

Alpha shares analysis

29 August 2023

Two tech growth stories continuing to expand

Cloud computing and cybersecurity have been two of the big growth drivers within the broader technology sector and there is enormous hype around artificial intelligence picking up the baton for the years ahead.

Analyst: Phil Oakley

Our companies this week are **Arista Networks (US:ANET)** and **Darktrace (DARK)**. Arista has benefited enormously from the surge in demand by cloud service providers for its network infrastructure technology. Cloud computing is still a growth industry and Arista has grown its own proportion of market share, too. Furthermore, it could also see a significant uplift in demand thanks to the need for speed in server communications due to AI implementations.

Darktrace has been subject to short interest and some controversy since its shares went public in the UK. Its cyber security offering is incorporating AI to become more useful and proactive but there are some questions around its short-term revenue growth prospects against an uncertain economic backdrop.

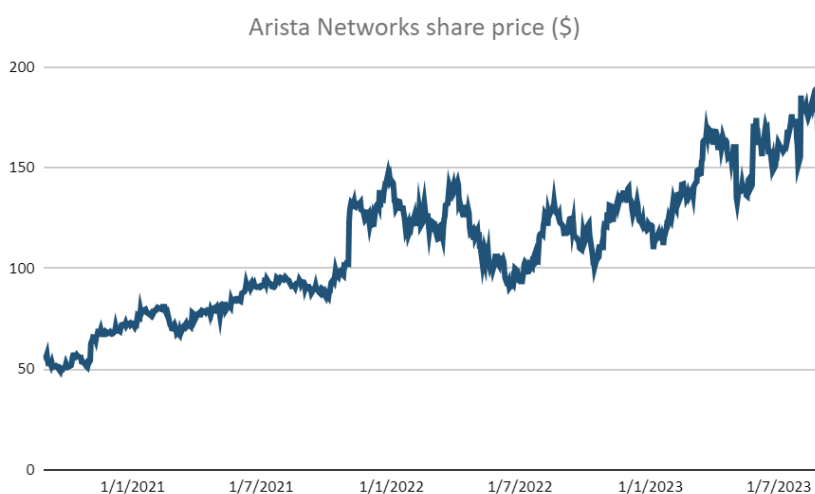
Arista Networks

Most investors are aware of the huge growth seen in cloud computing services in recent years. Much of the commentary around this market has been focused on tech giants such as **Microsoft (US:MSFT)**, **Amazon (US:AMZN)**, **Alphabet's (US:GOOGL)** Google and **Meta Platforms (US:META)** who provide these services.

However, in order to offer cloud networking services to their customers, they are reliant on companies that make the network infrastructure and offer the kind of capabilities that are needed.

One of those companies is **Arista Networks (US:ANET)**. Its shares listed on the New York market back in 2014 and have performed very well.

So far in 2023, the shares are up by 47.7 per cent with gains of 132 per cent over the last five years. This compares with the S&P 500 index which is up by 14 per cent and 52.2 per cent over those same time frames, respectively.



Source: LSEG Data & Analytics

Arista is a leading company in the market for ethernet switches, routers and software to large data centres as well as company local networks (referred to as the campus market).

Ethernet switches connect computers, wi-fi access points, internet of things (IoT) devices and servers to networks so that they can communicate with each other and the internet instead of talking over each other.

As businesses grow and they demand more of their networks, the ethernet switches need to be capable of handling more tasks at faster speeds. By offering multi-gigabit ethernet switches, service speeds on the same infrastructure are increased without the need for extra cabling.

Arista is the market leader in the 100/200/400 gigabit switches market with a market share of 41 per cent.

In the broader switches market, based on the number of ports served, Arista has been consistently taking market share from **Cisco (US:CSCO)** - which used to dominate the market - for the last decade.

Back in 2012, Cisco had a market share of over 70 per cent. In 2022, its share had fallen to just under 30 per cent. Over the same period, Arista's market share had increased from just under 5 per cent to over 22 per cent.

Arista's success in recent years has been based around an advanced operating system known as EOS (Extensible Operating System) which is open sourced (based on Linux), highly programmable and reliable.

By being programmable, Arista can allow its customers to integrate a larger range of third party applications into their networks as well as their own.

EOS offers the customer high levels of capacity, scalability, availability and security. Arista also believes that its products offer its customers a lower total operating cost compared with legacy networks.

Arista serves a wide range of industries such as:

- Large internet companies
- Cloud Service providers
- Financial services
- Government agencies
- Media
- Entertainment
- Telecom service providers

Cloud and/or internet titans such as Microsoft and Meta have accounted for a significant proportion of the company's revenues in recent years.

As well as selling ethernet switches, Arista also offers services in network monitoring and security.

Huge growth from cloud computing

Arista has benefitted from the stellar growth in company spending on cloud computing networks as they shift from physical networks.

In the cloud applications need to be distributed across thousands of servers. By connecting the servers with high speed networking switches applications can be quickly deployed and updated in a cost effective way.

The bandwidth required in the cloud is much bigger than used in legacy networks which will drive demand for better and faster switches going forward.

Revenue growth for companies such as Arista will come from new cloud adopters but also from existing customers refreshing and upgrading their networks.

Arista believes that it has a significant technology advantage over its competitors such as Cisco, Extreme Networks and Juniper Networks and reinforces this with continuous development.

It cites key advantages such as:

- High capacity
- Low latency (delays)
- Power efficiency
- Port density

Artificial Intelligence (AI) to provide longer term growth boost

The last couple of years have seen very strong growth coming from cloud computing. This growth is expected to moderate going forward.

However, Arista could become a big beneficiary from the growth in artificial intelligence as its customers ramp up spending in this area.

AI will need huge computing power and therefore very good networking switches to allow it to work and speed up communications across servers.

Arista believes that over the coming decade, AI networking will become an extension of cloud networks and will see significant growth. It has commenced trials of backend AI networks with pilots due to begin in 2024 and deployments in 2025. This will complement its existing front end network presence.

Existing data centre and campus networks trading well

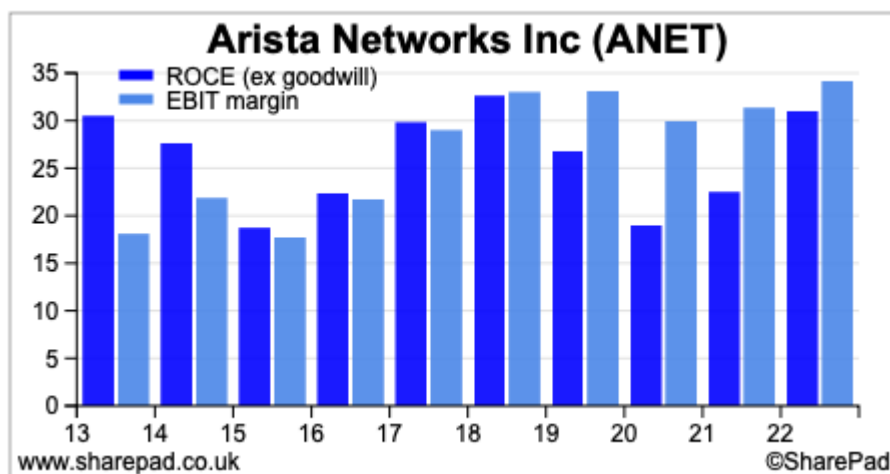
Whilst there has been a lot of investor focus on the cloud, many companies still operate physical data centres and networks. Arista has been doing well here and continues to take market share.

A lot of mission critical applications used by companies are still remaining on site rather than moving to the cloud. By offering a hybrid data centre approach to customers, Arista is able to grow its revenues on many fronts.

A very profitable business

Arista has been able to achieve consistently high levels of profitability for some time now. Looking at measures such as operating (or EBIT) margins and return on operating capital employed (ROOCE) it has all the hallmarks of a top quality company.

When combining this with its longer-term growth potential, it is not difficult to see why Arista shares have performed so well and remain very popular with investors.



When comparing its financial performance with its major competitors, Arista stacks up well.

Arista Networks: financial performance vs peers

TIDM	Name	Market Cap (\$mn)	Gross profit margin	EBIT margin	ROCE (ex goodwill)	FCF margin	Net debt to Ebitda
ANET	Arista Networks	55,532	61.1	34.2	31.1	10.2	-0.4
CSCO	Cisco Systems	225,106	62.7	28.6	50.2	33.4	-0.1
EXTR	Extreme Networks	3,537	57.5	8.7	53.1	17.9	0.2
JNPR	Juniper Networks	8,968	55.8	10.6	16.6	-0.1	1.1

Source: SharePad

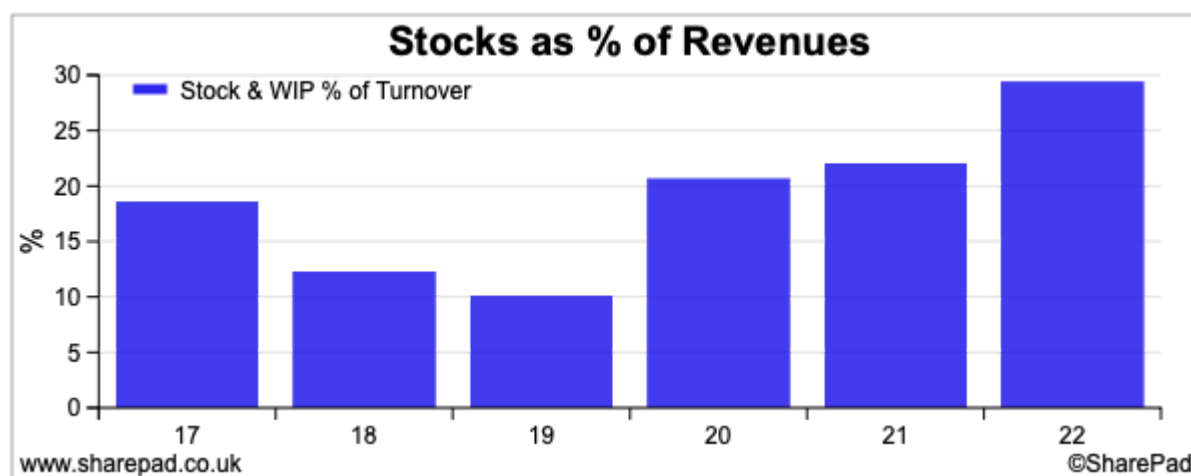
Can Arista keep on delivering for investors?

Whilst the longer-term outlook seems very reassuring for investors, there are some concerns that short-term growth is slowing rapidly.

Arista has benefitted from a boom in cloud spending for the last couple of years and this is slowing down. Several tech companies - including big Arista customers such as Microsoft - have recently mentioned that they are moderating their spending on cloud assets.

The other significant issue is that lead times to supply customers have come down significantly as supply disruptions have been resolved. This means that customers do not need to order as much as they have done in the recent past.

Arista's stock levels have been building up in recent times which can be a sign of trouble - as prices might have to be cut to shift excess stock - but the company has reassured investors that it is not expected to be a problem.



That said, Arista's growth will slow. It is guiding to 30 per cent revenue growth for 2023 as a whole, with 25 per cent growth in the third quarter. This implies that revenue growth will be down to 11 per cent in the fourth quarter.

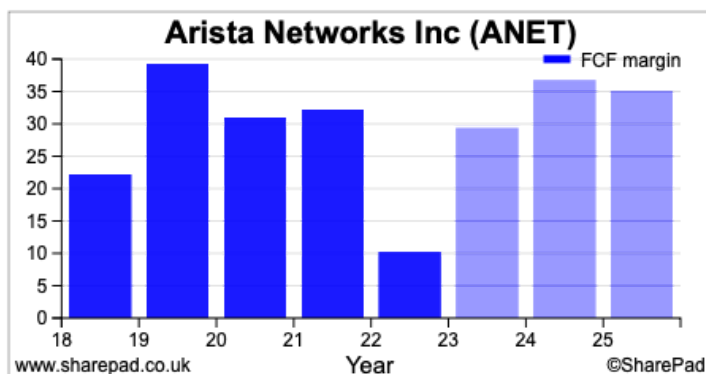
Whilst growth in traditional business data centres and campuses is offsetting some of the slowdown in cloud spending, it is not going to make a big difference.

In some ways, this is not unexpected given the previous boom and Arista's growth.

Looking further out, cloud spending is expected to remain strong as more businesses move to it and existing providers upgrade their networks. There is also hope that Arista will start to benefit from AI spending when its new products are released from 2025 onwards.

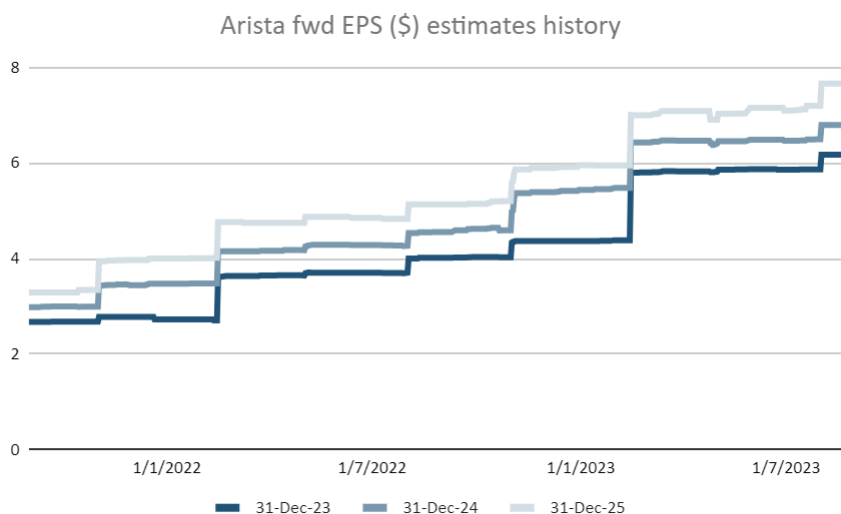
There should also be a modest benefit to Arista's earnings per share (EPS) as the company continues to buy back its own shares using its very strong free cash flows and low capex intensity.

With strong EPS growth expected in 2023, growth is expected to moderate to the 10-11 per cent range for 2024 and 2025. AI projects could then see this growth accelerate.



The good news for investors is that forecast momentum for Arista has been positive and on an upwards trend for a while. The most recent upgrade was last month, which suggests that the business is performing better than expected despite concerns about cloud growth.

Arista Networks: Trend in analyst consensus EPS forecasts



Source:FactSet

Premium valuation looks justified

Given Arista's exceptional levels of profitability and growth, it is no surprise that the stock market has attached a high valuation to its shares.

Arista Networks forecasts

Year \$mn	2023	2024	2025
Turnover	5,746.1	6,350.5	7,155.3
EBITDA	2,443.1	2,669.9	2,990.6
EBIT	2,375.7	2,615.6	2,959.6
Pre-tax profit	2,487.2	2,747.9	3,101.3
Post-tax profit	1,953.2	2,166.3	2,442.2
EPS (¢)	616.8	679.1	758.6
Capex	45.1	62.1	64.0
Free cash flow	1,689.3	2,336.2	2,516.9
Net borrowing	-4,391.7	-6,381.2	-8,314.4

Source: SharePad

However, whilst high, it is difficult to argue that the shares look significantly overvalued. Based on current forecasts, the shares are trading on a 2025F PE of 23.6 times which does not look excessive.

Arista Networks valuation

Year	2023	2024	2025
PE	29.1	26.4	23.6
EV/EBIT	21.5	18.8	16
EV/EBITDA	20.9	18.4	15.8
EV/Turnover	8.9	7.7	6.6
FCF yield %	3	4.2	4.5

Source: SharePad

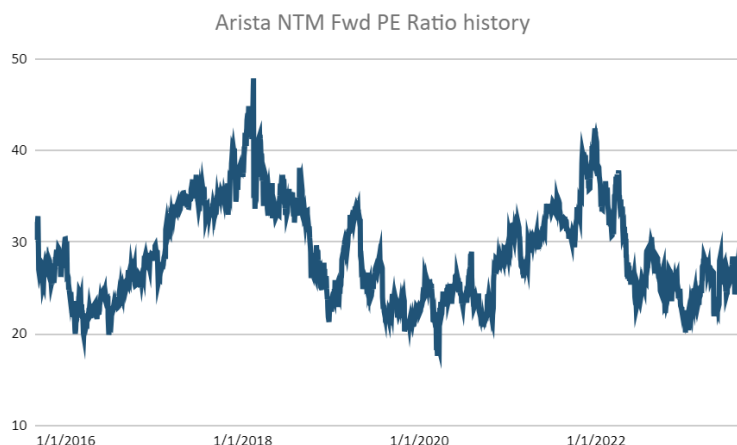
When compared to its peer group, Arista is trading on a big valuation premium. This is because it is growing faster and taking market share.

Arista Networks valuation vs peers

Name	Price	PE roll 1	fc EV /Sales	fc EV / EBIT	fc FCF yield	fc EPS %chg	fc Turnover %chg
Arista Networks	17930	27	8.9	21.5	3	47	31.1
Cisco Systems	5524	14	3.5	10.3	7.4	27.5	1.7
Extreme Networks	2768	17	2.3	12.7	6.4	42.6	14.7
Juniper Networks	2790	12	1.7	10.1	8.9	66.3	5.6

Source: SharePad

If we look at the history of Arista's valuation on the basis of its next twelve months (NTM) PE ratio, we can see that the company has been significantly derated over the last 18 months along with all growth stocks.



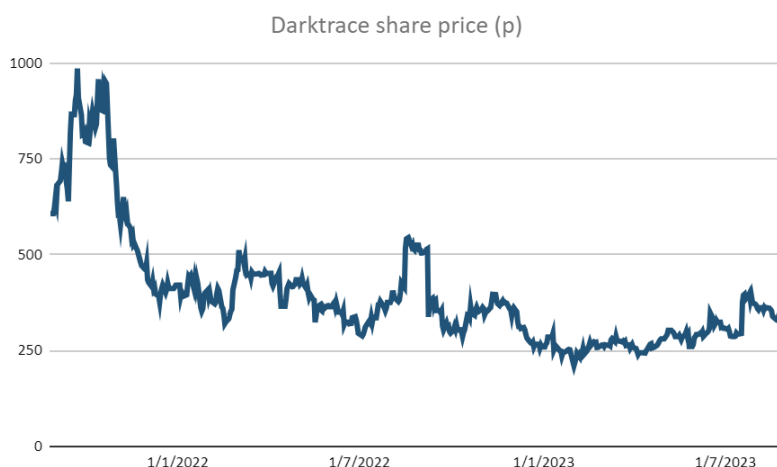
Source: FactSet

This does not mean that the shares are a bargain in any sense of the word, but investors can now buy the shares at a lower valuation than they have been able to do so for some time.

With good products tapped into favourable long-term markets, Arista Networks looks like a business that could continue to reward long-term investors.

Darktrace

Darktrace was founded in Cambridge in 2013. Instead of being viewed as a home-grown technology success story, the company has spent a large part of its short time listed on the stock exchange defending its business model and the integrity of its financial statements against attacks from short-sellers.



Source: LSEG Data & Analytics

Having soared in price immediately following its initial public offering (IPO) in April 2021, the shares have tanked and have struggled to make much progress whilst remaining volatile.

Darktrace is seeking to differentiate itself by providing artificial intelligence (AI) led cybersecurity and autonomous response technology to business customers.

Its products use AI algorithms to counter cyber threats on physical IT networks, cloud networks, the internet of things (IoT) and industrial control networks.

The company is offering something different compared with most mainstream cyber security companies. Instead of building databases against known attack data, Darktrace uses AI to learn about the business it is trying to protect. By continually learning and updating its knowledge it believes it is able to offer a more optimal and cost effective solution to its customers.

Its technology effectively learns from the business rather than from the nature of the security breach. It learns about business behaviours and environments and looks for irregularities within that to detect and respond to cyber threats.

Darktrace believes that attackers will increasingly use AI to breach a company's IT security and that its AI security technology is the ideal response to this and has very good growth potential.

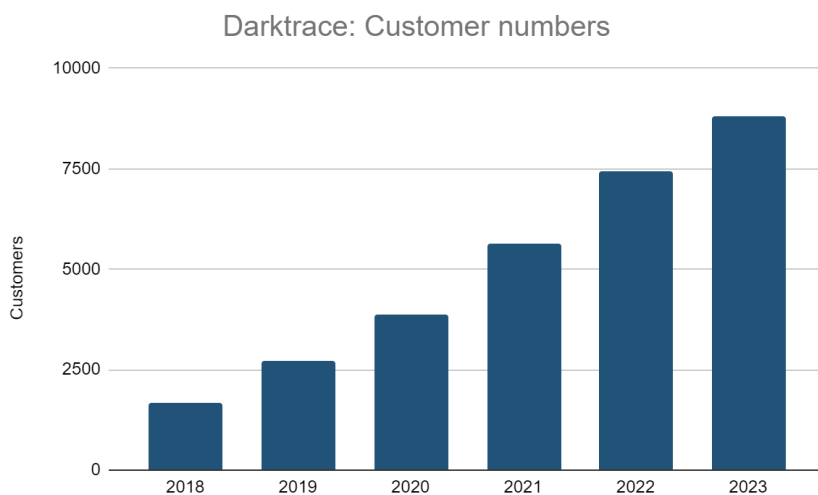
It has built a suite of security products to help companies protect their businesses. Its four core products are labelled Protect, Detect, Respond and Heal and are intended to work seamlessly together.

These products are designed to simplify its customers' IT security by offering high levels of protection at a lower cost than employing lots of staff and equipment in house.

Darktrace can protect the business and quickly get it operating normally after an attack. The customer can then get on with running the other parts of its business.

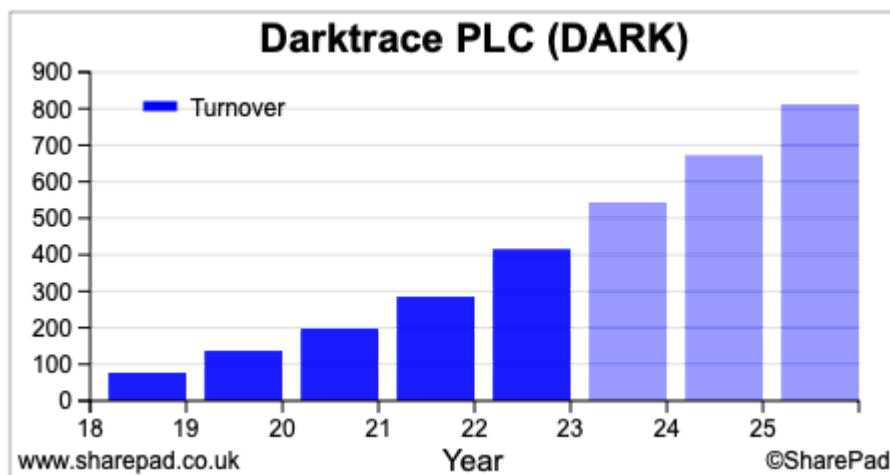
A good track record of customer and revenue growth

Darktrace has been successful at growing its business in recent years.

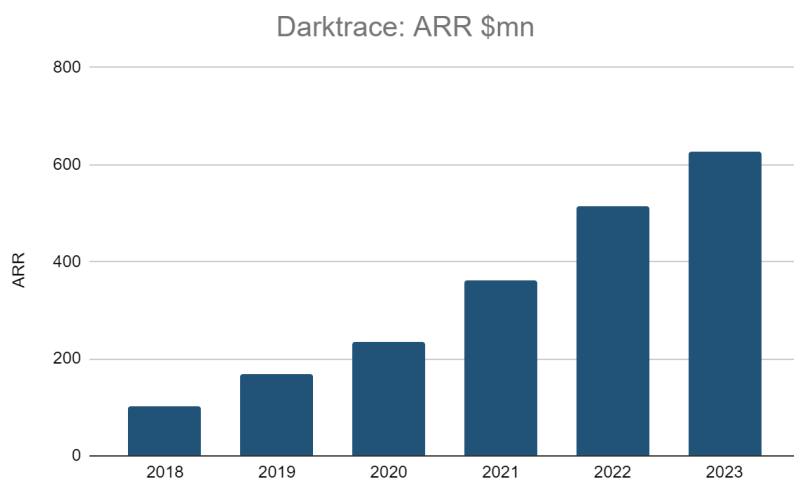


Source: Darktrace

Its customer numbers have grown nicely and so have its revenues.



The company talks a lot about its annualised recurring revenue (ARR). This is the annual committed subscription value of each order that can be recognised as revenue assuming that the customer renews all its subscriptions.



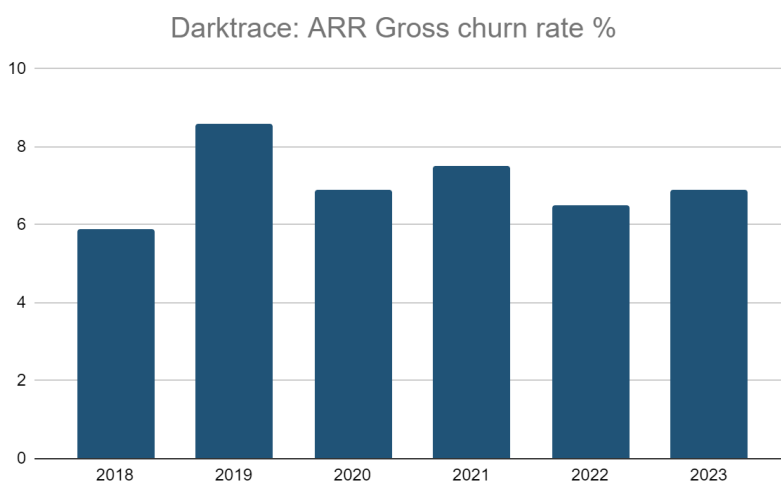
Source: Darktrace

This number has shown healthy growth in recent years but arguably needs to be interpreted with care.

The stock market will typically put a higher value on companies whose revenues are regular and predictable compared to those whose revenues are more lumpy and cyclical.

However, annualised and recurring does not necessarily mean they are secure as it depends crucially on subscribers continuing to renew their subscriptions.

What if they don't?



Source: Darktrace

Darktrace has been typically losing between six to 8 per cent of its ARR each year from customers cancelling their subscriptions. It has therefore needed to bring on new customers in order to keep on growing its revenues which it has been able to do.

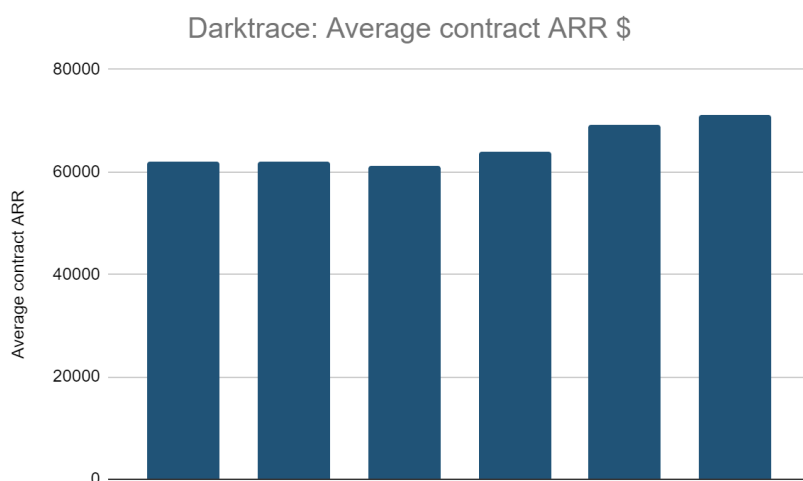
However, a large chunk of the company's customer base is with smaller companies who are less able to cope with economic hardship. At its fourth quarter trading statement last month, Darktrace said that economic uncertainty was beginning to make customer acquisitions tougher to achieve whilst making existing customers more reluctant to renew or buy additional subscriptions.

What is interesting is that the average ARR contract size per customer has not been growing that much.

Darktrace does not go into detail on the average number of products per customer (although it did mention in March this year that just under half its customers have four or more products) which makes it difficult to get a feel for the nature of revenue growth. Whilst the average ARR has risen it is possible that this has been driven by inflationary price hikes rather than selling more products.

However, at the company's half year results back in March, it did highlight that growth in average contract ARR had come from new products and upselling to existing customers which is encouraging.

Short-seller ShadowFall made the claim last year that it believed that Darktrace was winning new customers with an aggressive and promotional strategy based on offering discounts to new customers. This could explain some of the lack of growth in customer ARR in recent years but is difficult for a company outsider or passive investor to prove.



Source: Darktrace

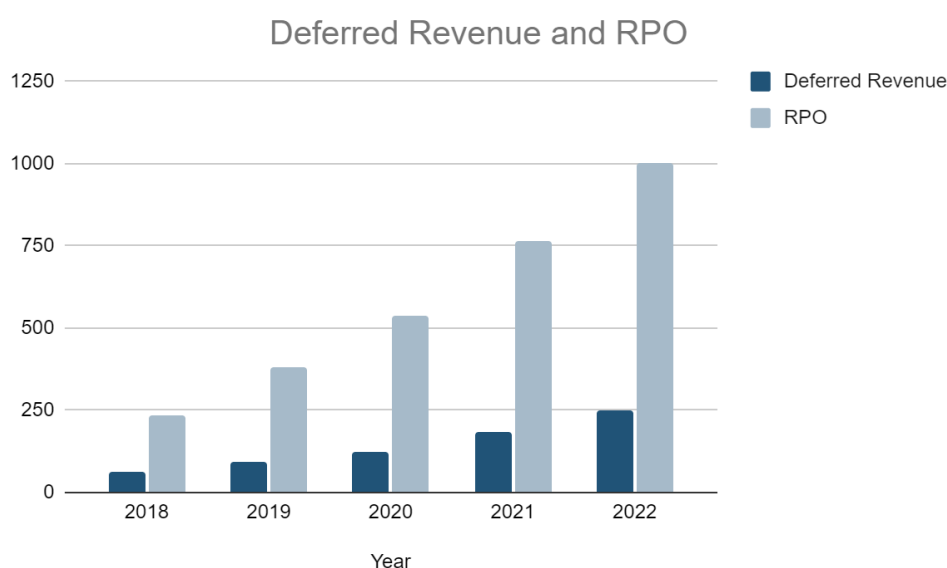
Deferred revenues and revenue backlog

Virtually all of Darktrace's revenues come from subscriptions of which the majority are billed annually and last for 3-4 years.

This gives Darktrace a lot of revenue visibility and also cash up front which is then added to revenues over the length of the contract.

As Darktrace receives cash up front before it is earned, the company has significant deferred revenue liabilities on its balance sheet. This is great for its cash flow but it means its free cash flow numbers should not be seen as comparable to profits as growth in deferred revenue balances (unearned income) flatter the figures.

Big deferred revenue cash flows also largely explain why Darktrace's free cash flow per share has regularly exceeded its earnings per share (EPS).



Source: Darktrace

What also needs to be taken into account is that movement from the deferred revenue balance to revenue has been a growing proportion of revenue in recent years.

Darktrace: revenues coming from deferred revenue balance at the start of the year

Year	Revenues \$mn	o/w def rev	DR %	Revenues ex DR	Sales growth	Adj sales growth	DR Balance growth
2018	79.4	22.5	28.3%	56.9			
2019	137.0	42.9	31.3%	94.1	72.5%	65.4%	47.8%
2020	199.1	72.6	36.4%	126.5	45.3%	34.4%	28.9%
2021	285.1	97.0	34.0%	188.1	43.2%	48.7%	50.0%
2022	415.6	154.5	37.2%	261.1	45.8%	38.8%	36.8%

Source: Darktrace/Investors' Chronicle

Back in 2018, deferred revenue accruals accounted for just over 28 per cent of revenues. In 2022, this had increased to over 37 per cent.

There is nothing wrong with this, but it gives the analyst/investor a feeling for how much revenue is coming from cash that has already been received and from fresh revenues during the year.

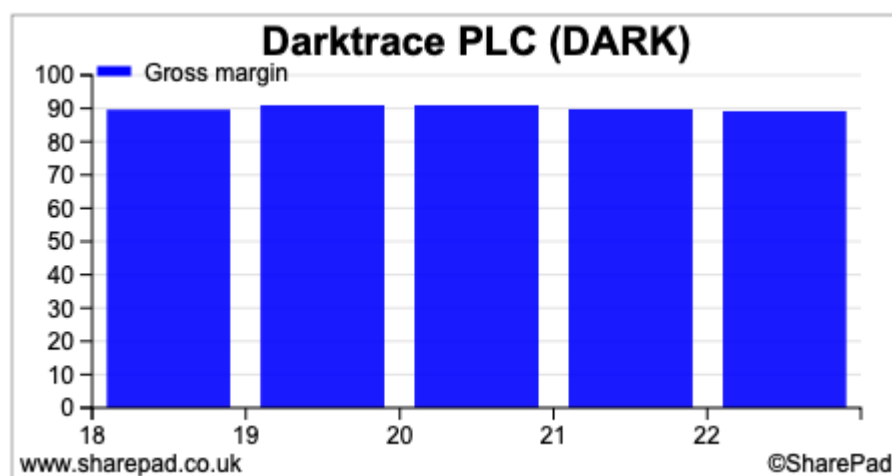
If you strip out the effect of deferred revenues and look at the underlying growth rate, you can see that it has been lower than reported revenue growth rates in most recent years but is still a very good number.

If you look at the remaining performance obligations (RPO) which is revenue that has yet to be recognised from existing contracts, Darktrace had a potential revenue backlog of over \$1bn - providing customers do not cancel their subscriptions - which is a decent position to be in.

Meaningful profits have yet to materialise

Whilst Darktrace has made very good progress on growing its revenues, turning them into profits has been more difficult.

From a gross margin perspective, the business looks very profitable as its cost of sales are very low. They include direct labour, cloud hosting costs and appliance depreciation.



The problem comes below the gross margin line where staff costs take up a huge proportion of revenues.

Darktrace is also a company that believes that paying its employees in shares should be ignored as it is a non cash item. The fact that the extra shares issued to pay them dilutes existing shareholders whilst the income forfeited by giving them away at a discount - as opposed to selling them on the stock market - is a meaningful transfer of value away from the company should not be ignored.

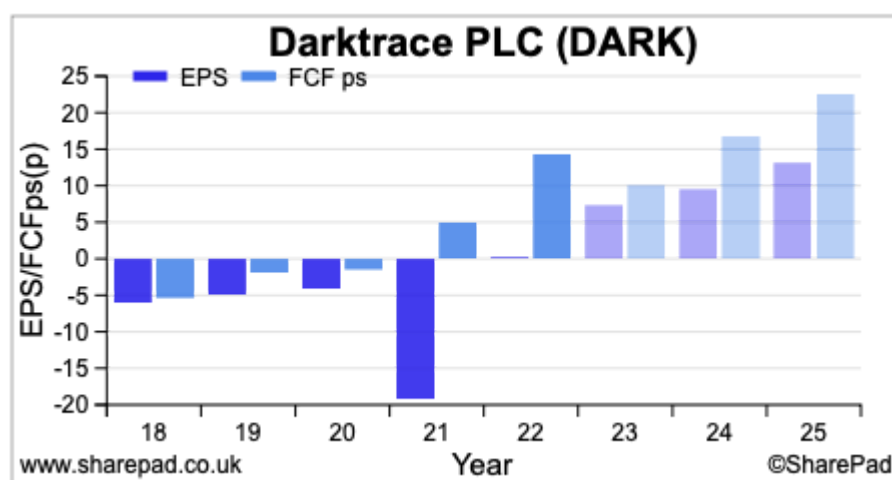
That said, it is difficult to spot clear and obvious signs of profit manipulation with this company. The Beneish M-Score - a formula based on accounting ratios used to detect company's with suspicious profits - suggests that earnings manipulation is unlikely, whilst a recent review by Ernst & Young has not raised material issues or restatements of profits.

The main problem for an investor in a company such as Darktrace is the difference between the movement of cash and the matching of revenues and expenses to calculate profits.

Free cash flow is usually the go to measure of underlying profitability. However, in this case, the big cash inflows from deferred revenues mean that this figure isn't useful.

Judging by City analysts' forecasts, the company's earnings and free cash flows are expected to see a big improvement over the coming years.

If their projections are broadly accurate then Darktrace should be able to scale its fixed overheads with its growing revenues to generate bigger and growing profits.

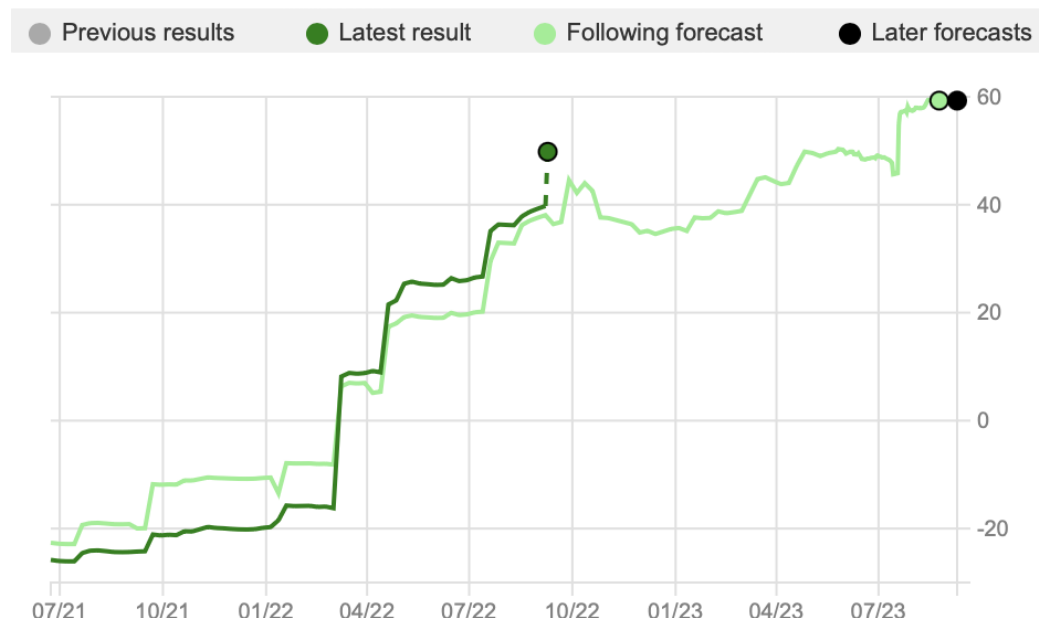


If we look at forecast momentum in recent months then the picture is encouraging.

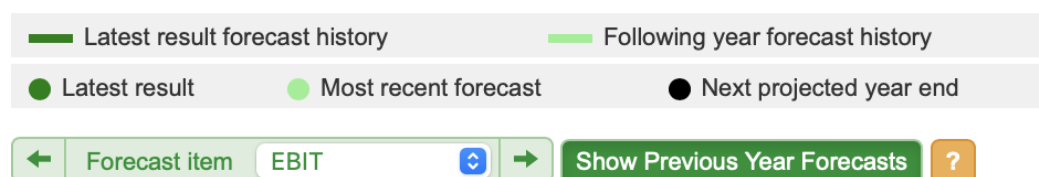
However, it is worth noting that the 2023 results - which will be announced on 6th September - will include another big chunk of share based payments which are excluded from analysts' forecasts. From 2024 onwards this should be less of a factor.

The trend in forecasts has been positive with a significant upgrade in July. Whether further upgrades to 2024 numbers will follow remains to be seen.

Darktrace: Trend in 2023FY EBIT



Shows the following full year forecast as it has changed on a daily basis.



Source: SharePad

At its last trading update in July, the company cautioned on weakening activity. It also guided a slowdown in revenue growth for 2024 to around 23 per cent with more of the growth to come in the second half of the year - something which often rings alarm bells.

Darktrace forecasts

Year \$mn	2023	2024	2025
Turnover	544.5	672.7	814.1
EBITDA	120.2	148.6	186
EBIT	59.3	80.8	109.3
Pre-tax profit	61.1	81.4	109.1
Post-tax profit	52.3	67.2	94.3
EPS (¢)	7.34	9.53	13.1
Capex	38.6	47.9	53.3
Free cash flow	70	116.5	157.6
Net borrowing	-342.5	-406.9	-554.1

Source: SharePad

Longer term, the business looks to have strong fundamental support. The growth of AI significantly increases the security threats to businesses, particularly in areas such as intellectual property theft and data protection.

That said, even with a strong following wind, it is difficult to argue that the shares look good value on any measure right now.

Given a strong recovery in the share price in 2023, big forecast upgrades look to be needed to drive the share price higher.

Darktrace valuation

Year	2023	2024	2025
PE	58.8	45.3	32.8
EV/EBIT	45.3	32.4	22.6
EV/EBITDA	22.3	17.6	13.3
EV/Turnover	4.9	3.9	3
FCF yield %	2.3	3.9	5.2

Source: SharePad

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