to markets outside of this region. We assess the TAM at NZ\$3.5 billion with ~85% of the opportunity within the electric utilities market and ~15% in telecommunications.

Flowing a TAM assessment into more realistic terms requires identifying the Serviceable Addressable Market (SAM) within the TAM.

Serviceable Addressable Market (SAM)

There are, in fact, limitations on any business model, be they geographic limitations, local differences of use, or language barriers. Therefore, the SAM is more helpful in assessing businesses to objectively estimate the portion of the market a business could acquire in the most optimistic of outcomes. Given our restriction of TAM and SAM to just the North American market we assess the SAM at NZ\$1,400 million.

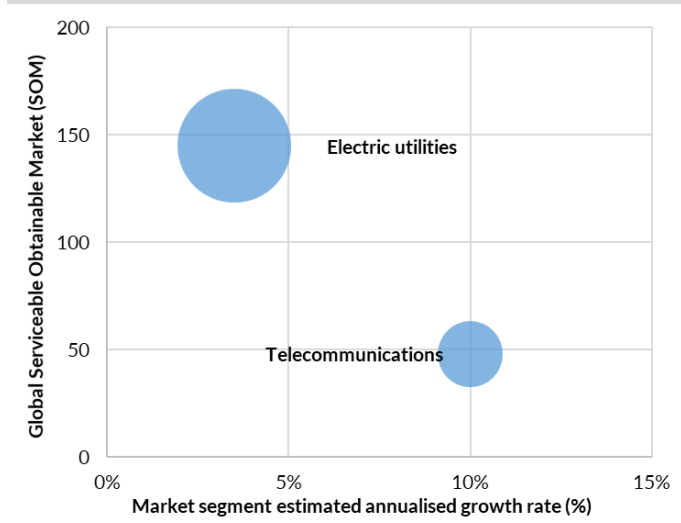
The third stage of assessing the market size is to make this more realistic and calculate the obtainable portion of the SAM.

Serviceable Obtainable Market (SOM)

Given market share limitations, it is unlikely that any business could practically capture 100% of a market. Additionally, given that IKE cannot enter each market segment at once, competitors will likely adapt and replicate the service offering, making achieving high market shares in markets entered years later much more difficult. Further, it is often difficult or impossible to convince all potential customers in a market, no matter how compelling the network effect and product benefits are, to utilise a company's service. Given this, an important additional measure is to calculate the Serviceable Obtainable Market, or SOM, to determine how many customers would realistically benefit from buying IKE's software for the North American GIS/EAM market for electric utilities and telecommunication companies. We have used our assessment of SAM to determine a level of achievability in our distinct period revenue estimates.

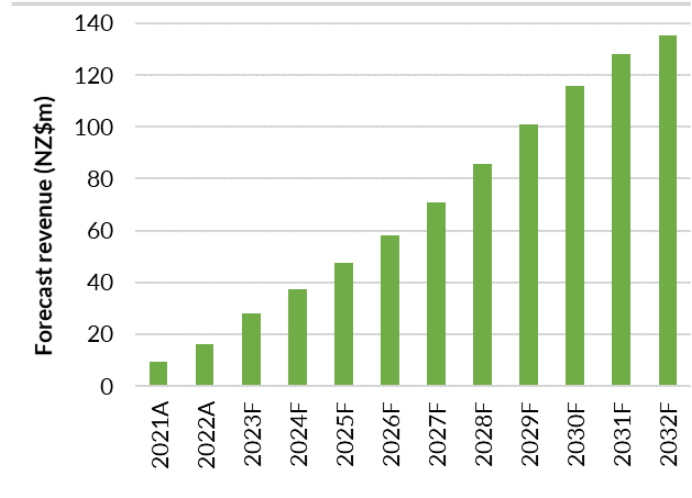
We currently estimate the North American **Serviceable and Obtainable Market (SOM) for IKE to be NZ\$190m**; see Figures 29 and 31 below. This compares with our IKE distinct period assessment of revenues in 2032 of NZ\$135m, providing plenty of scope for exceptional management execution. See Figure 30 below.

Figure 29. IKE – Global Serviceable Obtainable Market (SOM in NZ\$) and Market growth estimates (%)



Source: Forsyth Barr analysis

Figure 30. IKE – Our long run revenue estimates



Source: Forsyth Barr analysis

Figure 31. Our TAM/SAM and SOM Framework in action

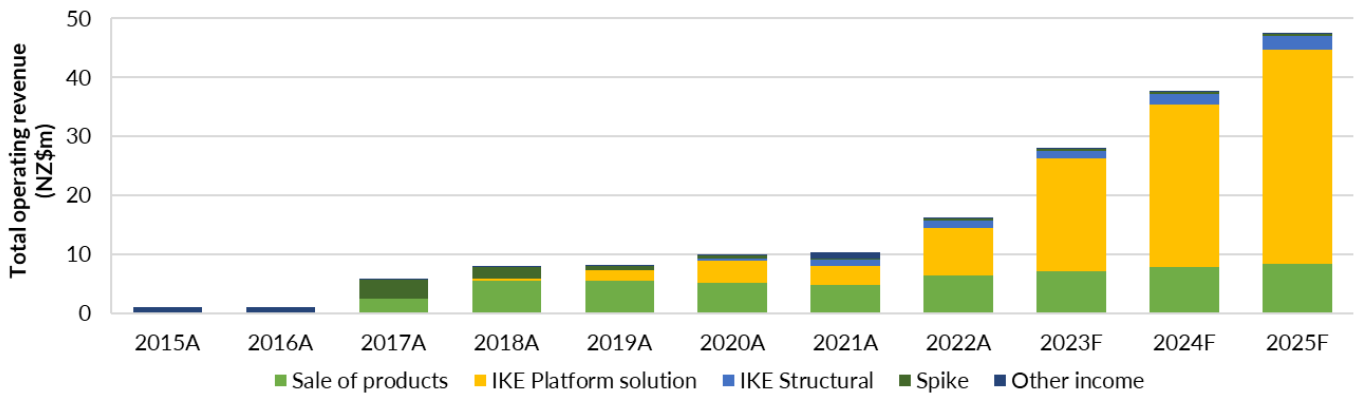


Source: Forsyth Barr analysis

Appendices

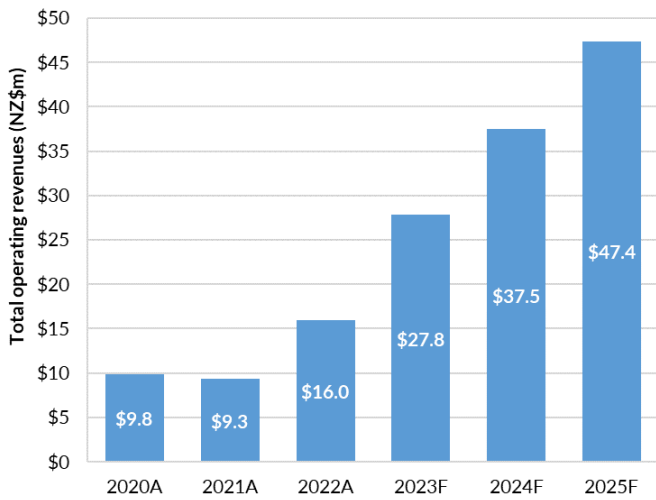
Appendix 1: Key charts

Figure 32. IKE – Revenue stack by line (NZ\$m FY15–FY25)



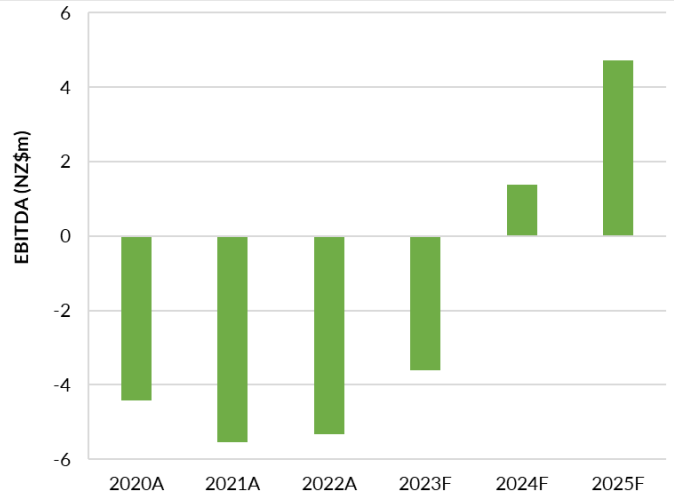
Source: Company data, Forsyth Barr analysis

Figure 33. IKE – Historical and forecast revenues (NZ\$m FY20–FY25)



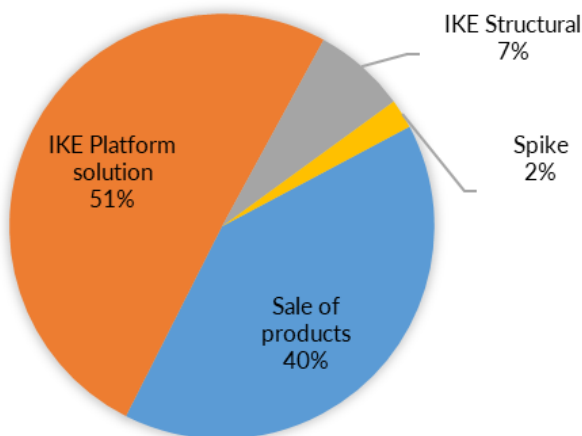
Source: Company data, Forsyth Barr analysis

Figure 34. IKE – Historical and forecast EBITDA (NZ\$m FY20–FY25)



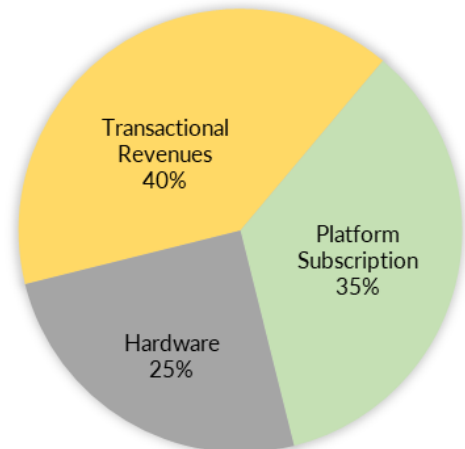
Source: Company data, Forsyth Barr analysis

Figure 35. IKE – Revenue by solution (FY22)



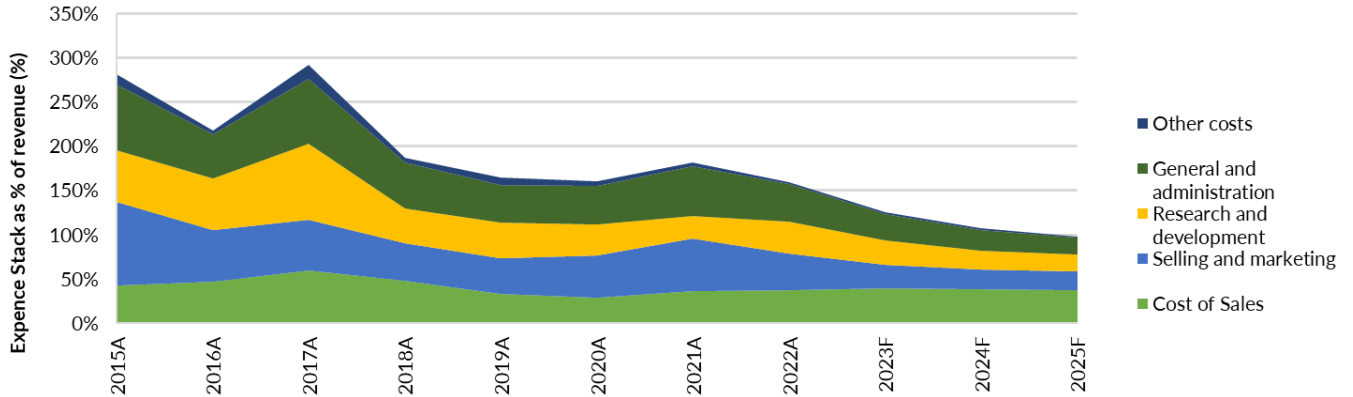
Source: Company data, Forsyth Barr analysis

Figure 36. IKE – Revenue by type (FY22)



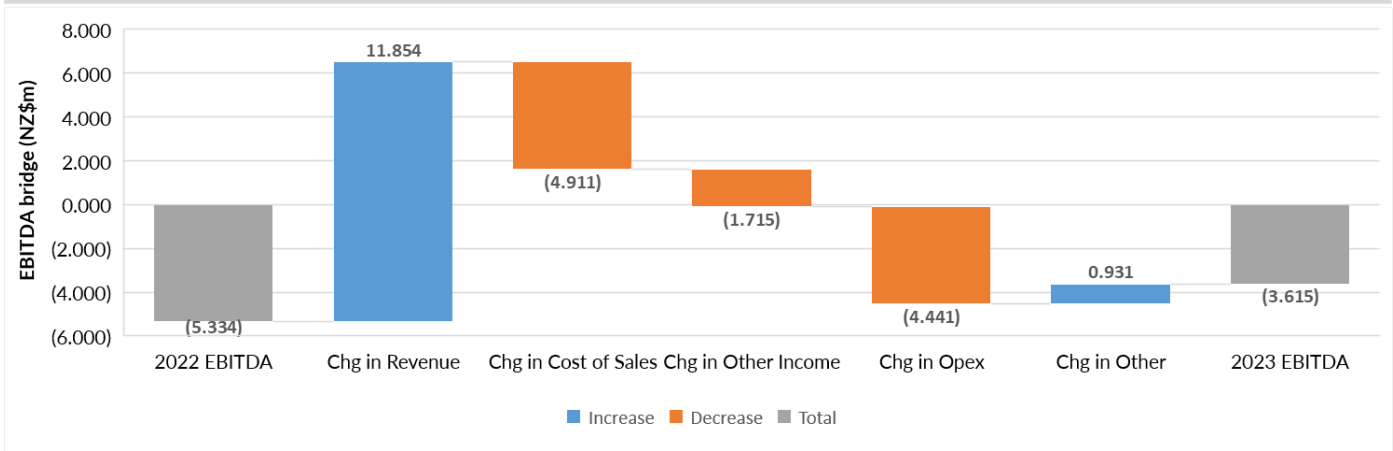
Source: Company data, Forsyth Barr analysis

Figure 37. IKE – Expense stack as % of revenue (actual and estimates FY15–FY25)



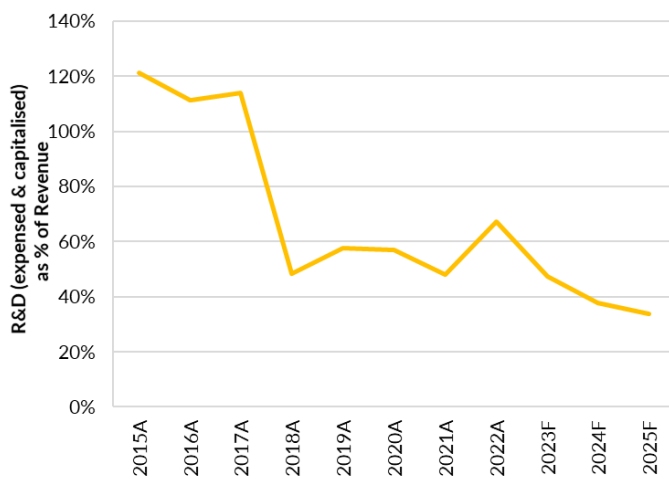
Source: Company data, Forsyth Barr analysis

Figure 38. IKE – EBITDA Bridge FY21 to FY22 (NZ\$)



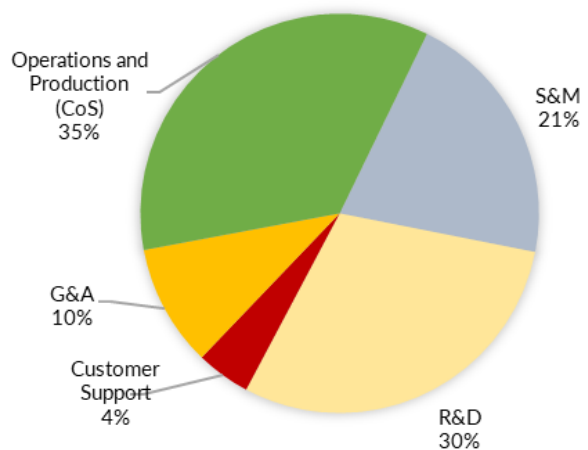
Source: Company data, Forsyth Barr analysis

Figure 39. IKE – R&D (expensed & capitalised) as % of revenue (actual and estimates FY15–FY25)



Source: Forsyth Barr analysis

Figure 40. IKE – Staff by area of operations (March 2022)



Source: Forsyth Barr analysis

Appendix 2: FY22 result highlights

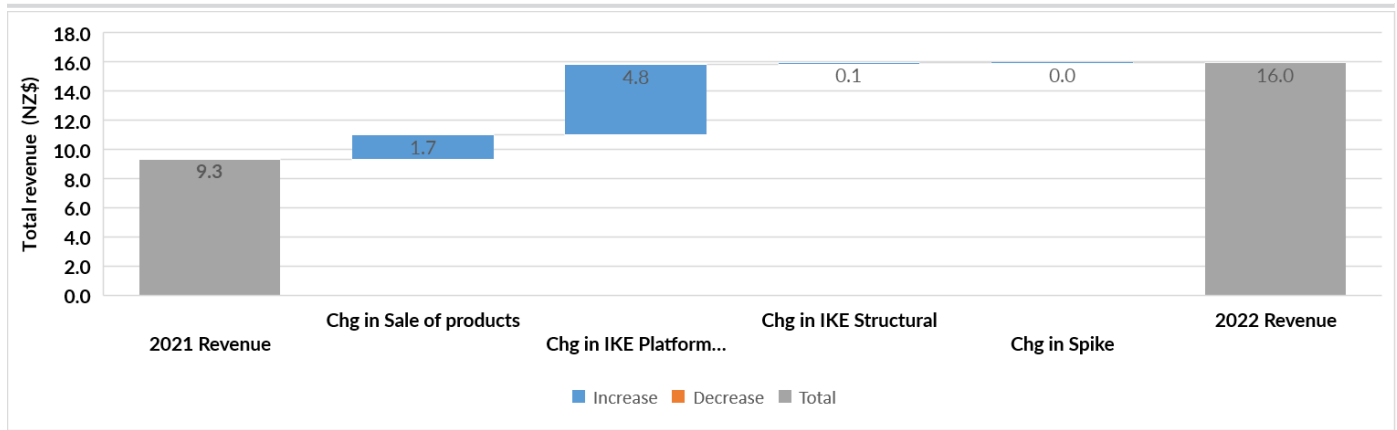
IKE's FY22 financial results to 31 March 2022 saw revenue +71% to NZ\$16m. There was a noticeable acceleration of revenue trends in the second half, with 2H22 revenue +102% to NZ\$10.3m. In addition, the company signed new contracts worth NZ\$26m. Given an approximate nine-month correlation between the timing of signed contracts and subsequent recognition of revenues, this bodes well for growth continuing into FY23. Gross margin came in at 62%, down slightly on the 64% seen in FY21 as the company invested in market development, account management, support, and deployment. The IKE team grew from 58 to 87 full-time employees over the year. In dollar terms, the gross margin was NZ\$9.9m, up +68% in FY21. At the EBITDA line, IKE reported a loss of NZ\$5.3m in line with NZ\$5.5m in the pcp. See Figure 38 above. IKE finished the year with NZ\$24.4m in net cash. The company noted a focus on recurring (subscription) and re-occurring (transactional) business models along with continued development of product capability.

Figure 41. IKE – Operating revenue FY21 actual versus FY22 actual (NZ\$m)

	FY21 Actual	FY22 Actual	Change
Operating Revenue	9.3	16.0	+71%
Cost of sales	(3.4)	(6.1)	79%
Gross profit	5.9	9.9	+67%
Other income	0.9	0.1	
General & Admin expences ("Corporate Costs")	(5.2)	(6.7)	+30%
Sales & marketing expenses	(5.6)	(6.5)	+16%
Research & Engineering expenses	(2.4)	(5.8)	+143%
Other operating expenses ("Support costs")	(0.4)	(0.5)	+6%
Finance costs	(0.1)	(0.1)	+25%
Total expenses	(13.6)	(19.5)	+44%
Profit before income tax	(7.5)	(7.9)	
Income tax benefit	0.0	0.0	
Net Profit (Loss) for the Year	(7.5)	(7.9)	-5%

Source: Company data, Forsyth Barr analysis

Figure 42. IKE – Revenue bridge FY21 to FY22 (NZ\$)



Source: Company data, Forsyth Barr analysis

Appendix 3: Key sector competitors and partners

An overarching view of competitors across IKE's three lanes of products can be seen in the section on the Competitive Landscape. Here we present an alternative/analytical view of a number of listed competitors.



Bentley Systems, Inc

Overview: Bentley Systems, Inc (NASDAQ: BSY) is an American-based infrastructure engineering software development company. Founded in 1984 and headquartered in Exton, Pennsylvania, the company offers software for infrastructure engineering. Their solutions aid the work of civil, structural, geo-professional, plant engineers, and owner-operators of infrastructure assets. The company's solutions target infrastructure sectors such as Public Works/Utilities (including roads, airports, ports, electric, and communications), Industrial/Resources (including discrete and process manufacturing, power generation, and mining), and commercial/facilities (including office buildings, hospitals, and campuses). The company has over 4,500 employees, providing software solutions to over 39,000 accounts in 186 countries worldwide. More information can be found on their website.

Products

- **Engineering Applications:** For modelling and simulation, allowing 3D design and documentation of infrastructure assets alongside the ability to analyse the functional performance of the designs created using modelling applications, thus ensuring compliance with design codes.
- **Geoprofessional Applications:** Furthers modelling and simulation to help engineers and scientists develop a detailed understanding and complete account of near and deep subsurface conditions.
- **Enterprise Systems:** Support data management and collaborative workflows for both project delivery and asset performance.
- **Industry Solutions:** Solve domain-specific problems for owners of infrastructure assets. These offerings span reality modelling, urban mobility simulation, and design and engineering of utility and communication networks.

Mission: Provide innovative software and services for the enterprises and professionals who design, build, and operate the world's infrastructure, advancing the global economy and the environment for improved quality of life.

Customer coverage: In FY21, Americas revenue was US\$483.09 million (FY20: US\$395.75 million), Europe, Middle East, and Africa (EMEA) revenue was US\$300.12 million (FY20: US\$254.04 million), Asia Pacific revenue was US\$181.84 million (FY20: US\$151.76 million).

Strategy, outlook and financials: BSY has a market capitalisation of US\$10.8B. For the year ending 31 December 2021, the company had total revenue of US\$965 million, up 20.4% year-over-year, of which direct sales channels generated approximately 92% while channel partners accounted for about 8%. Adjusted EBITDA was \$324.9 million, and the adjusted EBITDA margin was 33.7%. Management highlighted the outlook for 2022 includes: total revenues in the range of US\$1,110 million to US\$1,140 million, representing growth of 16.9% to 20.1% (in constant currency), constant currency ARR growth rate of 14% to 16%, adjusted EBITDA in the range of \$370 million to \$380 million, representing growth 16.3% to 19.5% (in constant currency), and adjusted EBITDA margin of approximately 33%.



Katapult Engineering

Overview: Katapult Engineering is a full-service OSP engineering and software developer servicing the utility industry, predominantly utility poles. Katapult's software supports the pole attachment process, increasing transparency, collaboration, and efficiency. The American firm was founded in 1991 and is a private company with headquarters in Dillsburg, Pennsylvania. The company's solutions aid in collecting and processing information in the field through various services, including providing the practical solutions to devising software for utility and fibre companies.

More information can be found on their website: <https://www.katapultengineering.com/katapult-method>

Operating through three segments:

- **Web Services:** Web-based tools and applications designed to simplify joint use and OSP engineering. The flagship product, Katapult Pro, is a full-stack solution for utility pole data collection, analysis, and delivery. These solutions allow utilities joint use departments to manage pole applications from submission to final construction comprehensively.
- **Engineering Services:** The Company leverages Katapult Pro to analyse data collected from field crews and clients. The firm specialises in pole attachment permitting, make-ready engineering, and pole loading analysis.
- **Field Services:** In the field, the company has data collecting methods.

Katapult Engineering represents IKE's closest competitor having partial competing functionality to the IKE Office product. Both companies target telecommunications and utilities in the North American market.



Laser Technology

Overview: Laser Technology, Inc. (LTI) is a privately owned American company operating in the laser measurement industry. The company's laser measurement sensors are used across various industries and applications, ranging from custom lasers for NASA to recreational rangefinders used by golfers. LTI's solutions reliably obtain accurate distances, levels, positions, and counts. These lasers are highly configurable and easily integrated into new or existing systems. LTI's industrial sensors are integrated into various applications, including flight safety systems, food processing, and wastewater treatment. The company was founded in 1985 and has headquarters in Centennial, Colorado. More information can be found on their website: <https://lasertech.com/utilities/>

Although small, LTI's laser-based speed and measurement devices overlap with IKE Office. Capabilities of the company's rangefinders extend into the utilities industry and provide a substitute for IKE Office products. Laser Tech's TruPulse line of rangefinders provides measurement solutions to collect reliable field spatial data for all types of utility disciplines, including electric, gas, water, pipeline, and telecom.



ESRI

Overview: ESRI (Environmental Systems Research Institute) is a global provider of geographic information system (GIS) software, location intelligence, and mapping. Since 1969, the company has provided geographic science and geospatial analytics that integrates, stores, edits, analyses, shares, and displays geographic information for powered decision-making. ArcGIS, the company's suite of GIS software products, is a comprehensive and scalable digital mapping and analytics software used by over 300,000 organisations. The company is privately held and has headquarters in Redlands, California. It has more than 5000 workers in 49 offices globally. More information can be found on their website: <https://www.esri.com/en-us/home>

ESRI is a key IKE partner with potential for integration across the IKE Insight product line. ArcGIS provides a reliable data and communication foundation to model utility networks. ArcGIS is used by most US utilities, with its modern capabilities reinforcing excellence for utility design and engineering. The software enables the design of 3D networks from production to customer, alongside the ability to manage projects throughout their life cycles while enforcing rules-based standards and connectivity. ESRI's ArcGIS geo-database enhances coordination and collaboration across internal and external parties through the instantaneous distribution of information alongside the capability to solicit community project interaction.



Intel Geospatial

Overview: Intel Geospatial is a cloud-based platform offering data engineering solutions, 3D visualisations, and essential analytics tools for geo-visual projects. The cloud-based framework is a new venture from Intel, leveraging AI to visualise, analyse and manage geo-spatial data, particularly across electric utilities, oil and gas companies, city governments, and ecosystem service providers that lack big-data infrastructure. This software enables users to analyse the state of various assets and run analytics to extract competitive insights, transforming traditionally labour-intensive asset management assignments into efficient data-driven systems.

Geo-visual data reveals the dynamic reality of critical assets and infrastructure, allowing users to identify the location, surroundings, and condition of assets. Leveraging AI alongside a suite of services for data ingestion, storage, cataloging, and preparation, Intel Geo-spatial can increase productivity, optimise asset and risk management operations, maximize GIS investments and strengthen systems of record.

The software capitalises on AWS data link architecture, creating a platform benefitting from the cloud's cost efficiency, and AWS services enable the company to deploy solutions with less effort. Intel Geo-spatial developed systems to ingest timely visual data and analyse it using innovative algorithms. The resulting solution is using next-generation AI to transform businesses digitally.

Intel Geospatial is a market leader in AI for infrastructure. Although it does not specifically address IKE's focus, there is potential for integration with the IKE Insight product line. More information can be found on their website: <https://www.intelgeospatial.com>



Altair Engineering Inc.

Overview: Altair Engineering Inc. (Nasdaq: ALTR) is a provider of software and cloud solutions in the areas of simulation, high-performance computing (HPC), data analytics, and artificial intelligence (AI). The company operates through two segments: Software and Client Engineering Services. Altair's integrated software suite optimises design performance across multiple disciplines encompassing structures, motion, fluids, thermal, electromagnetics, system modelling, and embedded systems while providing AI solutions and true-to-life visualization and rendering. Altair's solutions empower engineering, scientific, and business decisions through applications including AI, modelling and simulation, and visualization alongside data preparation, data science, MLOps, and orchestration. The company's software serves various industries, including universities, government agencies, manufacturers, pharmaceutical firms, banking, financial services, insurance, weather prediction agencies, and electronics design companies. Founded in 1985 and headquartered in Michigan, US, Altair has over 2,800 employees. More information can be found on their website: <https://www.altair.com/company>

Products: The Software segment encompasses software and software-related services.

- **Software:** Represents open architecture solutions for simulation, HPC, data analytics, and AI. Not all-encompassing, the offering includes solvers and optimization technology products, high-performance computing software applications and hardware products, modelling and visualization tools, data analytics and analysis products, an Internet of things (IoT) platform, and analytics tools. Further to a comprehensive offering, the company provides support and complementary software products through its Altair Partner Alliance (APA).
- **Software-related services:** Includes consulting, implementation services, and training focussed on product design and development and analysis from the component level up to complete product engineering.
- **Client Engineering Services:** The segment provides customers with ongoing expertise. The CES business hires engineers and data scientists for placement at a customer site for specific customer-directed assignments.

Mission: To explore and unleash the limitless potential of the curious and creative mind by transforming product and business decision-making through simulation, data analytics, and optimisation solutions.

Customer coverage: As of December 31, 2021, Altair has over 12,000 customers globally. Simulation and HPC customers are predominantly large manufacturing enterprises, while AI customers include banks, credit unions, BFSI, health care organizations, and finance departments across most industries, including manufacturing. In 2021, Altair generated 38%, 30% and 32% of total billings from customers in the Americas, EMEA, and APAC, respectively. No single customer accounted for more than 2% of 2021 software billings.

Strategy, outlook and financials: Altair has a market capitalisation of US\$3.95B. In FY21, total revenue was US\$532.2 million (+13% on FY20: US\$469.9 million), Software product revenue was \$453.7 million (+16% on FY20: \$391.7 million, and adjusted EBITDA was \$85.3 million (+12% on FY20: \$57.3 million). The outlook for FY22 includes total revenue between US\$555.0 million to US\$566.0 million, Software product revenue between US\$487.0 million to US\$498.0 million, and adjusted EBITDA of US\$89.0 million and US\$99.0 million.



Hexagon AB

Overview: Hexagon AB (STO: HEXA-B) is a Sweden-based company offering information technologies across geospatial and industrial enterprise applications for various industries. Although its headquarters are in Stockholm, Sweden, the business operates through more than 300 subsidiaries, with more than 22,000 employees across 50 countries worldwide. The company's product offering generates actionable information by integrating geospatial and industrial sensors, software, three-dimensional (3D) mapping, five-dimensional visualisation and analysis, domain knowledge, and customer workflows into intelligent information ecosystems. Hexagon's products facilitate a variety of industries, not all-encompassing; this includes agriculture, metals and mining, oil and gas, automotive, chemical, power, shipbuilding, construction, safety, defence and aerospace, surveying, medical devices, and pharmaceutical. More information can be found on its website: <https://hexagon.com/solutions>

Products

- **Geospatial Enterprise Solutions:** Portfolio of reality-capture sensors ranging from laser scanners, airborne cameras, and unmanned aerial vehicles (UAV) to monitoring equipment, mobile mapping technologies, and precise positioning. The sensors are complemented by software to create 3D maps and models used for decision-making in various software applications.
- **Industrial Enterprise Solutions:** A Portfolio of metrology solutions incorporating sensor and software technologies for fast and accurate measurements. These solutions include technologies such as coordinate measurement machines (CMM) and laser trackers and scanners for optimising design, processes and throughput in manufacturing facilities. It also includes CAD (computer-aided design), CAM (computer-aided manufacturing), and CAE (computer-aided engineering) platforms.

Mission: Putting data to work to enable autonomous, connected ecosystems that boost efficiency, productivity, quality and safety for our customers

Customer coverage: The geographic split of FY21 revenue is €1,602.2 million in EMEA, €1,507.4 million in the Americas, and €1,237.8 million in Asia.

Strategy, outlook and financials: The company has a market capitalisation of SEK 291.5B. Management indicates a growth strategy driven by technology and innovative leadership to grow organically and through acquisitions. In FY21, the company reported SEK 4,347.4 million in net sales alongside EBITDA of SEK 1,654.1 (38% EBITDA margin) and SEK 1,269.6 million in EBIT (29.2% EBIT margin). Financial targets set out by the company include reaching annual average sales growth of 8%–12% between 2022–2026 and an adjusted operating margin (EBIT) of >30%. The targeted sales growth is a function of 5%–7% organic growth annually, compounded with 3%–5% structural growth per year from acquisitions.



Trimble Inc.

Overview: Trimble Inc. (NASDAQ: TRMB) is an American technology company empowering professionals and field mobile workers to enhance or transform their work processes. Core technologies involve positioning, modelling, connectivity, and data analytics integrated into its product set to establish vertically-focussed, system-level solutions. Integrating sensors, software, connectivity, and information allows Trimble to transform workflows into a connected ecosystem. It operates through four segments: Buildings and Infrastructure, Geospatial, Resources and Utilities, and Transportation. The Buildings and Infrastructure segment provides solutions across architecture, engineering, construction, operations, and maintenance. The Geospatial component provides solutions targeted at surveying, engineering, and government industries. The Resources and Utilities segment predominantly services agriculture, forestry and utilities industries. The transportation segment centres on solutions for the long-haul trucking and freight shipper markets. Trimble Inc. was founded in 1978. Today the company has 11,931 employees and is headquartered in Sunnyvale, California. More information can be found on its website: <https://www.trimble.com/en/our-company/about/overview>

Products

- **Buildings and Infrastructure:** The building construction portfolio provides solutions for the residential, commercial, and industrial building industry across the entire life cycle of a building. This includes software for 3D conceptual design and modelling; BIM software used in design, engineering and construction, and enterprise resource planning and project management.
- **Geospatial segment:** This segment of solutions includes field-based data collection systems and field software, real-time communications systems, and back-office software for data processing, modelling, monitoring, reporting, and analysis – replacing less productive conventional methods.
- **Resources and Utilities:** This segment offers precision agriculture products and services, such as guidance and positioning systems, including autonomous steering systems, automated and variable-rate application and technology systems, and information management solutions.
- **Transportation:** This segment offers solutions for long-haul trucking and freight shipper markets; mobility solutions comprising route management, safety and compliance, end-to-end vehicle management, alongside routing, mapping, and predictive modelling solutions.

Mission: Transform the way the world works by delivering products and services that connect the physical and digital worlds.

Customer coverage: The geographic segmentation of total revenue in FY21 was 51.0% in North America (US\$1,866.1 million), 30.7% in Europe (US\$1,124.6 million), 12.2% in Asia (US\$447.3 million), and the Rest of the World segment contributed 6.1% (US\$221.4 million).

Strategy, outlook and financials: The company has a market capitalisation of US\$15.6B. In FY21, total revenue was US\$3.66B (+16% on FY20: US\$3.15B), the gross margin was 58.3% (down 80bps on FY20), adjusted EBITDA was US\$936.9 million (+17% on FY20: US\$798.7 million), and adjusted EBITDA margin of 25.6% (+30bps on FY20). The company is targeting a growth strategy centred on multiple elements, including executing its Connect and Scale strategy, increasing focus on software and services, focussing on attractive markets with significant growth and profitability potential, geographic expansion with localisation strategy, strategic acquisitions, and other pillars. The outlook for FY22 includes total revenue between US\$3.76B–US\$3.82B, an operating margin of approximately 23.0%–23.5%, and organic ARR growth of 16% (+12% in this metric in FY21).

Source: Various company websites and news agencies, Refinitiv, Bloomberg, Forsyth Barr analysis

Appendix 4: Customer stories



Horrocks Engineers: Overview

Horrocks Engineers is widely recognised as a leading full-service civil engineering firm in the western United States. Founded in 1968, the company has a long history underpinned by a solid commitment to performing high-quality field data collection, pole load analysis, and make-ready engineering. The company has established itself as a progressive industry leader, leveraging an employee base of seasoned engineers, surveyors, drafters, and technicians. Horrocks' extensive experience administering utility pole projects of varying size, scope, and complexity has led to significant technical expertise and management expertise. Consequently, Horrocks has established a strong reputation and confidence among its stakeholders and the market in which it operates. Its formidable brand image resulted in the US's largest wireless infrastructure provider asking for their help with an aerial fibre deployment in Salt Lake City, Utah. However, this project was conditional on Horrocks using IKE instead of old-fashioned manual collection methods.

Introduction to IKE

With more than 50 years of industry experience, Horrocks was skeptical about deviating from established engineering methods. The company maintained caution when engaging with IKE's opportunity. However, their risk-averse view was short-lived. Horrocks adopted the forward-looking pole data collection solution IKE presented after recognising its effectiveness and guaranteed results. Horrocks was enthusiastic about the proposition offered by IKE 4, particularly drawn towards less time in the field, Photo Verifiable Accuracy, and the integration with O-Calc Pro. Horrocks' employees experienced firsthand the practicality of IKE 4 after a field training seminar. Brian Christensen, a Principal Engineer at Horrocks, reported that the initial training was "just right". For Horrocks Engineers, "IKE 4 was easy to learn and had a friendly user interface". Christensen added, "IKE 4 was intuitive, and once his team members got a few poles under their belt, they were ready to go". The transition from training to rollout was instantaneous for Horrocks. Integrating IKE's tool allowed completion of this project in record time as Horrocks leveraged the ability to accelerate the process, including the MRE and permit submission portion of this 600-pole project. IKE 4 met Horrocks' expectation of reducing time and improving consistency for field measurements. The product overdelivered in the additional time saved in back office operations relevant to pole loading through seamless unification between the IKE Office cloud and O-Calc Pro. Eliminating the transcription field notes and manual building of the pole in O-Calc Pro "was an added bonus," said Brian.

Outcomes

IKE operates by the mantra "a smart picture can save a thousand hours". Although slightly overreaching, IKE products significantly increase the efficiency of traditional methods in collecting, analysing, and managing pole information. Brian revealed the Photo Verifiable Accuracy embedded in an IKE Photo and point-to-point measurements, "has already proven to be a great backup record and something that's helping Horrocks minimize revisits to the pole". "IKE 4 is a productivity enhancement tool that allows our staff to collect data with a high degree of accuracy and productivity compared to traditional methods". The rollout of IKE at Horrocks proved beneficial as the company could execute the project on time and within budget, ensuring all client needs were met. Further, integrating IKE will provide additional dividends for Horrocks through greater efficiency on other projects. In Brian's words, "IKE 4 is a productivity enhancement tool that allows our staff to collect data with a high degree of accuracy and productivity compared to traditional methods".

CYIENT

Cyient: Overview

Cyient Limited is a global company founded in 1991, providing geospatial, engineering design, information technology (IT), and data analytic solutions. The company has headquarters in Hyderabad, India, servicing the North American, European and Asia Pacific markets. A diverse workforce empowers engineering services, electronic and mechanical manufacturing services, and digital technology solutions, including geospatial services encompassing data acquisition, remote sensing, photogrammetry, navigational data mapping, and location-based services. Through co-innovation, sustainable solutions and practices, and service excellence, the company's offering is integrated across a wide range of industries bringing a valuation above NZ\$94 billion. Leveraging a telecom division with combined experience of over 60 million hours has resulted in a technologically progressive company. Cyient is a market leader in telecom and utilities engineering, pioneering next-generation technology since the onset of the fibre and 5G revolution.

Introduction to IKE

Cyient has been a partner of IKE for more than six years through the company's IKE 3 product. Cyient played an integral role in developing the flagship IKE 4 (now IKE) product in 2016, facilitating real-world input into the product design process and sharpening today's pole data collection solution. A Cyient senior manager recalls, *"their development team came to our location with a prototype, and we were able to tell them what we liked and didn't like, and they were responsive"*. The partnership has been invaluable and has introduced significant positives for both companies. Cyient, *"helped steer [IKE] to create a solution that fits"* with the PoleOS Company being *"a fantastic partner and supplier"*. The Indian counterpart relied on IKE for a solution to the lack of visibility over the management of capital assets as they continued to grow their telecom business. Its existing systems provided Cyient with new information on the use of devices and the productivity of its fielders. The company needed a solution to benchmark the field collection process to improve the usage of devices and the performance of the people using them, increasing the overall delivery speed of actionable insights.

Outcomes

IKE Office Pro provided the solution Cyient needed through pioneering workflow enhancements and new features, reflective of IKE's excellence in innovation. The newly developed IKE Dashboards proved game-changing for Cyient, with advanced visualisations providing vital insights into how projects perform. IKE Office Pro streamlined data received directly from the IKE device, enabling Cyient to interact with field-specific dashboards aimed at managing devices and fielders. Implementing these dashboards provided detailed metrics on device usage and fielding progress, areas of their business that previously lacked insight. As the former senior manager recalls, *"It [IKE] helps make new employees efficient in short order as opposed to months of training on traditional data collection methods"*. The new generation of IKE Office positively impacts team productivity as employees can ramp up fast alongside being able to address performance issues by monitoring collection speeds. Back-office teams can leverage IKE Office Pro features, greater productivity, and a consistent data flow to draw insights. Globally recognised as a market leader in outsourced engineering, the ability to easily monitor efficiency in driving data from their field teams to their outsourced engineering teams has been invaluable for Cyient.



Crown Castle International: Overview

Crown Castle International Inc. (CCI) is the largest shared communications infrastructure provider for cell towers, small cells, and fibre in the US. The business works across communications and utilities as a US national engineering service provider (ESP).

Introduction to IKE

IKE originally described CCI's profile to the market in July 2020 as a new customer win, but only in March 2021 did it name them as the significant customer. In the March 2021 update, IKE noted that CCI has now standardised onto the IKE Platform for utility pole-related 5G and fibre deployment processes, and the rollout of the IKE Platform had begun. IKE has now deployed its systems across several CCI regions. IKE noted that it is an important long-term contract for pole-related 5G and fibre deployment processes. IKE CEO Glenn Milnes commented: *"We are pleased to be closely aligned with CCI. Our objective is to get CCI networks built and to market faster, be it fibre or 5G construction, where the IKE platform has proven to more than double their pre-construction speeds for network deployments"*. Mr Milnes added that *"the majority of the revenue opportunity for IKE relating to CCI standardisation however comes from their 200+ engineering service providers, as opposed to CCI itself"*.

Outcomes

When announcing CCI using the IKE Platform, IKE stated that the contract, and related engineering company contracts, was expected to translate to approximately \$0.7m in revenue per annum. CCI's 2020 Director of National Construction Small Cell, Robbie Heaps, said: *"Delivering on the Crown Castle promise calls for a modern approach to how small cell and fibre data is collected in the field and then processed in our back office. IKE brings the platform and a creative and resourceful team to reduce permitting acceptance times. We're leaning on them to improve our speed to market"*.

Source: Company, Forsyth Barr Analysis

Appendix 5: SWOT

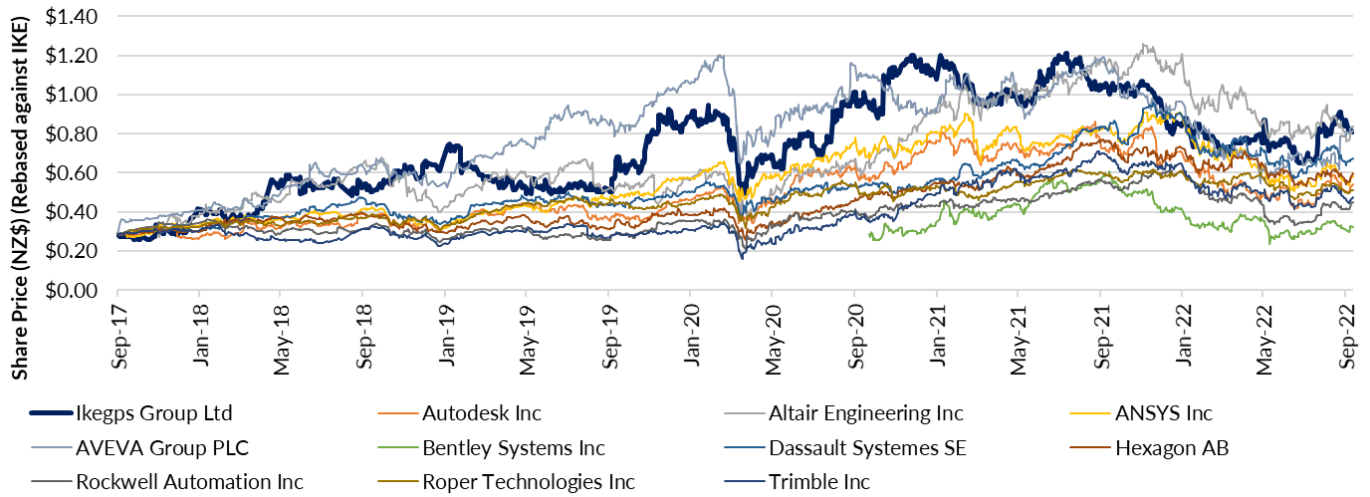
Figure 43. IKE – Assessed key strengths, weaknesses, opportunities, and threats

Strengths	Opportunities
<ul style="list-style-type: none"> ■ Seen as an expert across the US electric utility and communications space, IKE is a trusted market brand. Customers see it as offering accurate, high-quality engineering outcomes. ■ Customer retention rates are high. Once implemented into large infrastructure companies, these will likely be very sticky long-term relationships. ■ IKE is one of a few technology companies dedicated to this specific area/field. ■ IKE is hyper-focussed on the US and Canadian markets for at least the next 2–3 years, albeit they have customers in other countries. ■ IKE is SOC2 Type I certified for data security – the global gold standard. ■ IKE is well capitalised with NZ\$24.4m in net cash. ■ The sales cycle with engineering firms is often concise as they on-bid contracts. ■ Once installed inside customers, IKE can be pretty hands-off with minimal ongoing training. IKE trains the trainers via 'IKE University'. ■ IKE's costs are mostly people, so IKE can scale as required. ■ IKE has transitioned from a hardware to a software firm over the last 6–7 years, improving the business model. ■ IKE's long-term strategy is to build upon three interrelated lanes that cover technology excellence specific to the 1) collection, 2) analysis and 3) management of distribution power infrastructure, and delivery of Customer eXperience (CX) excellence. Put together, these lanes target to create long-term differentiation, potentially delivering some pricing power in the long run. Its products integrate to cover a broad workflow verse the standalone nature of competitor products. ■ Solid gross margins (~62%) should see profitability materialise as sales scale. ■ The sectors IKE operates in are very defensive to recessionary headwinds. ■ Dual-listed on the NZX and ASX, providing access to capital for growth and strategic acquisitions. ■ Among >350 enterprise customers in NA, IKE has already on-boarded five of the largest investor-owned utilities in the US and several of the largest communications companies. ■ IKE delivers integrated 'middle-ware' software so electric utility/communication customers can adopt IKE products more easily without impacting existing asset management, financial and GIS systems. 	<ul style="list-style-type: none"> ■ An ageing workforce within utility and telco network companies is making it necessary to make productivity gains via technology. A younger generation replacing them is also expecting to operate in a modern way. ■ Work practices are required to face public criticism (including outright liability), and digitising work processes gives something to reference to cover many of those liability risks. ■ Most customers are monopolies and often share best practices, so success aids in building momentum. ■ US infrastructure networks require a substantial multi-decade capital improvement programme to meet reasonable standards. ■ Opportunity to extend deeper into the workflows at electric utility and telco network companies around analytics, dashboards and automation. ■ Automation capability will significantly lower customer costs and increase speed and data quality, and the IKE product set should be constantly enhanced over the next 12–36 months. ■ Due to the communications infrastructure boom (fibre and 5G networks), there appear to be 6–10+ years of market growth specific to attaching fibre and 5G antennas onto electric distribution networks. ■ The fast transition to Electric Vehicle EVs requires electric utilities to build capacity (IKE's software supports engineering design and construction). ■ IKE's license management platform makes it easier for customers to deploy and adding a multiplier to the revenue model. ■ IKE is focussed on building technology to automate engineering workflows that will potentially disrupt industry-wide engineering work practices, such as pole load analysis. ■ Acquisitions could expedite scale and product development roadmaps on the build-or-buy spectrum, as was seen with the Pole Foreman. ■ IKE operates within large TAM markets with low penetration at ~6.5%. ■ Engineering firms are supportive of the product, given that it aids them in driving productivity and profitability. ■ A tier-1 group of national engineering firms have contacts with many utility and telco network companies, aiding the sales process into these firms given deep, long-term relationships/contracts. ■ One of the prominent enterprise players may make a buy versus build decision, potentially making IKE a takeover target. ■ AI implemented over the company's extensive data set could provide a runway for offering new services, analytics and services in the future.
Weaknesses	Threats
<ul style="list-style-type: none"> ■ Changing risk-averse work practices at utility and telco network companies is challenging, given large networks and workforces. ■ IKE is hyper-focussed on the North American market because of the size of the opportunity and because IKE is small. Other countries operate different sets of regulatory/engineering standards making geographic expansion more difficult. While there are overlaps, each jurisdiction has many nuances. ■ Additional scale is needed for IKE to achieve financial profitability and net positive cash flow (IKE is deliberately choosing to pursue customer acquisition over near-term profitability). ■ Smaller engineering firms that IKE deals with do have a business failure rate. This raises observed customer churn rates. ■ Compared with many of its customers and partners, IKE is substantially smaller in size and scale, potentially making negotiations somewhat unbalanced in terms of power. 	<ul style="list-style-type: none"> ■ Larger and more established super enterprise software firms (GE Energy, Oracle, Intel, Esri, Schneider Electric, and others) may see the sector applications as an opportunity and disrupt IKE's progress. In the long term, many technology companies will help utilities manage assets and this is not deemed to be a 'winner takes all' market opportunity. ■ Data security breaches would severely impact the company's market perception and prospects. ■ Growth may take longer to transpire, providing the needed operational leverage and, as such, requiring the company to either slow product improvements, cut costs or raise additional money. ■ Finding and retaining software development staff could reduce the ability to design and implement solutions within desired timeframes. ■ Protection of IP could be costly given the relative size of the world's leading producers of software and the litigious nature of the North American market.

Appendix 6: Performance against a basket of comparable companies

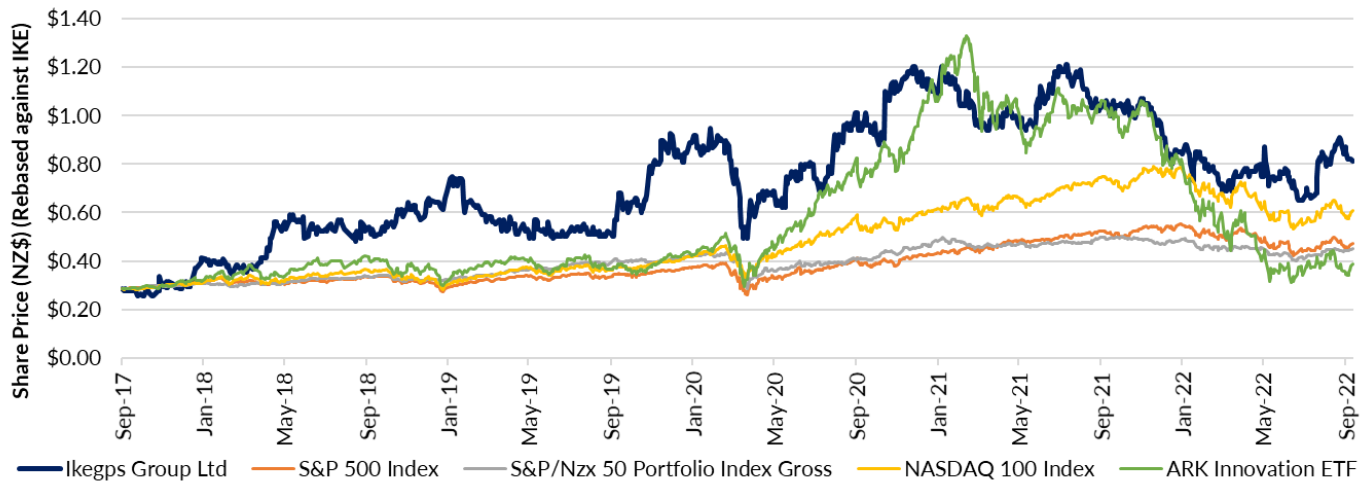
Performance against a basket of comparable companies: as seen in Figure 44 below. Against these ten companies, IKE has performed strongly over the last five years. We re-based stock price histories of the companies involved rather than showing market prices, allowing for a better comparison of share price performance. Relative to several equity indices, IKE has also performed well. Figure 45 below benchmarks IKE against the NZX50, S&P500, Nasdaq and the ARK Innovation fund. Again the index data has been re-based for comparative purposes.

Figure 44. IKE – Peer comparative stock performance (all re-based to IKE's share price)



Source: Forsyth Barr analysis

Figure 45. IKE – comparative index performance (all re-based to IKE's share price)



Source: Refinitiv, Forsyth Barr analysis

Appendix 7: Company history

Figure 46. IKE – Company history

Year	Month	Event
2013		Development of electric utility solutions begins after strong demand from U.S. utility customers
	Nov	General Electric (G.E.) makes strategic investment & signs a global trademark licence agreement for IKE's MapSight product
2014	Jun	IKE introduces Mapsight to the market offering it across the utility industry
	Jun	Spike smartphone solution is commercialised
	Jul	IPO on NZX raises NZ\$25m, with ticker IKE
	Oct	In-Q-Tel (Venture capital firm investing in high-tech companies for U.S. Intelligence) partnership widens into IKE's smartphone solution
	Nov	Distribution of SBD smartphone measurement solution begins after reaching liscensing agreement
2015	May	Partner with DXG Technology in Taiwan to manufacture IKE's laser-based measurement tools
	Aug	Integration of Mapsight™ & SPIDA Calc® structural analysis software through a collaboration agreement with SPIDA technology
	Sep	Partnership with Carahsoft Technology Corp. (TAA Compliance) grants IKE's products inclusion into the U.S. government's GSA Schedule
	Oct	Spike partner discussions with major global partners
	Dec	IKE achieves its initial NZ\$1m contract with Global communiation and infrastructure
2016	Jan	NZ\$0.9m was raised through institutional placement at NZ\$0.81 per share
	Feb	Introduces IKE4; the flagship field data collection and reporting solution
	Mar	G.E. discontinues trademark on IKE's MapSight product resulting in a share buyback of 0.9m IKE shares from GE
	May	Cyient adopts IKE4 enabling the refinement of the product through its use in the roll-out of Fibre in the U.S
	Jun	Spike software integration with Prontoforms allows users to submit measurements to back-office systems directly from the field
	Aug	NZ\$5.25m was raised through equity placement and NZ\$3.0m through an underwritten share purchase plan
	Nov	Dual listed on ASX with ticker IKE
2017	Jul	Spike's integration with Autodesk® software allows the use of Spike files with computer-aided design (CAD)
	Jul	IKE analysis product line launched
	Aug	NZ\$3.7m was raised through equity placement and NZ\$1.3m through an underwritten share purchase plan
	Dec	IKE4 was adopted by AT&T (the world's largest communications company)
2018	Mar	Integration of Spike with Esri's Survey123 for ArcGIS
	Mar	All Californian and Washington investor-owned utilities have now adopted the IKE4 platform as their primary product of choice
	Aug	AT&T writes the 'IKE Standard' into its Articles for aerial make-ready-engineering projects
	Aug	Raised NZ\$5.0m through equity placement and NZ\$1.25m through an underwritten share purchase plan
2019	May	IKE analyse signs on Charter Communications and Crown Castle (USA's largest cable company and largest provider of communications infrastructure, respectively)
	Sep	8 of the 15 largest U.S. Communications & Cable companies have signed onto IKE's platform
	Sep	US\$3.4m (NZ\$5.4m) acquisition of PoleForeman assets
	Sep	Raised NZ\$5.0m through underwritten equity placement and NZ\$1.5m through oversubscribed retail offer
2020	Jul	IKE set as 'standard' across pole-related 5G and fibre technologies by Crown Castle
	Jul	NZ\$19.7m raised through institutional placement and 1:7 entitlement offer
	Oct	IKE analyse wins an agreement with ComEd (one of the largest U.S. utility companies) to help assess and design its power distribution infrastructure
2021	May	Acquisition of Visual Globe's A.I. platform for an initial payment of US\$3.3m in cash and up to an additional US\$7.1m by 2024
	Aug	A\$23.6m (NZ\$24.7m) was raised through underwritten share placement (~NZ\$19.2m) and an oversubscribed share purchase plan (NZ\$5.5m)
	Oct	Alex Knowles was appointed as the new Chair after Rick Christie announced decision to step aside
2022	Feb	IKE announces strong contract momentum after signing several contracts (aggregate NZ\$6m) with key U.S. utility companies in the first 7 weeks of CY22
	Jul	Provides strong Q1 earnings guidance with revenue +162% vs pcp

Source: Company records, various web sources, Forsyth Barr analysis

Appendix 8: Key terms and definitions

Figure 47. IKE – Key terms and definitions

Term	Definition
AEC	The architecture, engineering and construction sector
AI	Artificial Intelligence
COS	Cost of Sales
DCF	Discounted cash flow
EAM	Enterprise asset management (EAM) is a combination of software, systems and services used to maintain and control operational assets and equipment. The aim is to optimize the quality and utilization of assets throughout their lifecycle, increase productive uptime and reduce operational costs.
EBITDA	Earnings before interest, taxes, depreciation and amortisation
IOUs	Electric Investor Owned Utilities are private companies and investor owned enterprises that act as public utilities. Some of the largest include, Excelon, Entergy and Southern Company.
Enterprise Mobility	The trend towards increased mobility in the workforce, and in particular the growth of smart phone and mobile computing for enterprise
ESOP	Employee Share Option Plan
EV	Enterprise value
EV/EBITDA	Enterprise value-to-EBITDA is a financial ratio that measures how much it would cost to purchase a company's value in terms of its EBITDA.
EV/Sales	Enterprise value-to-sales is a financial ratio that measures how much it would cost to purchase a company's value in terms of its sales.
G&A	General and Administration expenses
GE	General Electric
Geospatial	Relating to data that is associated with a particular location
GIS	Geographical Information Systems which involve the capture, integration, storage, editing, analysis, sharing, and display of geospatial information
GPS	Global Positioning system for a worldwide navigational and surveying facility based on the reception of signals from an array of orbiting satellites.
HOA	Heights of Attachment records and reports for audits, site planning, and sales that include heights of attachment and basic pole information.
ISMS	Information security management system
LiDAR	Acronym for Light Detection and Ranging. A method for calculating distances by targeting an object or a surface with a laser and measuring the time for the reflected light to return to the receiver.
MRR	Make-Ready-Recommendations leveraging the full depth of IKE Analyze in a consultative partnership to give you MRR for a project.
NESC	The National Electrical Safety Code has three basic structural loading conditions that may apply to various components of an overhead line. These load cases are generally referred to as 1) district loading, 2) extreme wind and 3) extreme ice with concurrent wind.
NESC	National Electrical Safety Code requirements
NPAT	Net profit after tax
OEM	Original equipment manufacturer
PLA	Pole load analysis provides industry-standard pole records with completed PLA in IKE Structural/Pole Foreman, O-Calc Pro, SpidaCalc, and PLS CADD.
Pole audit	The survey of utility poles on condition of the pole, other hardware, inventory of equipment, shared assets, attachment count, and other valuable information about a utility's infrastructure.
PoleForeman	An IKE brand for its pole loading and obstacle clearance software.
R&D	Research & Development expenses
S&M	Sales and Marketing expenses
Sagline	An IKE brand for its wire and fibre sag and terrain clearance software
SAM	Serviceable Addressable Market
SC	Safety Code
SC	Safety Codes
SEC	Securities and Exchange Commission
SOM	Serviceable Obtainable Market
Spike	Spike is a compact laser beam measurement device for users in the field to create 3D shapes and measurements.
SSO	Single Sign-On
TAM	Total Addressable Market

Source: Forsyth Barr analysis

Appendix 9: Board profiles and remuneration

IKE has six directors with four classified as independents including the independent chairman.

Figure 48. IKE – Board profiles

Board Member	Position	Description
Alex Knowles	Chairperson and Independent Director	Alex has investing and operating experience with international companies in the information technology and transportation industries. Based in Los Angeles, he was formerly Chief Operating Officer of the largest international freight forwarder and small parcel consolidator in the US Alex took over as Chair at the end of October 2021.
Glenn Milnes (MBA (Dist.), BSc (Hons), B PhD)	CEO and Managing Director	Glenn Milnes is the CEO and Managing Director at ikeGPS, where he is accountable for the company's overall strategy, performance, and growth. Prior to leading ikeGPS, Glenn previously held senior executive, strategy and corporate development positions in the Communications industry with Cable & Wireless International, and No 8 Ventures.
Eileen Healy (BS Electrical Engineering)	Independent Director	Serial entrepreneur of two high-tech startups addressing the US communications market including Healy & Co, providing outsourced engineering to the US utility market. Customers include AT&T Mobility, T-Mobile, Vodafone, Verizon Wireless, Frontier Communications, and FirstNet. She also founded and sold Telecompetition Inc., a data analytics company. Healy & Co's current contracts include the build of a greenfield 5G network using ORAN (Open Radio Access Network) across all of the US for a major mobile network operator and the transition of a 4G network from Los Angeles County to AT&T Inc.
Mark Ratcliffe	Independent Director	Mark was the founding CEO of Chorus New Zealand from 2007 to 2017 where he led the deployment of New Zealand's national fiber network. Prior to Chorus Mark was CIO and COO of Spark (formerly Telecom NZ). Prior governance roles include Director of 2 Degrees from 2017 to 2020. The majority of his current portfolio is in the Infrastructure Sector and he is currently the Chair of First Gas, Tuatahi Fast Fibre, and a number of other private and public sector boards.
Fred Lax (MSEE AND BSEE)	Independent Director	Fred Lax is an executive leader with extensive global experience in the telecommunications industry and related technologies. Based in California, he is a former director of NASDAQ listed Ikanos Communications Inc. (acquired by Qualcomm Atheros), and former Chief Executive Officer and President of NASDAQ listed Tekelec, Inc.
Rick Christie (MSc (Hons) Chemistry)	Non-executive independent director and former Chair	Rick Christie is the former Chair of Ebos Group, where he was Chair through much of its growth to become a \$3B+ business today. He has experience on a number of other major boards, including TVNZ. Rick was previously CEO of investment company Rangatira Ltd and had 20 years of executive management experience in the international oil and gas industry. Rick stood down as Chair at the end of October 2021.

Source: Company records, Forsyth Barr analysis

Remuneration for the Board of Directors

Directors' fees are currently set at a maximum of \$324,500 for the non-executive Directors. The actual amount of fees paid in the year up to 31 March 2022 was \$319,417. Each Director is separately entitled to be reimbursed for reasonable travelling, accommodation, and other expenses incurred in performing their role Directors. No Director of either of the Group's subsidiaries receives any remuneration in that capacity. Options granted to Directors are disclosed in Directors' relevant interests. The total Directors remuneration pool for FY23 is set at \$320,000. The last increase in Directors' fees was made with effect from February 2022.

Figure 49. Remuneration for the Board of Directors and shareholdings (as at 31 March 2022)

Name	Category	Total (NZ\$)	#Shares	Shareholding %
Alex Knowles	Chairperson and Director	\$ 158,056	11,522,503	7.2%
Glenn Milnes	Executive Director		1,192,220	0.7%
Frederick Lax	Independent Director	\$ 161,056	494,828	0.3%
Eileen Healy	Independent Director	\$ 155,946	0	0.0%
Mark Ratcliffe	Independent Director	\$ 109,547	163,964	0.1%
Rick Christie	Non-executive independent director and Ex-Chair	\$ 166,889	301,307	0.2%
William Morrow (resigned)	Independent Director	\$ 4,325	n/a	n/a
	Total	\$ 755,819	13,674,822	8.6%

Source: Company records, NZX filings, Forsyth Barr analysis

Appendix 10: Management profiles and employee remuneration

Figure 50. IKE Management team

Management	Position	Description
Glenn Milnes	CEO and Managing Director	Glenn Milnes is the CEO and managing director at ikeGPS, where he is accountable for the company's overall strategy, performance, and growth. Glenn joined ikeGPS following more than a decade of leadership roles at organizations including International Communications group, Cable & Wireless International, London, where he oversaw a group of more than 30 fixed and wireless businesses, and No. 8 Ventures. Before entering the business world, Glenn played professional cricket in New Zealand, England, and The Netherlands, representing New Zealand at various levels. Glenn holds an MBA with Distinction from Imperial College London, a Bachelor of Science with First-Class Honors from Oxford Brookes University and a Bachelor of Physical Education from the University of Otago.
Stephen Fairbrother	Chief Finance Officer	Stephen is the Chief Finance Officer at ikeGPS, where he is responsible for ensuring the financial integrity of IKE as it scales to meet customer demand and overall growth. Stephen works closely with all business functions to support their finance needs for their areas of focus in the business. Stephen holds a commerce degree from Victoria University of Wellington. and is a Chartered Accountant, Australia – New Zealand. He has more than ten years of experience working alongside and within growth businesses including several high-performing cloud platform businesses.
Leon Toorenburg	Chief Technology Officer	Leon Toorenburg is the Chief Technology Officer at ikeGPS, where he leads the research department to investigate how to leverage new technologies to simplify and speed up ikeGPS customers' workflow. Leon is the founder of ikeGPS and has been instrumental in the development of all ikeGPS' products. He holds numerous US and international patents on measurement technologies. Leon holds a Bachelor of Science from Victoria University and Bachelor of Engineering with honors from Canterbury University.
Chris Ronan	Chief Marketing Officer	Chris is IKE's Chief Marketing Officer where he is accountable for IKE's marketing, communications, brand, and customer experience. Prior to joining IKE, as the founder and president of two leading North American digital marketing agencies Chris led marketing and brand initiatives for some of the world's leading companies including Ford Motor Company, Dell, Air New Zealand, Emirates Team New Zealand, and SouthWest Airlines among others, helping these businesses shape their identities and tell their stories. He has a [Arts] degree from Midwestern State University. Before entering the world of commerce Chris was a semi-professional road cyclist.
Chris DeJohn	SVP, Sales	Chris brings a wealth of experience in the enterprise and telecommunications market, having participated in the emergence and transformation of some of the largest data, cellular, and voice network infrastructure in the world throughout his career. He has seen how modernisation and economics fundamentally changed with the application of new technologies. With the nation's utility industries on the verge of a similar radical shift, Chris helps lead IKE's application of our cutting edge technology to guide customers in navigating this evolution.
Lydia Siloka	Head of People	Lydia joined IKE in the second half of 2020 to lead the people function and drive employee engagement. Lydia joins IKE having been in People leadership positions across a range of international and growth businesses including as Senior People Manager at Amazon, Country People Director at Thales Digital and Security, HR Manager, South Africa for Teleperformance, and a HR leader at Victoria University.
Jareth Rossking	Head of Engineering	Jareth leads the engineering teams across the IKE Office, IKE Structural (PoleForeman), and IKE Insight solutions. He has 10+ years of experience in the information technology industry specializing in the utility sector. Jareth started his career as a software developer and grew into the Head of Engineering role at AgilityCIS, where his team consisted of 75 developers working across a number of countries and timezones.
Malcolm Young	SVP Structural Analysis and Head of IKE Structural	As VP of Structural Analysis Malcolm is responsible for the development and delivery of IKE's structural analysis products and for the quality control function for IKE Analyze. Prior to joining IKE, Malcolm was founder and president of PowerLine Technology – the developer of IKE's PoleForeman product – where he built the company to the position of having some of the largest investor-owned utilities in North America as embedded customers. Before that Malcolm held senior engineering management positions at Alabama Power. Malcolm is a qualified structural engineer and is considered to be one of the preeminent thought leaders in the US market related to power poles and a structural analysis.

Source: Company records, Forsyth Barr analysis

CEO remuneration

Glenn Milnes started as CEO in July 2010. His agreement reflects standard conditions for a CEO of a listed company being a combination of fixed salary and incentive arrangements. The incentives are a Short Term Incentive (STI) component set at up to 25% of base salary, linked to specific financial and non-financial targets set annually by the Board, and a Long Term Incentive (LTI) component set at up to 25% of base salary, in employee stock options. Mr Milne's base salary (formally in USD) for the year to 31 March 2022 was NZ\$836,266 and he received bonuses of NZ\$286,783. Glenn had 1,239,000 employee stock options as of 31 March 2022 of which 539,000 (with an exercise price of \$1.06) was granted on 8 July 2021. The remaining employee stock options have vesting dates from 2020 to 2026. Vesting at each date is dependent on his remaining an employee at the applicable vesting date.

Figure 51. Remuneration for CEO/Executive Directors

Name	Category	FY22 Total (NZ\$)
Glenn Milnes	CEO and Managing Director	\$ 1,123,049

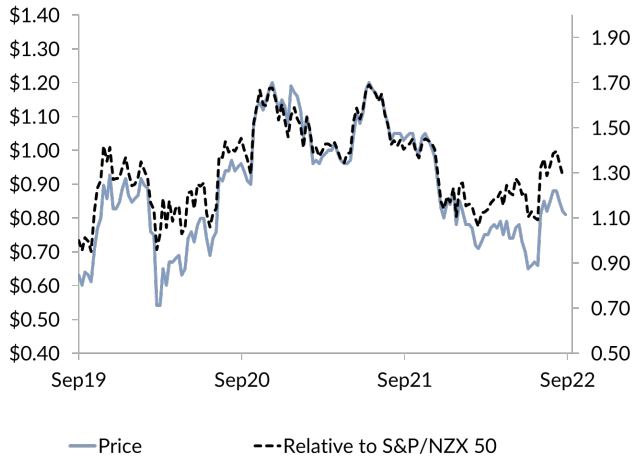
Source: Company records, Forsyth Barr analysis

Figure 52. Description

Remuneration	Number of Employees
100,001-110,000	7
110,001-120,000	5
120,001-130,000	3
130,001-140,000	7
140,001-150,000	5
150,001-160,000	1
160,001-170,000	2
170,001-180,000	1
180,001-190,000	1
190,001-200,000	2
210,001-220,000	2
220,001-230,000	1
230,001-240,000	1
250,001-260,000	2
260,001-270,000	1
310,001-320,000	1
340,001-350,000	1
350,001-360,000	4
400,001-410,000	1
410,001-420,000	2
640,001-650,000	1
	51

Source: Forsyth Barr analysis

Figure 53. Price performance



Source: Forsyth Barr analysis

Figure 54. Substantial shareholders

Shareholder	Latest Holding
Wilson Family Trust	17.5%
K & M Douglas Trust	8.7%
Scobie Ward	8.3%
TEK Trust	7.2%

Source: NZX, Forsyth Barr analysis, NOTE: based on SPH notices only

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