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The big picture – Digitalization and the cloud

The world has for the last couple of decades been on a digitalization journey, which has changed how we live and how we work. Digitalization of data, processes, industries, entertainment, communication, and information access has fundamentally changed how the world functions from e-commerce, social media, messaging apps, enterprise software, and artificial intelligence to the Internet of Things (IoT) and much, much more.

Digitalization is a megatrend that is likely to continue for decades with growth rates significantly above GDP growth. One of the fastest growing segments within this broad megatrend is the conversion from on-premises IT systems to the cloud. In short, this means that instead of storing data and running applications on local servers and computers, organizations are using remote servers and infrastructure (like data centers) provided by cloud computing companies to store, process, and manage their data and applications. There are several reasons why this shift is occurring:

1. Cost savings: Cloud computing can be more cost-effective than on-premises solutions, as organizations only pay for the resources they use and do not have to maintain and upgrade local infrastructure.
2. Scalability: Cloud computing allows organizations to scale their IT resources up or down as needed, which can be particularly useful for companies that experience fluctuations in demand.
3. Flexibility: Cloud computing allows organizations to access their data and applications from anywhere with an internet connection, which can be particularly useful for companies with remote employees or those with a distributed workforce.
4. Reliability: Cloud providers typically have robust infrastructure and backup systems in place to ensure the availability and reliability of their services.
5. Security: Many cloud providers have strict security protocols in place to protect their customers' data and applications, which can be more effective than the security measures that some organizations have in place on-premises.

It is generally agreed that the shift toward cloud computing has been significant and has accelerated in recent years. External reports like GlobalData[1] or Grand View Research[2] forecast around 15% growth for the global cloud computing for the next 5-10 years. Enterprise software and cloud computing are resistant but not immune to economic downturns and the current economic environment is likely to put some short-term downward pressure on growth rates. We think it is highly likely that the growth will accelerate again as the economy starts to recover and we believe the growth rates will stay healthy throughout the downturn. The COVID-19 pandemic has accelerated some enterprise software spend and we may see some post-COVID normalization with temporary lower growth rates.

[1] https://www.globaldata.com/store/report/cloud-computing-market-analysis/
[2] https://www.grandviewresearch.com/industry-analysis/cloud-computing-industry

Software reselling
In the early days of the IT revolution hardware was dominating and distribution centered around hardware resellers. As software became increasingly important many hardware resellers branched into reselling software. Today the market is fragmented with many small local software resellers, larger hard- and software resellers, and a fewer large pure software resellers.

As the world is becoming increasingly digitalized, we have seen an explosion of software options, especially within enterprise software and the task of managing software in business has become very complex. At the same time, many companies developing software (vendors) prefer to focus on developing the very best software and leave the servicing of thousands or millions of customers to the software resellers. This has driven the need for not only distributing but also managing software (SAM) in an increasing number of businesses and public organizations with the goal of minimizing costs and maximizing utility while staying compliant. Properly done, software asset management (SAM) can help businesses and organizations save money on software expenditures[3] by making sure the number and type of licenses are right (not all users need the diamond version), identifying cloud savings, etc.

Software resellers can be a convenient single point of contact for all or most of the customers' software needs and offer guidance on what software to choose. Software resellers have an important role in making sure the customer is compliant and pays for the software they use. This function is important and attractive both to the customer who risks getting audited by the vendor, and the vendor who needs to spend fewer resources making sure the customers pay for their software. The most important role of software resellers from the vendor's point of view is the distribution and servicing of customers.

As mentioned earlier this allows the vendors to focus on what they do best, develop great software, and let the software resellers handle the cumbersome servicing of individual customers. Software resellers mainly earn money by acquiring software with a rebate and reselling at market price but may also earn money on related services. The margin software resellers can earn on reselling software depends on the complexity of the software, how mature, and how competitive the market is. The margin is low on simple, mature products with low competition and vice versa. A typical gross margin can be 5-8% of gross revenue.

As software reselling has grown increasingly complex, requiring specialized software and preferably related services like SAM to be efficient and relevant, smaller players are becoming less competitive. This coupled with a preference among large vendors for working with fewer larger resellers is driving consolidation in the industry where larger players gain market share both through acquisitions and organically.

[3] Crayon claim to save their customers 23% of their IT spend on average. https://www.crayon.com/global-site/

Crayon

Crayon is a leading global software reseller and Software asset management advisor. The company was founded in Norway in 2002 and expanded to Sweden and Denmark in the following years. In 2009 Crayon started a European expansion by entering Germany followed by a global expansion in 2015 by entering the US. The geographical expansion has mostly been organically supplemented by some M&A, most notably Inmeta (Norway) in 2011, Anglepoint (US) in 2015, Sensa (Iceland) in 2020, and Rhipe (Australia) in 2021. Crayon has a strong market presence in all geographical regions except the US, where the subsidiary Anglepoint is highly acclaimed[4] but not among the largest resellers. The vast majority of Crayon’s growth has been organic, helped by their strategy of being 100% focused on software and services and being very well positioned within cloud computing, benefitting from the particular high underlying market growth in this segment.

Crayon partners with numerous vendors but Microsoft is by far the most significant, making up more than half of Crayon's business. Crayon has expanded its business with other vendors in recent years, most notably Amazon Web Services, but for now, the development of Crayon and Microsoft (cloud services) is highly correlated.

Table 1 - Business segments

	Software		**Services**	
(TTM)	Software and cloud direct	Software and cloud channel	Software and cloud economics services	Consulting services
Share of gross profit	34%	21%	15%	30%
Share of EBITDA	51%	31%	6%	12%
EBITDA margin without HQ	54%	53%	15%	15%
Customer retention*	~96%	~99%	~87%	~93%
Share of public customers*	~40%	~0%	~20%	~45%

** Numbers are from the Q1 2020 quarterly presentation (last time made publically available)*

Historically software resellers have recorded the full price of the software resold as revenue although the software resellers share of the full price typically is single digit. The accounting methodology for software resellers has recently been changed so that recorded revenue do not include the part that is passed on to the software vendor. Under the new methodology gross profit typically makes up 80-90% of reported revenue. Because of the historical accounting methodology all margins are calculated using gross profit and not revenue.

Crayon has four business segments. Software and cloud direct which is reselling software directly to the end customers, software and cloud channel which is reselling software to channel partners who sell to the end customer, software and cloud economics which offers software asset management (SAM) services and consulting services which offer related consulting services like cloud migration and deployment. The software segment makes up the majority of EBITDA with very high customer retention rates while the services segment is important in acquiring customers for the software business. Especially software and cloud economic services with their SAM offering naturally generates significant new business for the software segment. Crayon helps customers analyze their IT spending and identify

[4] Named leader by Gartner’s Magic Quadrant

potential savings and then expands the business with the customer over time to include software reselling or other services. This go-to-market strategy works well in all economic environments and is perhaps the most efficient in economic downturns.

Management

The management team consists of CEO, Melissa Mulholland, and CFO, Jon Birger Syvertsen, who we have a great impression of from our interactions with them. Jon has been with Crayon the longest joining in 2018 as CFO and has been part of international expansion overseeing the financials of the business in a period of high growth, rising margins, good net working capital (NWC) control, and strong cash flows. Melissa has great credentials with 12 years working for Microsoft in a leading position with responsibility for how companies can be profitable in the cloud and talent development. Melissa joined Crayon as Chief Services & Solutions Officer in 2020 before being named CEO in March of 2021. Melissa has increased focus on the workforce, employee retention rates, and diversity. Furthermore, she has overseen the acquisition of Rhipe, the largest in Crayons history, which so far looks quite successful, promoting several key employees from Rhipe to leading positions.

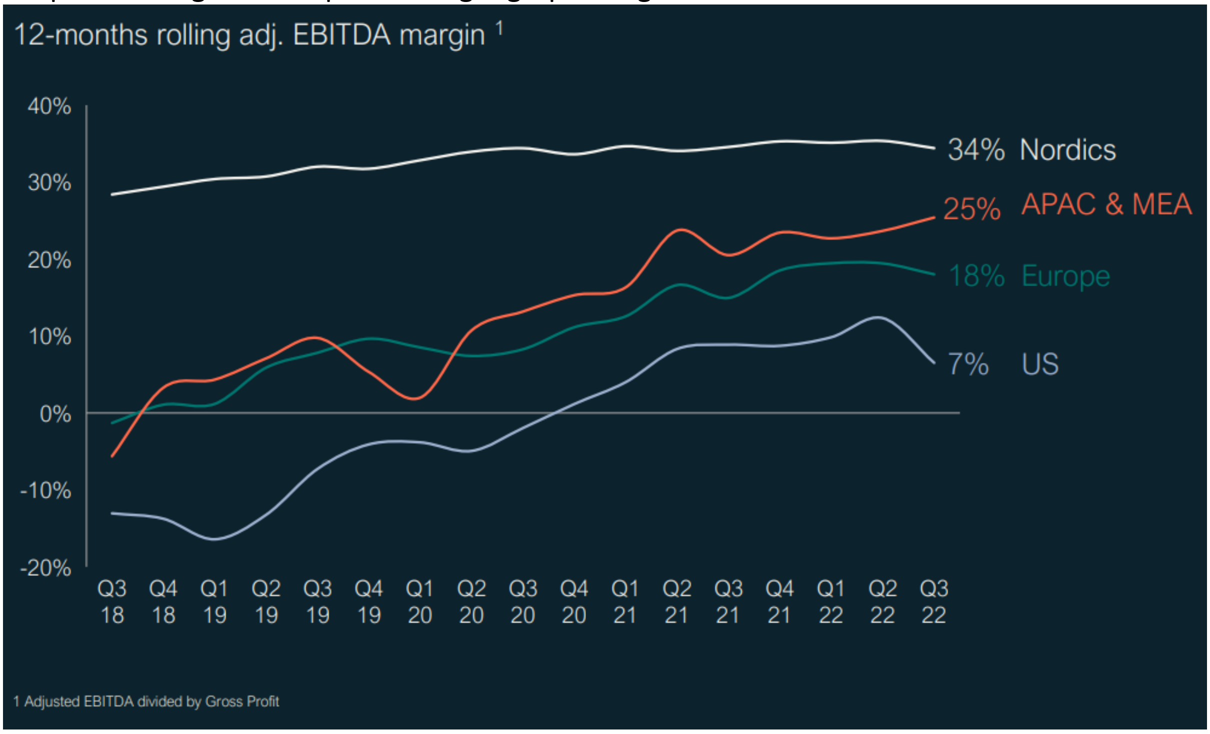
Competitive position and long-term potential

Reselling other companies' software has natural limitations to the possible size of moat one can build as the software vendor ultimately controls the software. However, with that said, Crayon's competitive position is as good as it gets for the industry. Following the acquisition of Rhipe, Crayon is among the largest partners of Microsoft in all regions except the US, and being large is a significant competitive advantage in this industry. Scale drives efficiencies (for example Crayon invests ~ 70 MNOK yearly in the development of proprietary technology and software which smaller players cannot match) and allows for a broader offering of software and services to customers while being prioritized by vendors. Crayon has the advantage of being 100% focused on software and services, with no distractions from a legacy hardware business, is closely aligned with Microsoft, and is very well positioned to benefit from the cloud transition with its services and software offering. Customer retention is high, especially in the high-margin software segments which add stability to the business and makes it easier to grow. Crayon also appears to be better than average at attracting and retaining employees.

The combination of a strong competitive position, international expansion, and a rapidly growing underlying market makes it likely Crayon can achieve high organic growth rates for many years to come. Crayon's medium-term growth target is 20% and we think they have good odds of continuing to deliver on that target although 2023 is likely to be below.

The international expansion has put significant downward pressure on the margin for years as the expansion costs are expensed immediately and the benefit of increased future revenue and earnings takes longer to be visible in the financial numbers. In the recent years the international expansion is increasingly starting to pay off, not only in growth, but also in improving margins as shown in Graph 1 on the side page.

Graph 1 – Margin development on geographic regions



Source: Crayon, Q3 2022 presentation

In theory, Crayon can achieve margins in international markets that are similar to the Nordic home region. To understand the margin potential, we first have to look at Table 2 which shows the relative size of the high-margin software and low-margin services business in all regions. The Nordic and US have a high share of low-margin service business while Europe and APAC & MEA have a large share of the high-margin software business.

Table 2 - Segmentation on business and geography

Share of Gross profit by geographic area (TTM)	**Software (high margin)**		**Services (low margin)**	
	Software and cloud direct	Software and cloud channel	Software and cloud economics services	Consulting services
Europe	51%	15%	19%	15%
APAC & MEA	27%	47%	5%	21%
US	28%	9%	55%	8%
International*	35%	28%	20%	17%
Nordics	32%	11%	8%	49%
Group	34%	21%	15%	30%

** International = Europe + APAC & MEA + US*

Table 3 shows the potential margin in Europe, APAC & MEA, and the US if those regions can achieve the same software and service margin as Crayon currently has in the Nordic home market. The margin potential in Europe and APAC & MEA is higher than the current Nordic margin because their share of high margin software business is significantly larger.

Table 3 - Margin potential

EBITDA Adjusted margin	TTM	Margin potential*	Realistic margin**
Europe	17,8%	45,0%	31,4%
APAC & MEA	25,4%	48,6%	37,0%
US	6,5%	31,4%	18,9%
International*	18,9%	43,8%	31,3%
Nordics	34,4%	34,4%	34,4%
Group (ex HQ)	25,6%	39,9%	32,7%
HQ	-4,9%	-4,9%	-4,9%
Group	20,7%	34,9%	27,8%

Margin potential assumes that margins in all geographies can reach the same level as in the Nordics, the realistic margin assumes only half of the current gap can be closed
** International = Europe + APAC & MEA + US*

In practice, we think Crayon is unlikely to achieve the full margin potential because Crayon is in a very strong competitive position in the Nordic home market, and it is highly unlikely all international regions simultaneously can achieve similar margins. Our more realistic margin potential assumes the international regions can on average close half of the current margin gap. In that case, the adjusted EBITDA margin of the group will increase from 20,7% to 27,8%.

Short-term development

While the long-term potential looks very promising, the short-term development is more mixed. We expect the business to be resilient but not immune to the current economic downturn. At its core, software drives efficiency, and Crayon's cost-saving go-to-market strategy is very relevant in economic downturns. Having a functional IT infrastructure is critical to all businesses and is likely to be among the last bills not being paid. However, spending on new software is likely to be somewhat impacted and layoffs will negatively impact total IT spending. Crayon is responsible for collecting payments from the end customers and although the customer is likely to pay, the payment may be later than usual negatively impacting Crayon's cash flow and losses on bad debt will increase.

The COVID pandemic has positively impacted software spending while the cost of traveling and social activities has been subdued. In addition, employee churn appeared to be artificially low during the pandemic as people valued the safety of remaining with their current employer. These factors positively affected Crayon's margin during the pandemic, and we see the opposite effect as the world goes back to normal.

Our best guesstimate is that growth will fall but remain double-digit, cashflow continue to be below long-term potential while the margin will remain roughly flat until the economy starts recovering at which point, we expect growth, cash flow, and margin to improve significantly and return to the long-term trend again.

Financials and normalized earnings

When we look at the financials of any company our primary goal is to understand the true underlying earnings and secondly make sure the earnings are comparable with other companies. We would like to walk you through how we normalize Crayon's earnings to gauge what we consider the true underlying earnings. In table 4 you can find Crayon's historical financial numbers, our normalizations on the trailing twelve months (TTM) numbers, the 2023 consensus, and an illustration of Crayon's earnings in 5 years if the average organic growth end up being 17,5% and the adjusted EBITDA margin increases 3,3% which implies ¼ of the earlier calculated margin potential is realized in 5 years. This 5-year scenario also assumes net working capital to gross profit settles at -10% and the cashflow generated during the period is used to back down NIBD and buy back shares, pay dividends that are reinvested or make acquisitions that do not destroy shareholdervalue.

Table 4 - Financials

(MNOK)	2018	2019	2020	2021	TTM	TTM Normalized	2023 Consensus	In 5 years Normalized
Gross sales	9.048	13.618	19.599	26.438	36.317	36.317		
Revenue			2.688	3.534	4.653	4.653		
Gross profit	**1.486**	**1.809**	**2.345**	**3.040**	**4.002**	**4.002**	**4.958**	**8.964**
EBITDA (Adjusted)	**186**	**292**	**413**	**655**	**828**	**828**	**1.106**	**2.151**
Share-based compensation	-3	-20	-49	-55	-20	-30		-67
Other income and expenses	-8	-23	17	-9	-30	-10		-22
IFRS 16 Depreciation	0	0	0	0	0	-55		-124
IFRS 16 Interest expense	0	0	0	0	0	-11		-26
EBITDA	**175**	**250**	**382**	**591**	**778**	**721**		**1.912**
Depreciation	-12	-14	-19	-24	-39	-39		-86
IFRS 16 Depreciation	0	-26	-35	-45	-55	0		0
Amortisation	-65	-73	-86	-106	-179	-80		-179
Impairment	0	-59	0	0	0	0		0
EBIT	**99**	**77**	**241**	**416**	**505**	**602**	**770**	**1.647**
IFRS 16 Interest expense	0	-9	-10	-11	-11	0		0
Interest expense, net (ex IFRS 16)	-35	-39	-22	-58	-128	-128		-40
Currency translation	-3	-5	8	-11	-100	0		0
Other, net	-8	-14	-23	-32	-22	-22		-20
EBT	**52**	**10**	**194**	**304**	**244**	**452**	**583**	**1.587**
Tax	-43	-29	-67	-49	-11	-100		-349
Non-controlling interests	-4	-7	6	27	19	26		93
Profit	**13**	**-12**	**121**	**228**	**214**	**326**	**452**	**1.145**
Currency translation	7	9	5	11	299	0		0
Non-controlling interests	-7	-7	6	28	24	26		93
Comprehensive income	23	-3	126	239	508	326		1.145
Gross profit growth	*22,2%*	*21,7%*	*29,6%*	*29,6%*	*45,2%*	*45,2%*	*16,4%*	*17,5%*
Gross profit growth (organic)	*~20%*	*~20%*	*23,0%*	*26,0%*	*23,0%*	*23,0%*	*16,4%*	*17,5%*
EBITDA-margin (Adjusted)	*12,5%*	*16,2%*	*17,6%*	*21,5%*	*20,7%*	*20,7%*	*22,3%*	*24,0%*
EBITDA-margin	*11,8%*	*13,8%*	*16,3%*	*19,4%*	*19,4%*	*18,0%*	*N/A*	*21,3%*
EBIT-margin	*6,6%*	*4,3%*	*10,3%*	*13,7%*	*12,6%*	*15,1%*	*15,5%*	*18,4%*
Net interest bearing debt (NIBD)	107	99	-1.023	968	1.619	1.194	209	0
NIBD / EBITDA (Adjusted)	0,6	0,3	-2,5	1,5	2,0	1,4	0,2	N/A
Net working capital / Gross profit	*-23,1%*	*-18,7%*	*-41,8%*	*-23,4%*	*0,6%*	*-10,0%*	*-7,8%*	*-10,0%*
Operating cash flow	142	200	332	475	541	541	906	1.693
Changes in net working capital	-27	-9	610	-449	-577	-577	228	134
Operating cash flow, total	**115**	**191**	**942**	**26**	**-35**	**-35**	**1.134**	**1.826**
Capex (ex. M&A)	**-70**	**-76**	**-81**	**-83**	**-124**	**-124**	**-118**	**-265**
Free cash flow	**45**	**115**	**860**	**-57**	**-159**	**-159**	**1.016**	**1.561**
P/E					40,4	26,5	19,1	3,8*
EV/EBIT					20,3	16,3	11,5	2,7*

2023: https://www.crayon.com/globalassets/global/investor-relations/share-information/analyst-consensus-estimates-q4-2022.pdf

** NIBD is set to zero in five years as we assume Crayon will pay down its debt and distribute its net cash to shareholders through sharebuybacks reducing outstanding shares, as dividends that may be reinvested or through non value destroying M&A.*

MCAP (P) and EV are calculated as follows: MCAP - five years cash flow + NIBD 2022 (Normalized)

Although being partly non-cash we think **share-based compensation** is a very real cost. The accounting cost is partly influenced by the share price, which may be disconnected from the results of the business in the short term. We try to smooth out the volatility and let the cost reflect the cash cost of a non-share-based incentive program that the employees would demand if they were to give up their share-based compensation.

Other income and expenses include items judged to be non-recurring in nature like M&A costs, restructuring costs, and forgiveness (profit) of US COVID business loans. We think it is great to see Crayon also adjust for one-off profits and not only adjust for costs. It can be discussed to what degree M&A and restructuring costs are non-recurring or not, depending on the frequency and size over time. Some companies do not disclose non-recurring items and pursuant to our second goal of making earnings comparable between companies we think most of the cost should not be adjusted (removed). However, we think it is prudent to smooth out some of the volatility as the often lumpy nature of 'non-recurring' costs can give a skewed picture of the underlying profitability from quarter to quarter and year to year.

IFRS 16 changed the way rent is expensed. Under IFRS 16 rent is divided into a depreciation and interest component as if the company owned the property it rents. We understand the logic behind the change but on balance prefer the old accounting methodology, mainly because it allows for an easy and intuitive comparison of depreciation & amortizations and capital expenditure (CAPEX). Depreciation & amortization is meant to represent the CAPEX needs of maintaining the assets of the company in a steady state. Thus, we move IFRS 16 depreciation and interest cost up in the profit and loss statement as an operational cost above the EBITDA line.

Amortization is meant to represent the cost of replacing intangible assets but can be heavily impacted by the accounting methodology when companies are acquired at a price above their booked equity value. In that case accounting methodology creates an intangible asset that covers the difference between the equity and the purchase price so the price paid is equal to the net assets (equity + new intangible asset) received from an accounting perspective. The accounting methodology then starts seriously misrepresenting reality when the new intangible assets are amortized (expensed) while the true value of the acquired business (hopefully) increases.

Table 5

Note 8 – Intangible assets

(NOK thousands)	Software licenses (IP)	Development costs	Contracts	Technology and software	Total
Aquisition cost 01.01	8,760	386,130	986,201	208,585	1,589,675
Additions	-	54,183	-	-	54,183
FX translation	73	13,651	51,302	9,343	74,369
Aquisitition cost at the end of the period	**8,833**	**453,964**	**1,037,503**	**217,927**	**1,718,228**
Amortisation and impairment 01.01	6,820	287,965	387,370	109,098	791,252
Amortisation	205	57,371	61,260	23,159	141,996
Impairment	-	-	-	-	-
Accumulated amortisation and impairment	**7,025**	**345,336**	**448,629**	**132,257**	**933,247**
Net value at the end of the period	**1,808**	**108,628**	**588,873**	**85,670**	**784,980**
Amortisation period	3-7 years	3-10 years	5-20 years	3-10 years	
Amortisation method	Linear	Linear	Linear	Linear	

Source: Crayon, Q3 2022 financial report

Table 5 shows Crayon’s intangible assets from its most recent financial report (Q3 2022). You can easily identify the intangible assets that were created by M&A as Software licenses, Contracts and Technology & software because there are no additions in the reporting period which covers the first 9 months of 2022. However, those three assets are amortized by a total of 85 MNOK in the period, equal to 113 MNOK on a yearly basis. This is not representative of the cost of replacing Crayon’s actual intangible assets (development costs). We can verify the logic by ascertaining that the additions to development costs (54 MNOK) are roughly in line with the amortizations of development costs (57 MNOK) for the period.

We also think **currency translations** do not represent the true underlying earnings unless there is a significant long-term drift between different currencies the business is operating in. Currency translations vary randomly from period to period and are in the case of Crayon often accompanied by an opposite currency translation under comprehensive income. This is very clearly visible in quarterly data. Crayon’s currency translations are extraordinarily large because Crayon collects the full payments from the customers and passes the vast majority on to the vendor, resulting in very, very large payables and receivables compared to Crayon's revenue and gross profit.

Although Crayon’s **tax** is extraordinarily low in the period and may be low for some time as early international losses are recovered, we estimate the underlying long-term taxes to be 22% of pretax profits equal to the corporate tax rate in Norway.

Non-controlling interests are adjusted to represent our best guesstimate of the non-controlling share of the normalized earnings.

To sum up, we think the true underlying (normalized) earnings of Crayon are 326 MNOK during the last twelve months and not 214 MNOK as reported in the financial accounts.

Crayon's net working capital (NWC) is highly seasonal and significantly impacts net interest-bearing debt (NIBD) from quarter to quarter. NWC is high (bad) in Q1 and Q3 and low (good) in Q2 and Q4. We think EV/EBIT is the most important valuation multiple and we normalize the seasonality in the NWC to get a more useful(stable) NIBD and enterprise value (EV).

Historically Crayon has been able to collect payments before paying vendors, resulting in a negative NWC which is great, because it implies NWC is a source of funds. The TTM NWC/Gross profit number of 0,6% looks bad relative to the historic numbers and is partly driven by the temporary dynamics explained in the section Short-term development which we expect to normalize when the economy recovers. However, the seasonality is the biggest reason the number looks bad because we compare Q3 (TTM) with Q4. For reference, NWC/Gross profit was -1,4% in Q3 2019 before COVID temporarily positively affected NWC. The acquisition of Rhipe was dilutive to NWC/Gross profit and we do not expect the figure to fully recover. We have settled with -10% in our normalized numbers but it could just as easily be -5% or -15%. In either case, Crayon has highly attractive cashflow characteristics which make organic growth more valuable because it creates cash while growth in most companies consumes cash. For reference, a typical company with a physical product that needs to be in inventory could have a NWC/sales of +20% and may require significant CAPEX investments in factories and machinery on top of that.

We've included cash flow in our P/E and EV/EBIT numbers in the 5-year forecast to illustrate the value of attractive cashflows in a high-growth business. The scenario is based on 17,5% organic growth and an adjusted EBITDA margin expansion of 3,3 percentage points equivalent to ¼ of the theoretical margin potential calculated in the segment Competitive position and long-term potential. The assumed growth, margin expansion, and cash flow characteristics are below the historical performance and look reasonable to us. The estimated P/E of 3,8 and EV/EBIT of 2,7 should be discounted at an appropriate risk-adjusted discount rate for five years but Crayon's future cashflows look heavily discounted to us.

Peer analysis

Broadly defined numerous listed companies could be considered peers to Crayon but the growth, cashflow characteristics, cyclicality, and margin potential of hardware reselling are far worse than software reselling. To compare apples with apples we've focused on peers with a high share of gross profit from software reselling and services. Measured against software resellers Crayon is among the very best measured by historic (organic) growth and margin improvement as seen in table 6.

Table 6 - Peer analysis

	MCAP (MNOK)	NIBD (MNOK)	Enterprise value (MNOK)	Cloud, Software & Services' share of gross profit*	Gross profit growth (4 years)	EBITDA Adjusted margin change (4 years)	EBIT margin change (4 years)
Bytes	11.823	-432	11.391	~95%	25,3%	15,0 pp.	15,9 pp.
Softcat	29.211	-1.176	28.035	~65%	19,3%	6,3 pp.	6,4 pp.
Softchoice	8.154	1.441	9.595	~72%	8,1%	3,5 pp.	N/A
SoftwareOne	23.135	234	23.369	100%	25,6%**	N/A	-6,7 pp.
Crayon	8.651	1.619	10.270	100%	25,7%	10,8 pp.	11,1 pp.
Crayon (N)***	8.651	1.194	9.844	100%	25,7%	9,0 pp.	10,2 pp.
Average					*19,6%*	*8,3 pp.*	*5,2 pp.*
Median					*22,3%*	*6,3 pp.*	*6,4 pp.*

4 years growth rates are based on 2017-2021

** Our estimates based on reported shares of hardware in either gross invoiced income, revenue or gross profit*

*** Significantly impacted by many acquisitions including Comparex in January 2019*

**** Crayon (N) refers to Normalized numbers. The methodology can be seen in detail in the section Financials and normalized earnings*

Table 7 on the next page compares Crayon with the peer group on four different multiples. Crayon trades at a discount to the peer group on all multiples, especially when using the normalized numbers which we argue reflect the true underlying earnings more accurately that the reported financial numbers.

We think Crayon has the highest growth and margin potential, making it likely Crayon will increase earnings faster than the peer group. If our assement of future earnings growth potential is correct, Crayon should trade at a premium to the peer group.

Table 7 - Peer analysis

	Gross profit growth TTM	Organic Gross profit growth TTM*	EBITDA Adjusted margin TTM	EV/Gross profit TTM	EV/EBITDA Adjusted TTM	EV/EBIT TTM	P/E TTM
Bytes	24,9%	~24,9%	43,5%	7,9	18,1	20,3	27,0
Softcat	18,4%	~18,4%	43,0%	7,1	16,5	17,0	21,9
Softchoice	17,0%	~16,3%	24,7%	3,1	12,6	24,7	75,4
SoftwareOne	17,7%	~5-10%**	25,1%	2,4	9,6	38,6	103,2
Crayon	45,2%	23,0%	20,7%	2,6	12,4	20,3	40,4
Crayon (N)***	45,2%	23,0%	17,5%	2,5	13,7	16,3	26,5
Average	*19,5%*	*16,8%*	*34,1%*	*5,1*	*14,2*	*25,2*	*56,9*
Median	*18,1%*	*17,4%*	*34,0%*	*5,1*	*14,5*	*22,5*	*51,2*

** Our estimates based on reported geography mix in sales, reported currency effects and organic revenue growth*

*** This is our best guestimate as SoftwareOne has done many acquisitions in recent years and will not disclose organic growth, which usually indicates that organic growth is not very good.*

**** Crayon (N) refers to Normalized numbers. The methodology can be seen in detail in the section Financials and normalized earnings*

Bytes is a value-added reseller of hardware, software, and cloud products and services for both public and private entities in the UK and has been so for the last four decades. Bytes is a local company in that +95% of its business is done in the UK alone, which somewhat lowers its growth prospect going forward. On the other hand, Bytes has a strong market position in its home market resulting in very high margins.

Softcat is a value-added reseller of hardware, software, and cloud products and services for both public and private entities in the UK and its gross profit is more than twice the size of its UK peer Bytes. Both Softcat and Bytes have delivered double-digit growth rates in recent years with very high margins.

Softchoice is a value-added reseller of hardware, software and cloud products and services for both public and private entities in the US and Canada and has a low 5-year growth rate in gross profit at 8,1% p.a. compared to peers but has grown gross profit organically at double digits in 2021 and TTM. Softchoice IPO'ed in June 2021 and their valuation is towards the lower end on EV/Gross profit and EV/EBITDA Adjusted, but the higher end on EV/EBIT and P/E. This is explained by Softchoice's relatively large adjustments in their financial reports primarily by share-based compensation, which needs to be normalized as they can be quite volatile depending on the share price, but are a real economic cost that should be included in earnings.

SoftwareOne is a value-added reseller of software and cloud products and services for both public and private entities globally with no hardware sales. SoftwareOne has done many acquisitions in recent years without reporting growth rates adjusted for acquisitions. We interpret their refusal to disclose growth adjusted for acquisitions as a sign that organic growth is lackluster. SoftwareOne has also made two large downgrades of their long-term EBITDA margin guidance since their IPO in October 2019 from 35% to 30% to 25%, partly explained by the many acquisitions, which has been dilutive to their margin. SoftwareOne has rather large adjustments in 2021 and TTM that mainly consists of share-based compensation and integration/M&A-related costs which we consider as real costs. We think it is fair to conclude SoftwareOne struggles the most of the companies in the peer group.

Share overhang

One of the contributing factors to Crayon's share price development in 2022 has been the sales from three major shareholders (OEP, SoftwareOne and Softline under the name Axion BidCo in the shareholder registry) and the potential share overhang from their remaining holdings, which we expect eventually also will be sold. The coincident of three major shareholders sales last year has significantly impacted the share price by supplying more shares than the demand could absorb, driving a drop in share price until supply and demand became balanced again.

In addition to the impact of the sales which clearly coincided with significant drops in share price, the remaining share overhang can keep potential buyers on the sideline.

Table 8 - Share overhang

Change in shareholder base	**10th of January 2023**		**31st of December 2021**		**Change in shareholding**	
(million shares)	Shares	Ownership (%)	Shares	Ownership (%)	Shares	%
OEP ITS	7,40	8,3%	10,72	12,2%	-3,32	-31,0%
SoftwareOne	1,68	1,9%	10,98	12,5%	-9,30	-84,7%
Softline (Axion BidCo)*	~ 0	~ 0%	4,98	5,7%	~ -4,98	~ -100%
Potential share overhang	9,08	10,2%	26,68	29,9%	-17,60	-66,0%
Potential share overhang + TRS	13,66	15,3%	26,68	29,9%	-13,02	-48,8%

** Softline under the name Axion BidCo's shares are assumed to be zero on the 10th of January 2023 as they are not present in the top 20 shareholder list from Crayon's website*

The potential share overhang combining the remaining shares held by OEP ITS and SoftwareOne equals 9,08 million shares or 10,2% of the total shares in Crayon. SoftwareOne entered a Total Return Swap (TRS) on the 22nd of December 2022 and depending on how those shares should be accounted, an additional 4,58 million shares can be added to the potential share overhang for a total of 13,66 million shares.

OEP is a private equity firm that has been an occasional seller over the last two years, and we expect OEP to eventually sell their remaining position in Crayon because their holding period is limited as a private equity firm. OEP currently own 7,4 million shares, making up the lions share of the potential remaining share overhang.

SoftwareOne is a close peer to Crayon and our interpretation is that SoftwareOne originally invested in Crayon with the intention of possible acquiring Crayon down the road. Crayon has outperformed SoftwareOne in recent years making this possibility increasingly unrealistic. We think SoftwareOnes sale is motivated by cashing out on their successful investment, freeing up cash to invest in their (slightly struggling) core business while also returning cash to their shareholders.

Softline is a Russian peer that invested in Crayon under the name Axion BidCo. Following Russia's invasion of Ukraine Softline has struggled and their stock (GDP) listed in the UK is down 97% since their IPO in the fall of 2021. On the 28th of March 2022, Softline (Axion BidCo) flagged that they had sold shares in Crayon, bringing their holdings below the 5% threshold. Our interpretation is that Softline was not able to do an accelerated bookbuilding because of their Russian affiliation and was forced to dump all of their shares over the stock exchange. Their sale coincided with the sale of an addition 5,0% on the 05th of April by SoftwareOne, further increasing the downward price pressure on the share price.

Conclusion

To summarize, we think the major shareholders sale of shares is not related to the value or underlying business performance of Crayon and is driven by other motivations. We think the sales and potential share overhang has significantly impacted Crayons share price in the short term but the effect is temporary and has no impact of the fundamental value of Crayon.

We think the likely deacceleration in growth, flattish margins, and less attractive cashflow characteristics is temporary in nature and mainly driven by the economic slowdown and normalization of temporary COVID tailwinds. However, we also think there is some underlying weakness, mainly in the US region.

We think Crayon is more resilient to economic downturns than the average company but that there is some idiosyncratic risk in reselling other companies software.

We think the reported financial earnings significantly understate the true underlying (normalized) earnings of Crayon.

We think the long-term growth prospect is excellent with a rapidly expanding underlying market supported by further international expansion.

We think Crayon's business model has very attractive cashflow characteristics which makes growth significantly more valuable than growth at the average company which has to tie up a lot of cash in NWC (and CAPEX) when growing.

We think the long-term margin potential is excellent as the international regions continue to close some of the margin gaps to the Nordic home region. The margin potential is further collaborated by the high margins of the peer group.

We think Crayon's competitive moat is as good as it gets for the industry.

Crayon is trading at a discount to the peer group, and we think they should trade at a premium.

Crayon looks heavily discounted compared to the future cashflows as estimated in our 5-year scenario which is based on growth, margin improvement, and cashflow characteristics below what Crayon has achieved historically.