



ArtSpark Holdings / 3663

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INDEX

How to read a Shared Research report: This report begins with the trends and outlook section, which discusses the company's most recent earnings. First-time readers should start at the business section later in the report.

Executive summary	3
Key financial data	4
Recent updates	5
Highlights	5
Trends and outlook	7
Quarterly trends and results	7
Full-year company forecasts	10
Outlook	12
Business	14
Business description	14
Profitability snapshot, financial ratios	19
Strengths and weaknesses	20
Historical performance and financial statements	21
Income statement	30
Balance sheet	31
Cash flow statement	32
News and topics	33
Other information	33
History	33
Shareholder return	34
Major shareholders	35
Top management	35
Employees	35
Other	35
Glossary	35
Profile	37

Executive summary

Dual-company business model sets ArtSpark apart

- ArtSpark is a joint holding company formed by the merger of Celsys Inc. and HI Corp. in April 2012. Celsys was known for CLIP STUDIO PAINT, software for producing manga, illustration, and animation, as well as an e-book distribution service for feature phones. HI was strong in 3D software for mobile phones. The two companies hold the top market shares in Japan of their respective products.
- ArkSpark has two business segments: Creator Support business (BtoC/BtoB business) belonging to Celsys and UI/UX business (BtoB business) to HI. In FY03/17, the Creator Support business brought in 64.5% of overall sales, and UI/UX business the remaining 35.5% (operating profit, 84.4% and 15.6% respectively). ArtSpark aims to strengthen existing businesses and create new ones by combining the technologies and customer base of Celsys (applications) and HI (UI/UX) which both excel in their individual fields. The company sees global expansion and further improvements to CLIP STUDIO PAINT series as well as product improvement and enhanced marketing of UI authoring software product exbeans UI Conductor, a foundation for HMI (Human Machine Interface), as its main business strategies. (See Business description section for details.)

Performance

- Along with its announcement of FY12/18 results on February 9, 2018, ArtSpark updated the medium-term business plan it released back in July 2015, saying changes in market environment had increased the uncertainty about the future and made it necessary to step up R&D efforts in order to reinforce the competitiveness of its software IP. Regarding performance targets, the company said that, for now, it was limiting revisions to its sales and earnings targets for FY12/18, but that it planned to put together a new business plan and, once that was ready, it would be released at the appropriate time.
- For FY12/17, the company reported sales of JPY3.6bn (-5.2% YoY). Sales of JPY276mn were included in FY12/16 results from the sale of shares of HI Corporation Kansai, a subsidiary of a company subsidiary, during the previous term. When comparing sales of existing group companies, sales were up 2.1% YoY. Operating profit was JPY424mn (-15.3% YoY). Recurring profit was JPY410mn (-14.0% YoY), with interest paid coming to JPY4mn (down JPY2.2mn) and foreign exchange losses of JPY5mn (down JPY9.6mn). After booking extraordinary losses of JPY13mn for software impairment losses and only JPY19mn in taxes, net income attributable to parent company shareholders was JPY375mn (+11.2% YoY). During the year the company focused on software IP-centered businesses, strategic realignment of development resources, and improvement of operational efficiency. Sales and earnings finished above plan, with sales coming in 4.4% above plan, operating profit 13.0% above plan, recurring profit 16.3% above plan, and net income 26.2% above plan.
- For FY12/18, the company is forecasting consolidated sales of JPY3.6bn (-0.4% YoY), operating profit of JPY367mn (-13.4% YoY), recurring profit of JPY343mn (-16.4% YoY), and net income attributable to parent company shareholders of JPY251mn (-33.0% YoY). 1H FY12/18 results exceeded forecasts and have been revised upward. However, in anticipation of upfront investment in UI/UX*, and costs accompanying in-house development of IP products, 2H forecasts were set conservatively. The company raised its annual dividend payment by JPY1, to JPY5 per share, to be paid entirely at the end of the fiscal year.

* The company plans to make this into a core product for the next generation. It is focused on strengthening functionality to prepare for future mass production in response to strong demands from its automobile manufacturer customers.

Strengths and weaknesses

Shared Research believes ArtSpark's strengths lie in its technological expertise cultivated by creating products for mobile phones, Celsys' large global share in application software for end users, and HI's track record in developing embedded software for manufacturers. Weaknesses: high marketing cost of Creator Support business, major performance fluctuations in the UI/UX businesses, and time-consuming and costly to add or revise functions (see Strengths and weaknesses section).

Key financial data

Income statement (JPY'000)	FY03/10 Simple sum	FY03/11 Simple sum	FY03/12 Simple sum	FY12/12 Cons.	FY12/13 Cons.	FY12/14 Cons.	FY12/15 Cons.	FY12/16 Cons.	FY12/17 Cons.	FY12/18 Est.
Total sales	4,954,267	4,931,552	4,565,225	2,633,289	3,685,419	3,826,206	4,156,911	3,835,853	3,636,018	3,621,000
YoY	13.5%	-0.5%	-7.4%	-	-	3.8%	8.6%	-7.7%	-5.2%	-0.4%
Gross profit	2,136,043	2,148,534	1,694,117	411,323	1,142,503	1,333,494	1,278,954	1,564,523	1,602,062	
YoY	2.2%	0.6%	-21.2%	-	-	16.7%	-4.1%	22.3%	2.4%	
GPM	43.1%	43.6%	37.1%	15.6%	31.0%	34.9%	30.8%	40.8%	44.1%	
Operating profit	542,931	623,219	226,566	-667,312	-69,093	99,713	88,488	500,504	423,803	367,000
YoY	63.2%	14.8%	-63.6%	-	-	-	-	465.6%	-15.3%	-13.4%
OPM	11.0%	12.6%	5.0%	-	-	2.6%	2.1%	13.0%	11.7%	10.1%
Recurring profit	527,143	607,749	215,666	-690,045	-68,222	93,621	62,226	477,045	410,425	343,000
YoY	60.2%	15.3%	-64.5%	-	-	-	-	666.6%	-14.0%	-16.4%
RPM	10.6%	12.3%	4.7%	-	-	2.4%	1.5%	12.4%	11.3%	9.5%
Net income	218,826	371,438	-255,795	-1,350,939	42,811	59,958	34,791	337,150	374,791	251,000
YoY	-731.7%	69.7%	-	-	-	40.1%	-42.0%	869.1%	11.2%	-33.0%
Net margin	4.4%	7.5%	-	-	1.2%	1.6%	0.8%	8.8%	10.3%	6.9%
Per share data										
Shares outstanding (year end; '000)	-	-	-	6,635,570	6,636,770	6,647,375	6,709,945	6,779,120	6,779,120	
EPS	-	-	-	-203.59	6.45	9.02	5.21	49.80	55.25	36.91
Dividend per share	-	-	-	-	-	-	2.00	3.00	4.00	5.00
Book value per share	-	-	-	350.03	340.55	348.84	356.88	410.47	464.19	
Balance sheet (JPY'000)										
Cash and cash equivalents	1,344,987	1,988,715	2,191,488	1,294,740	1,323,533	1,086,746	1,323,640	2,152,234	2,491,012	
Total current assets	2,878,666	3,315,520	3,823,757	2,158,580	2,130,897	2,214,755	2,085,545	2,542,140	2,996,405	
Tangible fixed assets	104,148	98,621	83,204	70,065	55,733	71,552	52,856	56,035	76,767	
Investments and other assets	565,150	739,853	667,529	806,700	453,119	351,810	252,399	188,993	208,959	
Intangible fixed assets	886,181	1,078,856	1,406,486	979,243	1,003,040	1,326,376	1,209,075	911,906	741,982	
Total assets	4,434,149	5,232,853	5,980,979	4,024,939	3,650,704	3,969,974	3,602,921	3,699,684	4,024,115	
Accounts payable	178,477	173,764	276,578	170,305	168,904	211,822	149,730	68,135	80,707	
Short-term debt	10,000	133,332	503,136	438,576	596,879	558,012	473,141	357,329	274,964	
Total current liabilities	597,633	749,708	1,117,737	1,022,418	1,021,006	1,241,218	975,882	756,137	676,402	
Long-term debt	0	66,668	324,940	474,391	267,512	276,203	87,011	36,372	18,080	
Total fixed liabilities	46,804	120,709	427,264	653,465	343,485	365,953	187,233	145,328	180,242	
Total liabilities	644,439	870,418	1,545,002	1,675,884	1,364,491	1,607,172	1,163,115	901,466	856,644	
Net assets	3,789,710	4,362,434	4,435,976	2,349,056	2,286,213	2,362,802	2,439,806	2,798,218	3,167,471	
Total interest-bearing debt	10,000	200,000	828,076	912,967	864,391	834,215	560,152	393,701	293,044	
Cash flow statement (JPYmn)										
Cash flows from operating activities	297,551	1,154,289	273,344	137,818	358,484	672,554	837,494	1,435,075	1,021,462	
Cash flows from investing activities	-712,016	-916,091	-1,052,154	-622,300	-163,135	-508,476	-539,941	-551,610	-577,430	
Cash flows from financing activities	-28,281	401,469	869,543	-355,593	-48,473	-238,659	-64,272	-58,486	-108,862	
Financial ratios										
ROA (RP-based)	11.9%	12.6%	3.8%	-13.8%	-1.8%	2.5%	1.6%	13.1%	10.6%	
ROE	5.9%	9.1%	-5.8%	-41.0%	1.9%	2.6%	1.5%	13.0%	12.6%	
Equity ratio	85.6%	83.7%	73.1%	54.9%	61.7%	58.4%	66.4%	75.2%	78.3%	

Source: Shared Research based on company data

Figures may differ from company materials due to differences in rounding methods.

The company was formed from a merger of CELSYS, Inc. and HI CORPORATION in April 2012, and thus FY12/12 is a nine-month period.

Figures for FY03/12 and earlier are a simple aggregate of the results of CELSYS, Inc. and HI CORPORATION.

Recent updates

Highlights

On **December 17, 2018**, ArtSpark Holdings Inc. announced the acquisition of shares in Socionext Embedded Software Austria GmbH (making it a subsidiary) and a loan agreement.

At a meeting of the Board of Directors on December 17, 2018, the company announced the acquisition of shares in Socionext Embedded Software Austria GmbH (SESA: headquartered in Austria) and associated borrowing of funds. SESA will become a subsidiary of ArtSpark.

Background to stock acquisition

In its UI/UX business, ArtSpark has development solutions including a UI authoring tool (exbeans UI Conductor) and products for drawing graphics which are used in UI solutions to provide total support in fields from technology through design. Meanwhile, SESA supplies scalable human machine interface (HMI) not reliant on hardware as well as CGI Studio, GUI design software. It supplies major automobile companies primarily in Europe on an OEM basis and is highly compatible with ArtSpark.

Japanese car companies are customers for the ArtSpark group's existing exbeans UI Conductor, and major European car manufacturers are customers for SESA's CGI Studio, so each company can tap into the other's customer base. SESA has knowledge about ISO 26262*¹ as well as Automotive SPICE*². It will be able to share this expertise at a time when safety is under increasing scrutiny due to autonomous driving and other factors. ArtSpark thinks that there are many potential synergies, as sharing development expertise will assist in developing more efficiently, and expects enhanced market competitiveness. The company plans to appoint SESA director Reinhard Füricht to the position of managing director, and also intends to change the company name. The stock transfer agreement was reached on December 17, 2018, and the transfer is planned to take place on January 31, 2019.

*1: ISO 26262 refers to a global functional safety standard for automotive electric and electronic systems.

*2 Automotive SPICE refers to a process model issued by the VDA QMC (German Automotive Industry Association Quality Management Center) that establishes the process framework for automotive software development. It aims to evaluate automotive software development processes quantitatively.

Overview of subsidiary to be transferred

- ▷ Name: Socionext Embedded Software Austria GmbH
- ▷ Location: Austria
- ▷ Business: IT and software services
- ▷ Capital: EUR35,000 (JPY4mn)

Acquisition cost and share ownership before and after acquisition

- ▷ Number of shares to be acquired: 1 (Number of voting rights: 1; 100% of voting rights)
- ▷ Acquisition cost: JPY2.2bn (estimate), share acquisition cost: JPY2.0bn, advisory expenses: JPY150mn (estimate)

Loan agreement

The share acquisition is planned to be a cash transaction, with the company borrowing the necessary funds as shown following.

- ▷ Lender: MUFG Bank, Ltd.
- ▷ Loan amount: JPY1.5bn
- ▷ Planned borrowing date: January 2019

- ▷ Loan term: Six months
- ▷ Loan interest rate: TIBOR + spread
- ▷ Loan type: Unsecured

Note: ArtSpark is reviewing the impact on full-year FY12/18 earnings and will promptly disclose any material impact on earnings if they become apparent. The company said that it would factor in any impact on earnings for FY12/19 and beyond when it announces earnings forecasts.

On **October 26, 2018**, the company announced earnings results for Q3 FY12/18; see the results section for details.

For previous releases and developments, please refer to the News and topics section.

Trends and outlook

Quarterly trends and results

Quarterly performance (JPYmn)	FY12/16				FY12/17				FY12/18				FY12/18	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	% of 1H	1H Est.
Sales	1,083	1,174	790	789	841	882	1,035	878	1,012	911	905			
YoY	7.4%	2.2%	-18.9%	-23.1%	-22.4%	-24.9%	31.1%	11.3%	20.4%	3.3%	-12.6%			
Gross profit	420	550	291	303	420	400	540	242	514	425	419			
YoY	12.3%	81.6%	8.9%	-9.4%	-0.1%	-27.3%	85.5%	-20.1%	22.6%	6.3%	-22.4%			
GPM	38.8%	46.9%	36.9%	38.4%	49.9%	45.4%	52.2%	27.6%	50.8%	46.7%	46.3%			
SG&A expenses	247	266	261	290	279	287	278	334	301	337	293			
YoY	-24.4%	-18.7%	-10.3%	18.1%	13.2%	7.9%	6.6%	15.3%	7.7%	17.2%	5.3%			
SG&A ratio	22.8%	22.7%	33.1%	36.7%	33.2%	32.6%	26.9%	38.0%	29.7%	37.0%	32.4%			
Operating profit	173	284	30	13	140	113	262	-92	214	89	126			
YoY	262.2%	-	-	-85.1%	-18.9%	-60.1%	777.9%	-	52.0%	-21.6%	-52.0%			
OPM	16.0%	24.2%	3.8%	1.7%	16.7%	12.9%	25.3%	-	21.1%	9.8%	13.9%			
Recurring profit	164	267	26	20	133	111	263	-96	201	89	127			
YoY	359.1%	-	-	-76.9%	-18.7%	-58.6%	902.8%	-	51.1%	-19.6%	-51.6%			
RPM	15.1%	22.8%	3.3%	2.5%	15.8%	12.6%	25.4%	-	19.9%	9.8%	14.1%			
Net income	132	237	13	-45	127	94	215	-62	179	71	94			
YoY	669.2%	-	-	-	-3.7%	-60.5%	1529.6%	-	40.3%	-24.2%	-56.4%			
Net margin	12.2%	20.2%	1.7%	-	15.2%	10.6%	20.8%	-	17.7%	7.8%	10.4%			
Cumulative	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	% of FY	FY Est.
Sales	1,083	2,257	3,047	3,836	841	1,722	2,758	3,636	1,012	1,923	2,828		78.1%	3,621
YoY	7.4%	4.6%	-2.7%	-7.7%	-22.4%	-23.7%	-9.5%	-5.2%	20.4%	11.7%	2.5%			-0.4%
Gross profit	420	970	1,261	1,565	420	820	1,360	1,602	514	940	1,359			
YoY	12.3%	43.3%	33.6%	22.3%	-0.1%	-15.5%	7.8%	2.4%	22.6%	14.6%	-0.1%			
GPM	38.8%	43.0%	41.4%	40.8%	49.9%	47.6%	49.3%	44.1%	50.8%	48.9%	48.1%			
SG&A expenses	247	513	774	1,064	279	567	845	1,179	301	637	931			
YoY	-24.4%	-21.5%	-18.1%	-10.6%	13.2%	10.5%	9.1%	10.8%	7.7%	12.5%	10.2%			
SG&A ratio	22.8%	22.7%	25.4%	27.7%	33.2%	32.9%	30.6%	32.4%	29.7%	33.2%	32.9%			
Operating profit	173	457	487	501	140	254	516	424	214	302	428		116.7%	367
YoY	-	-	-	-465.6%	-18.9%	-44.5%	5.9%	-15.3%	52.0%	19.1%	-17.0%			-13.4%
OPM	16.0%	20.3%	16.0%	13.0%	16.7%	14.7%	18.7%	11.7%	21.1%	15.7%	15.1%			10.1%
Recurring profit	164	431	457	477	133	244	507	410	201	290	417		121.7%	343
YoY	-	-	-	-666.6%	-18.7%	-43.5%	10.8%	-14.0%	51.1%	19.0%	-17.6%			-16.4%
RPM	15.1%	19.1%	15.0%	12.4%	15.8%	14.1%	18.4%	11.3%	19.9%	15.1%	14.8%			9.5%
Net income	132	369	382	337	127	221	436	375	179	250	344		136.9%	251
YoY	-	-	-	-869.1%	-3.7%	-40.1%	14.2%	11.2%	40.3%	13.0%	-21.3%			-33.0%

Source: Shared Research based on company data
 Figures may differ from company materials due to differences in rounding methods.

Performance by quarter

Quarterly (JPYmn)	FY12/16				FY12/17				FY12/18			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Sales												
Creator Support	548	545	527	542	616	615	589	593	679	748	750	
UI/UX	540	634	270	261	248	288	456	298	344	174	170	
Subtotal	1,088	1,179	796	803	864	903	1,046	891	1,023	972	869	
Adjustments	-5	-5	-7	-14	-23	-22	-11	-12	-11	-11	-15	
Total	1,083	1,174	790	789	841	882	1,035	878	1,012	911	905	
Operating profit												
Creator Support	80	69	24	23	135	104	72	-11	139	157	142	
UI/UX	84	217	-5	-15	-10	2	167	-103	52	-51	-56	
Subtotal	163	324	-19	8	125	106	239	-115	191	106	87	
Adjustments	10	-40	49	5	15	7	23	22	23	-17	39	
Total	173	284	30	13	140	113	262	-92	214	89	126	
OPM												
Creator Support	14.5%	12.6%	4.6%	4.3%	22.0%	16.9%	12.2%	-1.9%	20.4%	21.0%	19.0%	
UI/UX	15.5%	34.3%	-1.9%	-5.9%	-4.1%	0.7%	36.6%	-34.7%	15.2%	-29.2%	-32.9%	
Total	16.0%	24.2%	3.8%	1.7%	16.7%	12.9%	25.3%	-10.5%	21.1%	9.8%	13.9%	
Cumulative (JPYmn)												
	FY12/16				FY12/17				FY12/18			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Sales												
Creator Support	548	1,093	1,619	2,161	616	1,231	1,820	2,413	679	1,426	2,176	
UI/UX	540	1,175	1,444	1,705	248	536	992	1,291	344	519	688	
Subtotal	1,088	2,267	3,064	3,867	864	1,767	2,813	3,704	1,023	1,995	2,864	
Adjustments	-5	-10	-17	-31	-23	-45	-55	-68	-11	-22	-37	
Total	1,083	2,257	3,047	3,836	841	1,722	2,758	3,636	1,012	1,923	2,828	
Operating profit												
Creator Support	80	148	172	196	135	239	311	300	139	295	438	
UI/UX	84	301	296	281	-10	-8	159	56	52	2	-54	
Subtotal	163	488	468	477	125	231	470	356	191	297	384	
Adjustments	10	-30	19	24	15	23	46	68	23	5	45	
Total	173	457	487	501	140	254	516	424	214	302	428	
OPM												
Creator Support	14.5%	13.6%	10.7%	9.1%	22.0%	19.4%	17.1%	12.4%	20.4%	20.7%	20.1%	
UI/UX	15.5%	25.6%	20.5%	16.5%	-4.1%	-1.5%	16.0%	4.3%	15.2%	0.3%	-7.9%	
Total	16.0%	20.3%	16.0%	13.0%	16.7%	14.7%	18.7%	11.7%	21.1%	15.7%	15.1%	

Source: Shared Research based on company data
 Figures may differ from company materials due to differences in rounding methods.
 Figures are before eliminations.

From Q1 FY12/16, the company revised its business performance management categories, integrating the Applications business with the UI/UX business (figures for the businesses are shown under the UI/UX business). Figures for periods prior to Q1 FY12/16 are also retroactively adjusted in the table above.
 From Q1 FY12/17, the company revised its business performance management categories, integrating the Content Solutions business with the Creator Support business (figures for the businesses are shown under the Creator Support business). Figures for periods prior to Q1 FY12/17 are also retroactively adjusted in the table above.

Q3 FY12/18 consolidated results

Overview

For cumulative Q3 FY12/18, the company reported sales of JPY2.8bn (+2.5% YoY) and operating profit of JPY428mn (-17.0% YoY). The company reported recurring profit of JPY417mn (-17.6% YoY) due to booking JPY1mn in paid interest and JPY7mn in forex losses and net income attributable to parent company shareholders of JPY344mn (-21.3% YoY) due to deducting JPY82mn in tax expenses. The company focused on software IP-centered businesses, strategic realignment of development resources, and improvement of operational efficiency.

Sales reached 78.1% of FY12/18 full-year company forecasts (FY12/17 cumulative Q3 sales reached 75.8% of full-year FY12/17 results), operating profit reached 116.7% (121.8%), recurring profit reached 121.7% (123.4%) and net income attributable to parent company shareholders reached 136.9% (116.4%).

Creator Support

- ▶ **Sales:** JPY2.2bn (+19.5% YoY)
- ▶ **Operating profit:** JPY438mn (+40.6% YoY)

Since its launch in 2012, CLIP STUDIO PAINT (software for producing manga, illustration, and animation) has sold more than four million units worldwide. The company changed its e-book solutions brand name from BS Reader to CLIP STUDIO READER in an

effort to strengthen the link with CLIP STUDIO solutions. The company also sponsored a modern Ashura exhibit held by Nara Newspaper Company Inc. and provided CLIP STUDIO PAINT for an illustration contest based on the theme of a new, modern image of Ashura.

CLIP STUDIO, a website providing total support for creators, had approximately 1.3mn registered users as of the end of September 2018 (vs. approximately 1.2mn at the end of June 2018).

UI/UX

- ▶ **Sales:** JPY688mn (-30.6% YoY)
- ▶ **Operating loss:** JPY54mn (JPY159mn operating profit in cumulative Q3 FY12/17)

ArtSpark is focusing on development and sales of self-developed IP products such as UI authoring software products exbeans UI Conductor, a foundation of HMI, targeting the automotive (cars and motorcycles) market and commercial- and consumer-use printers.

In the printer field, exbeans UI Conductor has been installed in over three million total printers produced by Seiko Epson Corp. (TSE1 6724). The company will continue to strengthen the features of this product so that it is adopted by Tier-1 companies (primary suppliers), and promote business creation through exhibits at events and fairs.

The company's products have been adopted as the default software for in-vehicle equipment by major OEMs since August 2015 and the company has shipped over 2.7mn units (mainly to the North American market).

For details on previous quarterly and annual results, see the Historical financial statements section.

Full-year company forecasts

(JPYmm)	FY12/16			FY12/17			FY12/18		
	1H Act.	2H Act.	FY Act.	1H Act.	2H Act.	FY Act.	1H Act.	2H Est.	FY Est.
Sales	2,257	1,579	3,836	1,722	1,914	3,636	1,923	1,698	3,621
YoY	4.6%	-21.0%	-7.7%	-23.7%	21.2%	-5.2%	11.7%	-11.3%	-0.4%
Cost of sales	1,286	985	2,271	902	1,131	2,034	983		
Gross profit	970	594	1,565	820	783	1,603	940		
GPM	43.0%	37.6%	40.8%	47.6%	40.9%	44.1%	48.9%		
SG&A expenses	513	551	1,064	567	613	1,179	637		
SG&A ratio	22.7%	34.9%	27.7%	32.9%	32.0%	32.4%	33.2%		
Operating profit	457	43	501	254	170	424	302	65	367
YoY	-	-33.8%	465.6%	-44.5%	294.5%	-15.3%	19.1%	-62.0%	-13.4%
OPM	20.3%	2.7%	13.0%	14.7%	8.9%	11.7%	15.7%	3.8%	10.1%
Recurring profit	431	46	477	244	167	410	290	53	343
YoY	-	-20.8%	666.6%	-43.5%	261.9%	-14.0%	19.0%	-68.2%	-16.4%
RPM	19.1%	2.9%	12.4%	14.1%	8.7%	11.3%	15.1%	3.1%	9.5%
Net income	369	-32	337	221	154	375	250	1	251
YoY	-	-	869.1%	-40.1%	-585.3%	11.2%	13.0%	-99.1%	-33.0%
Net margin	16.3%	-2.0%	8.8%	12.8%	8.0%	10.3%	13.0%	0.1%	6.9%

Source: Shared Research based on company data
 Figures may differ from company materials due to differences in rounding methods.
 Forecast based on most recently released figures.

On July 27, 2018, the company announced upward revisions to its full-year FY12/18 earnings forecasts, alongside its 1H results announcement. Details are given below.

Because 1H results surpassed initial forecasts by a wide margin, the company revised its full-year forecasts as set out below:

- ▷ Sales forecast: JPY3.6bn (initial forecast JPY3.3bn)
- ▷ Operating profit forecast: JPY367mn (JPY63mn)
- ▷ Recurring profit forecast: JPY343mn (JPY42mn)
- ▷ Net income forecast: JPY251mn (JPY7mn)

Earnings forecasts for FY12/18

- ▷ Sales: JPY3.6bn (-0.4% YoY)
- ▷ Operating profit: JPY367mn (-13.4% YoY)
- ▷ Recurring profit: JPY343mn (-16.4% YoY)
- ▷ Net income*: JPY251mn (-33.0% YoY)

*Net income refers to net income attributable to parent company shareholders.

There are three key assumptions underlying the forecasts. Shared Research thinks that these are conservative forecasts, framed in the context of upfront investments for long-term growth and uncertainties.

Assumptions for FY12/18

I. Uncertainties regarding CLIP STUDIO PAINT EX in Creator Support: In November 2017, ArtSpark released an iPad compatible version* of CLIP STUDIO PAINT EX, for which it held a conservative outlook in the beginning of FY12/18. The product is free for the first six months, and the company can only book sales once it starts receiving user fees after the six months has elapsed. At the start of the fiscal year, it was difficult to forecast how many users would transition to the paid service. Another unknown was how it would affect existing Windows and Mac OS versions. Despite these uncertainties 1H results exceeded the company's conservative forecasts, offering a reason for the company to revise up the full-year forecasts.

* CLIP STUDIO PAINT EX for iPad comes in seven different languages, with the same functions as the Windows and Mac OS versions. As the most advanced version of the company's CLIP STUDIO PAINT software series, the iPad version allows users to create full-scale Manga and illustrations and commercial-level animation using only an iPad.

II. Upfront investment in UX/UI: In the vehicle (car and motorcycle) market, the company needs to constantly upgrade product competitiveness to respond to the demanding needs of manufacturers. ArtSpark has positioned FY12/18 as a year to

make this into a core product for the next generation. It is focused on strengthening functionality to prepare for future mass production.

III. Focus on developing IP products in-house: The company is focused on developing IP products in-house. Previously, it did not rely on single products to generate earnings in either the Creator Support or UI/UX businesses. ArtSpark has developed its businesses by constantly looking to produce new IP products. Going forward, it plans to develop IP products in-house with a more intense focus than ever.

In FY12/18 the company is planning to pay an annual dividend of JPY5.0 per share (interim: JPY0; year-end: JPY5.0), up JPY1.0 versus the previous year. Versus the company's EPS forecast of JPY1.03, this represents a payout ratio of over 400%. ArtSpark is focused on returns to shareholders, and has a sound financial structure (as of end FY12/17, it had net cash of JPY2.2bn*).

*The company's interest-bearing debt declined from JPY913mn at end FY12/12 to JPY293mn at end FY12/17. Meanwhile, cash and deposits grew from JPY1.3bn to JPY2.5bn over the same period.

Major initiatives planned for FY12/19

- ▷ Emphasize marketing of software IP
- ▷ Continue strategically allocating resources to R&D, focus on improving management efficiency
- ▷ Increase CLIP STUDIO development and related service offer to help speed expansion overseas
- ▷ Develop services to aid content creation, distribution, and revitalizations using the CLIP STUDIO platform
- ▷ Focus development efforts on enhancing in-house IP products (UI Conductor, Affinity, VI Transfer, etc.)

Outlook

Along with its announcement of FY12/18 results on February 9, 2018, ArtSpark updated the medium-term business plan it released back in July 2015, saying changes in market environment had increased the uncertainty about the future and made it necessary to step up R&D efforts in order to reinforce the competitiveness of its software IP. Regarding performance targets, the company said that, for now, it was limiting revisions to its sales and earnings targets for FY12/18, but that it planned to put together a new business plan and, once that was ready, it would be released at the appropriate time.

Previous medium-term plan (announced July 31, 2015)

ArtSpark announced a medium-term business plan on July 31, 2015 for the period through FY12/19. For the final year of the plan, the company set a sales target of JPY5.0bn (versus JPY3.8bn in FY12/14) and operating profit target of JPY1.2bn (versus JPY100mn), representing an operating profit margin of 23.7% (versus 2.6% in FY12/14).

The company's management philosophy has been to provide a complete support for digital content creation, use, and consumption. The initial plan in 2012 (at the time of establishment) was to grow sales to around JPY7.0bn by winning more development orders, and form a strong foundation for long-term growth. The current medium-term management plan involves improving products and services by maximizing the synergies of the group's resources and intellectual property. According to the company, this caused a temporary fall in sales, but that the renewed focus on group intellectual property may lead to improved competitiveness and profitability.

The company expects improved profitability at the UI/UX segment to contribute to consolidated profit growth for the first three years of the plan. During the last two years, higher profits in the Content Solutions segment, specifically from graphics, in addition to solid performance of the UI/UX segment, may drive earnings. The company plans to book stable profits from the Creator Support segment, the main profit driver.

Improved development and reduced costs

ArtSpark intends to build a structure that will allow it to improve the utilization of its staff and other resources by flexibly moving development projects forward and avoiding overlap of research and development within the group. It also intends to develop a common core engine and integrate it into software of each group company to strengthen independent IP development. The plan also includes reducing costs, beginning with an office relocation and consolidation, and consolidation of divisions.

Segment-specific measures

Creator Support

As part of a reorganization of its product line-up, on June 30, 2015 the company ended sales of manga software ComicStudio and illustration software ILLUSTRATION STUDIO, hit products for 14 years. ArtSpark plans to further research and develop software CLIP STUDIO PAINT, which has inherited the functions of its two predecessors. The company intends to flesh out internet services and increase creators who use its software in Japan and overseas.

Content Solutions

In e-books, ArtSpark plans to grow by maintaining its position in the e-book market through improved customer support, and expanding through new devices. In graphics, the company plans to leverage its creator tool business to provide services relating to creation, distribution, and playing of digital content, as well as synergies with software sales toward commercialization and profitability.

UI/UX

ArtSpark aims to shift its business model away from focusing on winning orders for its development services (as it had been doing to gain scale), toward winning orders for its intellectual property. Under this new "Design & Engineering" theme, the company hopes to reduce production costs and increase profits. As a tier one software supplier to the automotive industry, it aims to promote sales of products developed based on its intellectual property (such as its next-generation UI authoring tool "exbeans UI Conductor").

Previous medium-term management plan targets

(JPYmn)	FY12/15	FY12/16	FY12/17	FY12/18	FY12/19
Content Solution	1,021	1,155	1,147	1,256	1,518
Creator Support	849	1,001	1,060	1,115	1,178
UI/UX	2,417	1,710	1,790	2,150	2,320
Applications	62	0	0	0	0
Sales	4,349	3,866	3,997	4,521	5,016
OP	181	286	349	837	1,190
OPM	4.2%	7.4%	8.7%	18.5%	23.7%

Note: Company projections as of July 2015
 Source: Shared Research based on company data

Business

Business description

Dual-company business model sets ArtSpark apart

ArtSpark is a joint holding company formed by the merger of Celsys Inc. and HI Corp in April 2012. Celsys was known for CLIP STUDIO PAINT software to produce manga, illustration, and animation, as well as an e-book distribution solution for mobile phones. HI was strong in 3D rendering software for cell phones. The two companies hold the top market shares in Japan for their respective products.

Celsys		HI	
Main businesses	Main products	Main businesses	Main products
Software for use in creating anime and manga	CLIP STUDIO PAINT	3D rendering engine for cell phones	MascotCapsule
	RETAS STUDIO	Font rendering engine	Higlyph
e-book distribution system for cell phones	BS Reader	UI development for embedded devices	exbeans UI Conductor exbeans Affinity
	BS Reader for Browser		
	BS Reader S		

Source: Shared Research based on company data

As the cell phone market rapidly shifted from feature phones to smartphones, the two companies needed to change their business models. Both were strong in their respective markets, and they merged in 2012 to strengthen their competitive edge by combining technologies and customer bases. ArtSpark said that it aims to reinforce the existing businesses and create new businesses through the resources of Celsys (strong in applications) and HI (UI/UX).

Establishes own base in human-centered design

Technologies to display graphics are advancing spurred by a wider range of portable internet devices, and the profusion of consumer electronics devices like digital cameras, in-vehicle devices, electronic billboards and store information terminals. The popularity of the iPhone and iPad has increased demand for user-friendly devices over functions.

While general electronic devices have been made on the idea of function-centered design, the iPhone and iPad, which offer ease of use, are based on human-centered design. The UI (user interface design) and UX (user experience design) concept is key. The UI/UX business provides comprehensive solutions for development and implementation by combining user interface (connecting users to devices and software), with user experience (pleasure, ease of use and other experience from devices and software). Since function-centered design has been dominant in Japan, human-centered design has not yet taken root. However, the need for user-friendly operations is likely to increase as functions increase.

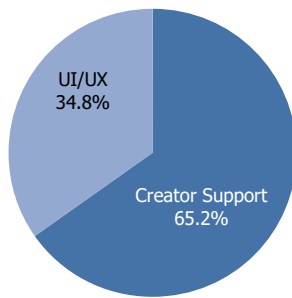
Celsys and HI had developed software for cell phones and held top positions in their respective industries. ArtSpark is thus the leader in image processing on low-end devices. The company is proceeding with operations in cooperation with designers and engineers in planning, development and implementation.

Segments

The company's business segments are Creator Support, originally a business operated by Celsys, and UI/UX coming from HI*. In FY12/17, Creator Support accounted for 64.5% of sales and UI/UX for 35.5%. The respective shares of operating profit were 84.4% and 15.6%.

*Until FY12/16, the three business segments were Creator Support, Content Solution, and UI/UX. Celsys handled Creator Support and Content Solution, while HI handled UI/UX, which included the former Applications segment

Sales breakdown



Source: Shared Research based on company data

Sales, profit, and margins by segment

(JPYmn)	Sales					Segment profit					Profit margin				
	FY12/13	FY12/14	FY12/15	FY12/16	FY12/17	FY12/13	FY12/14	FY12/15	FY12/16	FY12/17	FY12/13	FY12/14	FY12/15	FY12/16	FY12/17
	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY
New segments															
Creator Support	-	-	-	2,161	2,413	-	-	-	196	300	-	-	-	9.1%	12.4%
UI/UX	-	-	-	1,705	1,291	-	-	-	281	56	-	-	-	16.5%	4.3%
Adjustments	-	-	-	-31	-68	-	-	-	24	68	-	-	-	-	-
Old segments															
Content Solution	1,283	1,118	1,155	1,021	-	119	22	6	24	-	9.3%	2.0%	0.5%	2.4%	-
Creator Support	637	751	965	1,140	-	-94	10	135	172	-	-14.7%	1.4%	14.0%	15.1%	-
UI/UX	1,789	2,001	2,070	1,705	-	-160	34	-88	281	-	-9.0%	1.7%	-4.3%	16.5%	-
Adjustments	-23	-44	-33	-31	-	66	33	35	24	-	-	-	-	-	-
Total	3,685	3,826	4,157	3,836	3,636	-69	100	88	501	424	-	2.6%	2.1%	13.0%	11.7%
% of total (excl. adjustments)															
New segments															
Creator Support	-	-	-	55.9%	65.2%	-	-	-	41.1%	84.4%	-	-	-	-	-
UI/UX	-	-	-	44.1%	34.8%	-	-	-	58.9%	15.6%	-	-	-	-	-
Old segments															
Content Solution	34.6%	28.9%	27.6%	26.4%	-	-	33.6%	11.6%	5.1%	-	-	-	-	-	-
Creator Support	17.2%	19.4%	23.0%	29.5%	-	-	15.6%	254.6%	36.0%	-	-	-	-	-	-
UI/UX	48.2%	51.7%	49.4%	44.1%	-	-	50.8%	-166.3%	58.9%	-	-	-	-	-	-

Source: Shared Research based on company data

Figures may differ from company materials due to differences in rounding methods.

From Q1 FY12/16, the company revised its business segmentation, integrating the Applications business with the UI/UX business (earnings booked under the UI/UX business). Year-on-year comparisons that follow are retroactively adjusted.

Adjustments to segment profit mainly comprise company-wide revenues not distributed to segments and company-wide expenses (net). Company-wide revenues are management consultancy fees paid by group subsidiaries; company-wide expenses are expenses related to group management.

Creator Support: 65% of sales (56% in FY12/16)

The Creator Support business provides services and sells software and hardware related to the digital production of illustration, manga, and animation; it promotes research and development and the practical application of graphics technologies, and expands its product lineup in response to new content creation techniques and new devices. It comprises a BtoC business that offers total support for creators and a BtoB business that provides software and service expertise as solutions.

BtoC business

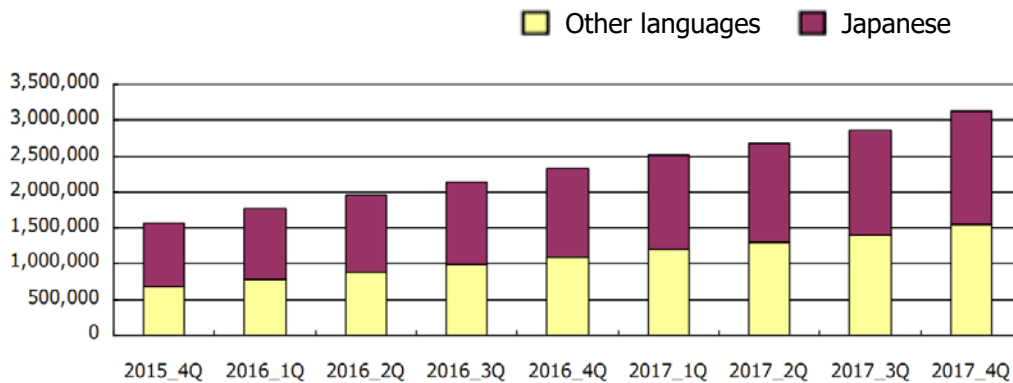
CLIP STUDIO PAINT (PRO, EX): Manga, illustration, and animation production software with various uses, such as monochrome and color drawings for printing on commercial magazines and manga for websites and digital devices. In addition to drawing and painting features for color illustrations, it has features that cover all production processes of manga including rough sketches, frame cuts, inking, background, effect, lettering and management of multiple pages. It is the world's first dedicated manga production software. (Compatible with both Windows and Mac.)

In the BtoC business, the company provides graphic content production software such as the CLIP STUDIO PAINT series, software for the production of manga, illustration, and animation. The company also manages its own website CLIP STUDIO, which provides total support to creators producing illustrations, manga, animations or novels, offering comprehensive services to support their creative activities. As well as selling software, the company provides information creators need, such as support, how-to courses, and context introduction. According to the company, over 1.1mn creators are registered with the creative support site CLIP STUDIO (as of end March 2018). Subsidiary Celsys is in charge of planning, development, and support of all software and services.

The company sells the software products through the CLIP STUDIO website as well as through PC distributors and retailers, and receives usage fees from end users. In the Japanese market, its manga and animation software are de-facto standards among professionals and more than 90% of TV animations use its products.

Accelerating global business is part of the company's growth strategy for CLIP STUDIO. ArtSpark has released multiple-language versions of CLIP STUDIO PAINT: English and Chinese versions in September 2013, French and Spanish versions in July 2014, a Korean version in May 2016, and a German version in September 2017. As a result, now nearly half of CLIP STUDIO sales are for non-Japanese versions.

Unit sales of CLIP STUDIO



Source: Shared Research based on company data

BtoB business

BS Reader for browser: As the product allows users to browse e-books on web browsers, users do not need to download viewer applications to look around content at e-book store sites. A variety of content can be distributed: comics, novels and photo books.

In the BtoB business, the company provides software and knowledge of services based on research and development of graphic technologies as solutions to companies. Sales come from royalties from companies and revenues for providing services under contract.

The core product is the BS Reader series of e-book viewers, developed by Celsys. The company has not unveiled a detailed sales breakdown, though it said that the BS Reader series accounted for 70-80% of sales and almost all the segment's profit. The segment also develops and sells (or leases out) BS BookStudio, authoring software for processing manga and other publications for mobile devices, and develops and provides ComicDC, a data server for content distribution.

BS Reader: As the necessary software for browsing e-books, the company provides the product, or grants a license, to content providers, which distribute content to feature phone and smartphone users, and telecom carriers, and receives certain royalty rates depending on sales of content by using the viewer.

Its BS Reader holds a viewer share of more than 90% for cell phones. Though competitors have joined the viewer market for smartphones, ArtSpark's BS Reader for smartphones is compatible with feature phones. Despite the rapid spread of smartphones, nearly half of cell phone users do not use smartphones. For content holders, ArtSpark's BS Reader is seen to be more attractive than competitors' products as it can provide one-stop solutions both for cellphones and smartphones.

UI/UX: 35% of sales (44% in FY12/16)

- ① **exbeans® UI Conductor:** A UI authoring tool (middleware) that allows users to launch their creations in runtime, thereby experiencing the designer's concept as he or she imagined it. The controls are intuitive, allowing users to drag and drop all elements of UI creation—including design, user interaction, animations, and screen transitions. Users can also easily create UIs across multiple devices and languages, and change designs and mechanisms as they see fit. Thus, this comprehensive line of UI authoring software provides users with a number of features that simplify the development process.

- ② **exbeans® Affinity:** a general-purpose library offering various services such as telematics (services provided for vehicles through mobile phones or the like), and a core library able to handle the flexible development of service applications. Using exbeans Affinity as a web application platform allows for the easy delivery, update, and collection of data.
- ③ **exbeans® VI Transfer:** a general-purpose module for the transfer of information from vehicles such as motorcycles and automobiles (CAN information), allowing applications to provide services using the information obtained. Together with exbeans Affinity, described above, exbeans VI Transfer allows the use of Web services built on Affinity.

The UI/UX business provides UI solutions to provide total support from the technological side to the design side for digital consumer electronics devices, primarily in fields relating to vehicles (automobiles and motorcycles). It licenses graphics-related products and receives custom development orders.

The company outlined a change in strategy for this segment as part of its medium-term plan*, announced on July 31, 2015. ArtSpark hopes to shift its business model away from primarily focusing on winning orders for its development services (as it had done to scale up quickly), toward winning orders for its proprietary IP. By doing so, the company hopes to reduce production costs and increase profits. In FY12/16, ArtSpark sold HI Corp. Kansai as part of an effort to revise its operations. As a result, the company expects sales to fall but anticipates a major increase in profit.

*On February 9, 2018, the company announced an updated medium-term plan (see Outlook section)

The company's strength in the UI/UX business is in a product lineup supported by provision of UI design by designers and endorsed by de-facto standard 3D graphics technologies. Core products were developed by HI, an ArtSpark subsidiary, including:

- ▷ **exbeans UI Conductor:** provides a UI development environment for embedded devices.
- ▷ **Higlyph:** a scalable font rendering engine with an emphasis on design; provides high speeds and rendering even on embedded devices.
- ▷ **W10 Browser:** a browser application for embedded devices compatible with HTML5.

UI solutions-related products are adopted for in-vehicle devices, digital cameras and karaoke equipment. W10 Browser is used for browsers compatible with multimedia broadcast. The company has developed UI for the SLR cameras of Olympus Imaging Corp, all-in-one printers of Brother Industries (TSE1: 6448) and Clarion Co Ltd (TSE1: 6796) touch panel audio-display screens for Suzuki Motor Corp (TSE1: 7269) K-cars. The company receives revenue from licensing those graphics-related products as UI solutions. It also receives revenue from the development, maintenance and support of custom UI design, software development and implementation. In addition, the core of this business has shifted from middleware products for mobile devices to UI solutions. The company changed the name of the business accordingly in FY12/13, from middleware to UI/UX.

K-car: A Japanese car category—literally “light car”. Engine displacement limited to 660cc. The number plates of private cars have a yellow base (black base for commercial vehicles).

In Q1 FY12/16, the company revised its business segmentation, integrating the Applications business with the UI/UX business, and gradually reducing the scale of both since then.

Production and sales

(JPYmn)	Segments	FY12/13	FY12/14	FY12/15	FY12/16	FY12/17	YoY
Production	Creator Support (new seg.)	1,663	1,623	1,672	1,549	1,540	-0.6%
	Content Solution	829	820	890	744	-	-
	Creator Support (old seg.)	833	803	782	805	-	-
	UI/UX	1,267	1,280	1,493	884	738	-16.5%
	Total	2,930	2,904	3,182	2,434	2,279	-6.4%
Purchase	Creator Support (new seg.)	212	115	116	101	117	15.9%
	Content Solution	102	49	49	31	-	-
	Creator Support (old seg.)	110	66	67	70	-	-
	UI/UX	-	-	-	-	-	-
	Total	212	115	116	101	117	15.9%
Sales	Creator Support (new seg.)	1,920	1,869	2,119	2,161	2,413	11.7%
	Content Solution	1,283	1,118	1,155	1,021	-	-
	Creator Support (old seg.)	637	751	965	1,140	-	-
	UI/UX	1,789	2,001	2,070	1,705	1,291	-24.3%
	Adjustments	-23	-44	-33	-31	-68	-
	Total	3,685	3,826	4,157	3,836	3,636	-5.2%

Source: Shared Research based on company materials

From Q1 FY12/16, the company revised its business performance management categories, integrating the Applications business with the UI/UX business (figures for the businesses are shown under the UI/UX business). Additionally, in FY12/17 the company consolidated Content Creation and Creator Support into a single Creator Support category. Figures for years prior to FY12/16 are also retroactively adjusted in the table above.

Sales figures are adjusted for intragroup transactions.

Personnel

Employees per segment

Segment	No. of employees			
	FY12/14	FY12/15	FY12/16	2017年12月期
Creator Support	84	87	88	84
UI/UX	129	54	46	69
Company-wide	19	25	22	14
Total	232	166	156	167

Source: Shared Research based on company data

Figures for the Creator Support segment from FY12/14–16 are the totals of the Content Solution and Creator Support segments.

Profitability snapshot, financial ratios

Profitability breakdown (JPYmn)	FY03/06	FY03/07	FY03/08	FY03/09	FY03/10	FY03/11	FY03/12	FY12/12	FY12/13	FY12/14	FY12/15	FY12/16	FY12/17
	Simple sum	Simple sum	Simple sum	Simple sum	Simple sum	Simple sum	Simple sum	Cons.9 mo.	Cons.Act.	Cons.Act.	Cons.Act.	Cons.Act.	Cons.Act.
Sales	2,692	3,346	4,117	4,364	4,954	4,932	4,565	2,633	3,685	3,826	4,157	3,836	3,636
HI	2,012	2,226	2,344	1,918	2,259	2,210	1,863	-	-	-	-	-	-
Celsys	680	1,120	1,773	2,446	2,696	2,721	2,702	-	-	-	-	-	-
Gross profit	1,213	1,912	2,215	2,090	2,136	2,149	1,694	411	1,143	1,333	1,279	1,565	1,602
HI	870	1,358	1,398	818	805	843	503	-	-	-	-	-	-
Celsys	343	554	817	1,272	1,331	1,305	1,191	-	-	-	-	-	-
SG&A expenses	1,033	1,453	1,903	1,757	1,593	1,525	1,468	1,079	1,212	1,234	1,190	1,064	1,178
HI	725	992	1,180	918	738	728	734	-	-	-	-	-	-
Celsys	309	460	723	839	856	797	733	-	-	-	-	-	-
Operating profit	180	459	312	333	543	623	227	-667	-69	100	88	501	424
YoY	-	-	-	6.7%	63.2%	14.8%	-63.6%	-	-	-	-	-	-
HI	145	366	218	-100	68	115	-231	-	-	-	-	-	-
Celsys	34	94	94	433	475	508	458	-	-	-	-	-	-
GPM	45.1%	57.1%	53.8%	47.9%	43.1%	43.6%	37.1%	15.6%	31.0%	34.9%	30.8%	40.8%	44.1%
HI	43.2%	61.0%	59.6%	42.6%	35.7%	38.2%	27.0%	-	-	-	-	-	-
Celsys	50.4%	49.4%	46.1%	52.0%	49.4%	48.0%	44.1%	-	-	-	-	-	-
SG&A ratio	38.4%	43.4%	46.2%	40.3%	32.2%	30.9%	32.1%	41.0%	32.9%	32.2%	28.6%	27.7%	32.4%
HI	36.0%	44.6%	50.4%	47.9%	32.7%	32.9%	39.4%	-	-	-	-	-	-
Celsys	45.4%	41.1%	40.7%	34.3%	31.7%	29.3%	27.1%	-	-	-	-	-	-
OPM	6.7%	13.7%	7.6%	7.6%	11.0%	12.6%	5.0%	-25.3%	-1.9%	2.6%	2.1%	13.0%	11.7%
HI	7.2%	16.4%	9.3%	-5.2%	3.0%	5.2%	-12.4%	-	-	-	-	-	-
Celsys	5.0%	8.4%	5.3%	17.7%	17.6%	18.7%	16.9%	-	-	-	-	-	-

Source: Shared Research based on company data

Figures may differ from company materials due to differences in rounding methods.

The company was formed from a merger of Celsys, Inc. and HI Corporation in April 2012, and thus FY12/12 is a nine-month period.

Figures from FY03/12 and earlier are the simple sum of the two companies' results.

The table above shows the historical performance of ArtSpark's two predecessor companies, HI Corp and Celsys. The increasing popularity of smartphones in Japan from 2010 onward significantly affected results at both companies. HI's main product was a 3D rendering engine for feature phones. This product generated licensing fees for the engine when phones were shipped, so the business model was affected by rising smartphone sales and the accompanying drop in shipments of feature phones. Celsys obtained revenue mainly from e-book browser distribution solutions for feature phones. Revenue was in the form of license fees paid by content holders when users viewed e-book browser. As such the impact of smartphone diffusion on Celsys was less than for HI. However, the drop in the number of feature phone users decreased the number of e-book browser viewers, affecting Celsys' performance. Both companies focus on software development, a labor-intensive business. The need to develop software for smartphones has driven up CoGS at both companies, resulting in falling gross margins from 2010 onward. HI temporarily shored up earnings by selling assets in unprofitable businesses, but declining sales still meant the company began booking an operating loss in FY12/12.

Amid such conditions, the two companies established a joint holding company on April 2, 2012, in a bid to gain a competitive edge by combining their technologies and customers. Since the merger, the new company—ArtSpark Holdings—has focused on tapping into new markets, mainly in the Creator Support and UI/UX segments, and improving margins with tight project management. The company initially booked an operating loss, partly owing to upfront investment. But its expansion into new businesses is paying off, with the company moving back into the black in FY12/14.

Strengths and weaknesses

Strengths

- ▶ **Technological expertise from creating products for feature phones:** ArtSpark enjoys a 90%-plus market share in 3D-rendering software and image distribution solutions for feature phones. Feature phones have limited memory and processing power, so they require light software. The experience that the company has built up in creating these programs will lend it a competitive advantage in developing programs for other devices with low processing power.
- ▶ **Celsys' large global share in application software for end users:** Celsys, one of the two companies merged to create ArtSpark, held a large market share in applications designed for end users. According to the company, ArtSpark tops global shares in the field of manga, illustration, and animation production software.
- ▶ **HI's track record developing embedded software for manufacturers:** The strengths of HI Corp. (the other of the two original companies) were in making embedded software for manufacturers. In addition to being adopted by North American automakers for mass production, ArtSpark's products have a strong track record with printer manufacturers, and the company anticipates further growth. The company has leveraged its UI/UX technology and track record for developing embedded software to establish long-term relationships with manufacturers.

Weaknesses

- ▶ **High marketing cost of Creator Support business:** In the Creator Support segment, the company operates a BtoC business providing creators a total support service through product offerings such as manga, illustration, and animation production software CLIP STUDIO PAINT and animation production software RETAS STUDIO. Since it is difficult to gauge the market size for these products or clearly identify the target customer base, associated marketing cost tends to get higher as a result.
- ▶ **Major performance fluctuations in the UI/UX business:** Over the past few years, the company has managed to shift its UI/UX business model toward handling proprietary IP products. That said, the process leading up to licensing (clients' adoption of the product) is significantly time consuming, and it takes another few years for the company to receive royalties from mass production. Even in the mass production stage, since production volume relies heavily on the manufacturers' production plan, earnings tend to fluctuate significantly. To narrow the range of fluctuation, ArtSpark must develop highly competitive products that match client needs and can be adopted repeatedly by clients for use in mass production.
- ▶ **Time-consuming and costly to add or revise functions:** In both the Creator Support and UI/UX businesses, the company responds to client requests for complex revisions and upgrades. Adding or upgrading functions to products can be time-consuming and costly. In the software development business, fixed cost is inherently high, and operating leverage also tends to be high.

Historical performance and financial statements

1H FY12/18 consolidated results

Overview

For 1H FY12/18, the company reported sales of JPY1.9bn (+11.7% YoY), operating profit of JPY302mn (+19.1% YoY), recurring profit of JPY290mn (+19.0%), and net income attributable to parent company shareholders of JPY250mn (+13.0%). The company focused on software IP-centered businesses, strategic realignment of development resources, and improvement of operational efficiency.

Results exceeded the company's forecasts for 1H FY12/18 (sales of JPY1.7bn, operating profit of JPY13mn, recurring profit of JPY3mn, and net loss of JPY9mn) by wide margins.

1H sales exceeded the company's initial forecasts due to robust sales overseas in the Creator Support business. Profits also exceeded initial forecasts by a large margin due to the recording of highly profitable sales. Because 1H results surpassed initial forecasts by a wide margin, the company revised its full-year forecasts as set out below:

- ▷ Sales forecast: JPY3.6bn (initial forecast JPY3.3bn)
- ▷ Operating profit forecast: JPY367mn (JPY63mn)
- ▷ Recurring profit forecast: JPY343mn (JPY42mn)
- ▷ Net income forecast: JPY251mn (JPY7mn)

Creator Support

- ▷ Sales: JPY1.4bnmn (+15.9% YoY)
- ▷ Operating profit: JPY295mn (+23.4% YoY)

The company released a Pro version and an annual membership plan for CLIP STUDIO PAINT for iPad (software for producing manga, illustration, and animation on an iPad) simultaneously worldwide. The company also released the new CLIP STUDIO TABMATE, an input device enabling more comfortable use of pen tablets, at dealers and online stores nationwide. In addition, the company increased convenience of the function allowing compatibility between ibisPaint (a painting app initially from ibis mobile inc.) and CLIP STUDIO PAINT, by making it available in all languages (having originally been offered only in the Japanese version).

CLIP STUDIO, a website providing total support for creators, had approximately 1.2mn registered users as of the end of June 2018 (vs. approximately 1.1mn at the end of March 2018).

UI/UX

- ▷ Sales: JPY519mn (-3.2% YoY)
- ▷ Operating profit: JPY1.6mn (JPY8.1mn operating loss in 1H FY12/17)

ArtSpark is focusing on development and sales of self-developed IP products such as UI authoring software products exbeans UI Conductor, a foundation of HMI, targeting the automotive (cars and motorcycles) market and commercial- and consumer-use printers.

Regarding exbeans UI Conductor, the company has been collaborating with various hardware and software vendors to develop joint solutions to increase convenience and raise market value. In 1H the company showed a demo machine for the HMI (Human Machine Interface) development solution developed in collaboration with ITEC Hankyu Hanshin Co., Ltd at the Automotive Engineering Exposition, an exhibition specializing in automotive technologies for engineers and researchers.

The company's products have been adopted as the default software for in-vehicle equipment by major OEMs since August 2015 and the company has shipped over 2.4mn units (mainly to the North American market).

Q1 FY12/18 consolidated results

Overview

For Q1 FY12/18, the company reported sales of JPY1.0bn (+20.4% YoY), operating profit of JPY214mn (+52.0% YoY), recurring profit of JPY201mn (+51.1%), and net income attributable to parent company shareholders of JPY179mn (+40.3%). The company focused on software IP-centered businesses, strategic realignment of development resources, and improvement of operational efficiency.

The progress rates against the company's plan for 1H FY12/18 were high, with sales at 60.6%, operating profit at 1,642.4%, recurring profit at 6,699.3%, and net income at JPY179mn (the company had forecast a JPY9mn loss in the quarter). However, the company has not revised initial forecasts.

Creator Support

- ▷ Sales: JPY679mn (+10.1% YoY)
- ▷ Operating profit: JPY139mn (+2.4% YoY)

Manga, illustration, and animation production software CLIP STUDIO PAINT PRO was released worldwide, bundled together with Wacom Intuos, a pen tablet sold by Wacom Co Ltd (TSE1: 6727). Additionally, the company began offering the CLIP STUDIO PAINT EX Volume License Subscription version, ideal for large-scale introduction to businesses and educational institutions, in English, French, Spanish, German, Korean, and Chinese (traditional Chinese). The company also held the European Comic Schools Contest, a contest for manga and illustration targeting students at art schools in European countries which teach manga, digital art, and illustration.

CLIP STUDIO, a website providing total support for creators, had just over 1.1mn registered users as of the end of March 2018 (vs. just over 1.0mn at the end of December 2017).

UI/UX

- ▷ Sales: JPY344mn (+39.1% YoY)
- ▷ Operating profit: JPY52mn (JPY10mn operating loss in Q1 FY12/17)

ArtSpark is focusing on development and sales of self-developed IP products such as UI authoring software products exbeans UI Conductor, a foundation of HMI, targeting the automotive (cars and motorcycles) market and commercial- and consumer-use printers.

Regarding exbeans UI Conductor, the company has been collaborating with various hardware and software vendors to develop joint solutions to increase convenience and raise market value. In Q1 the company announced ECU development support tool CANTOOL, a collaborative solution with ITEC Hankyu Hanshin Co., Ltd. Additionally, at Automotive World 2018, an industry-facing exhibition of next generation automotive technology held at Tokyo Big Sight, the company exhibited at the 1st Autonomous Driving Technology Expo to introduce its IP software and promote business creation.

The company's products have been adopted as the default software for in-vehicle equipment by major OEMs since August 2015 and the company has shipped over 2.0mn units (mainly to the North American market).

Full-year FY12/17 consolidated results

Overview

For FY12/17, the company reported sales of JPY3.6bn (-5.2% YoY). FY12/16 sales included JPY276mn, attributable to the sale of shares in HI Corporation Kansai, a subsidiary of a company subsidiary, during the term. When comparing sales of existing group companies, sales were up 2.1% YoY. Operating profit was JPY424mn (-15.3% YoY). Recurring profit was JPY410mn (-14.0%), with interest paid coming to JPY4mn (down JPY2.2mn) and foreign exchange losses of JPY5mn (down JPY9.6mn). Net income attributable to parent company shareholders was JPY375mn (+11.2%) after booking extraordinary losses of JPY13mn for software impairment losses and only JPY19mn in taxes. The company focused on software IP-centered businesses, strategic realignment of development resources, and improvement of operational efficiency.

Sales and earnings all finished above plan, with sales finishing 4.4% above plan, operating profit 13.0% above plan, recurring profit 16.3% above plan, and net income 26.2% above plan.

From Q1 FY12/17, the company revised its business segments, integrating the Content Solutions business with the Creator Support business (figures for the businesses are shown under the Creator Support business). Year-on-year comparisons that follow are retroactively adjusted.

Creator Support

- ▷ Sales: JPY2.4bn (+11.7% YoY)
- ▷ Operating profit: JPY300mn (+53.2% YoY)

Manga, illustration, and animation production software CLIP STUDIO PAINT was upgraded simultaneously world-wide, and the company began providing a German language version of the software, which had been in demand. The company now offers seven languages for the software, Japanese, English, Korean, Chinese (traditional), French, Spanish, and German.

In November 2017, the company made a simultaneous, worldwide release of an iPad compatible version of its manga and illustration production software^{*1}, CLIP STUDIO PAINT EX. CLIP STUDIO PAINT EX for iPad comes in seven different languages and offers the same level of functionality as its Windows and Mac OS versions. As the most advanced version of the company's CLIP STUDIO PAINT software series, CLIP STUDIO PAINT EX in its iPad version allows users to create full-scale Manga and illustrations and commercial-level animation using only an iPad.

^{*1} The product is free for the first six months, and the company can only book sales once it starts receiving user fees after the six months has elapsed. There was thus no impact on FY12/17 sales.

The company also launched the CLIP STUDIO PAINT EX Volume License Subscription version, which is ideal for companies or schools because it can be installed on multiple PCs using the same serial number.

CLIP STUDIO PAINT DEBUT was also bundled with an 8-inch Windows Tablet raytrektab DG-D08IWP (from Thirdwave Diginnos; equipped with pressure-sensitive digital stylus) for nationwide sale through large-volume retailers and e-commerce websites. As of November 2017, the company had shipped a cumulative total of more than 3.0mn units of its CLIP STUDIO PAINT software, with roughly half of these going overseas.

The company's electronic book viewer, BS Reader for Browser, which allows vertical scroll^{*2} of comic strip panel sequences, started being offered through Mecha Comic, an e-book distribution service hosted by Amutus Corporation that is among the largest in Japan in terms of the number of users. In addition, the electronic book viewer BS Reader for Browser was adopted by Kodansha's electronic book service that will be provided to educational facilities in Matsuda, Ashigarakami District, Kanagawa Prefecture. A browser viewer solution combining the BS Reader for Browser viewer with Media Do's md-dc content distribution system was released jointly, and adopted by Kodansha's "My Bookstore." Working together with Media Do, the company also created a browser viewer solution that was adopted by online Manga sellers Pixiv Comic Store and Comico PLUS.

*² Previously, the format allowed the reading of one panel at a time by tapping on the screen. The addition of the vertical reading scrolling capability enables a viewer to choose between the traditional panel display and vertical scrolling. According to Infocom (JASDAQ: 4348), the parent company of Amutus, the readability and speed of reading with vertical scrolling offers convenience that is unique to a smartphone.

CLIP STUDIO, a website providing total support for creators, had just over 1.0mn registered users as of the end of December 2017 (vs. 940,000 at the end of September 2017).

UI/UX

- ▷ Sales: JPY1.3bn (-24.3% YoY)
- ▷ Operating profit: JPY56mn (-80.2% YoY)

ArtSpark is focusing on development and sales of self-developed IP products starting from UI authoring software products exbeans UI Conductor, a foundation of HMI, targeting the automotive (cars and motorbikes) market and commercial- and consumer-use printers.

During the year the company released an updated version of exbeans UI CONDUCTOR software with new features making its screen transition support tools more user friendly as well as enhanced animation features. exbeans UI CONDUCTOR is being installed in more and more products, especially in-vehicle equipment and printers. In the printer market, for example, Seiko Epson extended its contract with ArtSpark from FY12/16 into FY12/17 to use exbeans UI CONDUCTOR in its main printer models as well as printers for the business market. Going forward, ArtSpark is looking to get more overseas companies to adopt exbeans UI CONDUCTOR software. In the area of in-vehicle equipment, the big Tier-1 companies (primary suppliers) are adopting exbeans UI CONDUCTOR and ArtSpark expects these manufacturers to be releasing products embedding the software.

Looking to the IoT era of next-generation vehicles, ArtSpark has released exbeans VI Transfer, a vehicle information communication software. As a general-purpose software to transfer information for vehicles (such as motorcycles and automobiles) for mobile devices, the prototype model of exbeans VI Transfer has been used as the default software for in-vehicle equipment sold to major OEM automotive equipment suppliers since August 2015, and to date has shipped some 1.7mn units (mainly to the North American market).

With regard to Higlyph, a scalable font drawing engine for embedded equipment, the company released an updated version for the global market that is capable of handling 57 different languages. Having been adopted for use in digital cameras, printers, electronic dictionaries, in-vehicle equipment, and a variety of other products, to date Higlyph has sold a combined total of more than 70mn units in Japan and overseas.

With respect to marketing at special events and trade shows, we note that the company had a booth at the 5th Connected Car Technology Show that was a part of the larger Automotive World 2017 exposition in January 2017 and that, as a Tier-1 manufacturer within the automotive industry, was able to use that venue to promote new business for its core self-development IP products. The company also continued working closely together with various platform vendors; in recognition of these efforts, it even received a "Gold Partner" award from Renesas Electronics Corporation, which holds a sizeable share of the global market for SoC platforms for in-vehicle equipment.

Further, the company aims to help develop new services and devices that utilize a variety of vehicle information by offering a combination of exbeans VI Transfer, a vehicle information communication software, and exbeans Affinity, a generic web application platform for embedded equipment. To this end, the company has been conducting marketing and proposal activities with auto manufacturers of both passenger and commercial vehicles.

The UI/UX business sales of JPY1.3bn in FY12/17 included the JPY276mn in sales from subsidiary HI Corporation Kansai. The company sold all of its stake in this company in Q3 FY12/16.

FY12/16 consolidated results

In FY12/16, the company focused on the Creator Support segment and UI/UX segment, working to improve sales and promotion activities and expand its service offering, while pressing ahead with measures to enhance management structure. The company worked to improve sales efficiency by focusing on distribution and concentration of management resources. For example, ArtSpark's subsidiary HI Corporation sold its stake in its subsidiary HI Corporation Kansai in July 2016.

Sales were JPY3.8bn (-7.7% YoY), operating profit was JPY501mn (+465.6%), recurring profit was JPY477mn (+666.6%) due to interest paid of JPY6mn and foreign exchange losses of JPY14mn, and net income attributable to parent company shareholders was JPY337mn (+869.1%), impacted by JPY64mn in software impairment losses, JPY7mn in stock valuation losses, and JPY6mn in capital losses from selling its stake in HI Corporation Kansai. Profits were higher year-on-year in all segments.

Sales were 102.8% of the company's full-year target. Operating profit reached 156.4%, recurring profit 156.4%, and net income attributable to parent company shareholders 126.3%. Sales declined in the UI/UX segment, owing to the company's subsidiary selling sales of all of its shares in HI Corporation Kansai in Q3, meaning the sales of HI Corporation Kansai in 2H was not included in the consolidated financial statement. However, the booking of sales for projects in the UI/UX segment initially slated for FY12/17, among other factors, resulted in higher sales than initially planned. Profits also exceeded initial plans owing to the booking of highly profitable sales.

From Q1 FY12/16, the company revised its business segmentation, integrating the Applications business with the UI/UX business (earnings booked under the UI/UX business). Year-on-year comparisons that follow are retroactively adjusted.

Creator Support

- ▷ Sales: JPY1.1bn (+18.2% YoY)
- ▷ Operating profit: JPY172mn (+26.8% YoY)

Sales in this segment outpaced the company's forecast, thanks to unexpectedly strong performance overseas and solid operations in Japan. Affected by higher sales, profit was also above expectations.

In FY12/16, ArtSpark released the English version of CLIP STUDIO PAINT, a manga illustration and anime production software, and an updated Chinese version (traditional Chinese). The company has sold the English version of CLIP STUDIO PAINT mainly in North America and Europe through a distributor, Smith Micro Software, Inc., packaged under the name Manga Studio 5, but going forward the packaged products, including the French and Spanish language versions, will be sold under the common name CLIP STUDIO PAINT. ArtSpark also expanded sales, jointly with Smith Micro Software, in French and Spanish speaking markets, including European and Latin American countries. In May 2016, ArtSpark launched the Korean language version of CLIP STUDIO PAINT, to gain a share in the rapidly growing manga market in Korea. In July 2016, the company reached a benchmark of having shipped a gross total of more than 2mn CLIP STUDIO PAINT products worldwide.

CLIP STUDIO, a website providing total support for creators, had 740,000 registered users as of end-December 2016 (vs. 590,000 at end-FY12/15).

Content Solution

- ▷ Sales: JPY1.0bn (-11.6% YoY)
- ▷ Operating profit: JPY24mn (+292.8% YoY)

Sales were essentially in line with the company's forecast, and the segment generated a profit, albeit a small one.

In this segment, the company promoted its business with an emphasis on BS Reader, its e-book viewer. In full-year FY12/16, it aggressively developed BS Reader for new devices and the latest OS. A browser viewer solution that combines the company's "BS Reader for Browser" e-book viewer with md-dc, a content distribution system by Media Do Co., Ltd. was chosen to be used in the Rakuten Manga service, which began operation under the Rakuten umbrella in April 2016, and was also chosen to be used in GEO Manga, operated by GEO Interactive Corporation in December 2016.

As of end-December 2016, BS Reader for Browser was being used in over 880 e-book distribution services.

UI/UX

- ▷ Sales: JPY1.7bn (-17.6% YoY)
- ▷ Operating profit: JPY281mn (operating loss of JPY88mn in FY12/15)

Sales in this segment were below the company's forecast, due to the sale during the year of HI Corp. Kansai. Profit exceeded expectations, however, because some sales were posted earlier than ArtSpark had expected. The company also made better-than-expected progress on bolstering productivity through structural reforms.

In FY12/16, ArtSpark's subsidiary HI Corporation sold its stake in its subsidiary HI Corporation Kansai in July 2016 as part of business restructuring efforts carried out since FY12/15. Thus, HI Corporation Kansai's earnings for Q3 onward are excluded from the consolidated results, resulting in a JPY365mn drop in sales and JPY369mn increase in operating profit year-on-year.

exbeans UI Conductor was selected for Panasonic Corporation's OEM display audio and built into Seiko Epson Corporation's color printer EP-879AW/AB/AR as well as the car navigation system AVN, sold by Fujitsu Ten Ltd.'s in-vehicle A/V equipment and home audio equipment brand ECLIPSE. A total of over 40mn units of Higlyph, a scalable font drawing engine for embedded equipment, were sold.

ArtSpark also participated in trade fairs to create new business channels for its IP products as a Tier-1 manufacturer in the automotive industry, including the Automotive World held at the Tokyo Big Sight, and Car HMI Europe 2016 held in Berlin, Germany.

In addition, the company began providing trial licenses to members of Automotive Grade Linux (AGL), a Linux Foundation project, to evaluate the development of exbeans UI Conductor, a UI authoring tool that provides a foundation for HMI development. This will allow the company to evaluate its product for commercialization purposes and use it as a GUI framework for use in AGL.

FY12/15 consolidated results

- ▷ Sales: JPY4.2bn
- ▷ Operating profit: JPY88mn

In line with its medium-term plan, during FY12/15 the company transferred the shares of U'eyes Design, relocated and consolidated the offices of subsidiary HI Corporation Kansai, and began development management across group companies to promote greater agility in project development. Art Spark also transferred investment securities that were previously held by subsidiaries to the parent in order to give it the ability to respond more flexibly to the funding needs of the group, including when it comes to selling securities. By working to concentrate and optimize management resources, and improve efficiency, the company was able to generate a certain level of results as it works toward structural reforms.

As a result, ArtSpark recorded FY12/15 consolidated sales of JPY4.2bn (+8.6% YoY) and operating profit of JPY88mn (-11.3% YoY). Recurring profit was JPY62mn (-33.5% YoY) due to primarily to interest paid of JPY11mn and investment losses in equity method affiliates of JPY7mn. Net income attributable to owners of the parent was JPY35mn (-42.0% YoY).

Sales and earnings finished below plan, sales at 95.6% of plan, operating profit at 48.9%, recurring profit at 42.0%, and net income at 27.8%.

Regarding sales, although the Creator Support segment performed favorably, results came in below previous forecasts due to the sale of a second-tier subsidiary. Meanwhile, restructuring under the company's medium-term business plan led to a concentration of resources on select projects at subsidiary HI Corporation and a temporary increase in outsourcing costs, and this combined with costs associated with the consolidation of offices left operating profit well short the company's previous forecast. At the net income level, earnings also reflected an extraordinary gain of JPY39mn from the sale of a subsidiary and an extraordinary loss of JPY35mn for office relocation expenses for a subsidiary.

The company did not originally plan to pay a dividend in FY12/15. However, having benefited to some extent from structural reforms that allowed management to improve resource allocation and operating efficiency, the company decided to pay a dividend of JPY2 per share at the end of FY12/15 and is currently planning to pay a dividend of JPY3 per share in FY12/16.

Content Solution

- ▷ Sales: JPY1.2bn (+3.3% YoY)
- ▷ Operating profit: JPY6.2mn (-72.2% YoY)

Lower sales for feature phones—a sector with high margins—resulted in a lower operating profit.

In the domestic mobile phone market, the main target of this segment, mobile phone service contracts hit JPY152.9mn (+5.4% YoY) as of end December 2015, according to the Telecommunications Carriers Association (TCA). The number of mobile phones shipped within Japan between April and September 2015 was 16.4 million units, and smartphones accounted for 77.0% of this figure (an increase of 10.5 YoY); the shift away from feature phones is progressing.

As of end December 2015, BS Reader was used in over 930 e-book distribution services (approximately 920 services at end September 2015).

Creator Support

- ▷ Sales: JPY965mn (+28.4% YoY)
- ▷ Operating profit: JPY135mn (operating profit of JPY10mn in the previous year)

Direct sales of CLIP, a website providing total support for creators, contributed to earnings.

The CLIP website had 590,000 registered users as of the end of December 2015 (about 550,000 registered users as of the end of September 2015).

UI/UX

- ▷ Sales: JPY2.0bn (+8.8% YoY)
- ▷ Operating loss: JPY87mn (operating loss of JPY8mn in FY12/14)

In the UI/UX segment, sales were up, but operating losses widened due to concentration of resources on select projects due to business restructuring, and this led to a temporary increase in outsourcing costs.

ArtSpark focused on development and sales of proprietary IP products geared toward the automotive sector, such as its UI authoring tool, exbeans UI Conductor, which provides a foundation for HMI development. New features were added to exbeans

UI Conductor, such as improved 3D functions—a necessity for future UI development—and multi preview functions, which allow for multiple screens to be used in unison.

Applications

- ▷ Sales: JPY31mn (-75.9% YoY)
- ▷ Operating loss: JPY1mn (operating profit of JPY42mn in FY12/14)

The company was downsizing this segment. It is not seeking to develop new business opportunities in this segment, and only records profits from fees received on existing service contracts.

FY12/14 consolidated results

- ▷ Sales: JPY3.8bn (+3.8% YoY)
- ▷ Operating profit: JPY100mn (operating loss of JPY69mn in FY12/13)
- ▷ Recurring profit: JPY94mn (recurring loss of JPY68mn in FY12/13)
- ▷ Net income: JPY60mn (+40.1% YoY)

Earnings increased as ArtSpark moved ahead with restructuring efforts. Net income was affected by negative goodwill of JPY14mn from the acquisition of HI Corporation Kansai and a valuation loss on investment securities of JPY28mn.

In response to the rapid shift in the mobile device market toward smartphones, ArtSpark is restructuring its operations, cutting costs, and increasing margins. It is also expanding the range of its target market in the UI/UX segment and focusing on the Creator Support segment—a result of its investment in growth businesses.

The company focused on marketing in all segments. Restructuring in FY12/13 also led to lower depreciation and personnel expenses, contributing to lower CoGS and SG&A expenses. The Creator Support segment began turning an operating profit as a result. The operating loss in the UI/UX segment narrowed due to acquisitions aimed at business growth. For example, the company made HI Corporation Kansai a second-tier subsidiary in order to expand its presence in western Japan in the UI/UX segment. It also made U'eyes Design, Inc. a second-tier subsidiary in order to enhance the design engineering business.

Content Solution

- ▷ Sales: JPY1.1bn (-12.9% YoY)
- ▷ Operating profit: JPY22mn (-81.3% YoY)

In the domestic mobile phone market, the main target of this segment, cell phone service subscription contracts hit 142.9mn (+6.0% YoY) as of the end of September 2014 (source: Telecommunications Carriers Association [TCA]). For the first time, smartphone contracts accounted for more than half of total feature phone and smartphone contracts, at 50.3% as of the end of September 2014, further illustrating the increasing popularity of smartphones (source: MM Research Institute).

Amid these conditions, ArtSpark reported a decline in high-margin feature phone sales, resulting in lower segment sales and profits. But the company is steadily shifting its business toward smartphones. SoftBank Mobile Corp. (subsidiary of SoftBank Corporation [TSE1: 9984]) adopted ArtSpark's e-book viewer, BS Reader for Browser, for its smartphone e-book service SmartBook Store. LINE Corporation (subsidiary of Naver Corp. [KRX: 035420]) also adopted Browser Viewer Solution—offered by subsidiary Celsys Inc. together with Media Do Co., Ltd.—for the PC web browser version of its LINE Manga service. The company also focused on growing sales: for example, it made the BS Reader for Browser e-book viewer compatible with iOS 8 for the iPhone and iPad. As of the end of December 2014, BS Reader for Browser was used in over 920 e-book distribution services.

Creator Support

- ▷ Sales: JPY751mn (+17.9% YoY)
- ▷ Operating profit: JPY10mn (operating loss of JPY94mn in FY12/13)

ArtSpark focused on increasing high-margin domestic direct sales' share of the total and tapping into overseas markets. In order to do so, it implemented promotional campaigns on social media and expanded its range of overseas versions of its software. Despite lower domestic sales through distributors, overall segment sales and profits were up, owing to an improved product mix—the result of higher domestic direct sales—and growth in overseas sales.

The company began sales of the French and Spanish language versions of its manga and illustration software, CLIP STUDIO PAINT. The company also participated in the Japan Expo in Paris. The company's overseas business grew as Kadokawa Contents Academy used the CLIP STUDIO PAINT EX software as a teaching tool in its overseas contents business. The CLIP website, providing support to creators, had 470,000 registered users as of the end of December 2014.

UI/UX

- ▷ Sales: JPY1.9bn (+25.9% YoY)
- ▷ Operating loss: JPY8mn (operating loss of JPY188mn in FY12/13)

The company focused on selling the exbeans UI Conductor, mainly to the automotive sector. This product is a next-generation UI authoring tool created from the company's accumulated embedded UI expertise. The company also concentrated on orders for development projects. As a result, orders grew and the company's customer base expanded. Sales of in-vehicle devices that use ArtSpark's product MascotCapsule UI Framework were robust, leading to multiple additional major licensing agreements from device manufacturers and higher revenues from royalties.

On February 28, 2014, ArtSpark made HI Corporation Kansai a second-tier subsidiary, in a bid to enhance customer support in west Japan ahead of business expansion. The company also made U'eyes Design, Inc. a second-tier subsidiary on April 15, 2014, in order to augment and accelerate the design engineering business.

The group posted double-digit sales growth in this segment, partly owing to the above two consolidations. Expenses were also kept in check through more rigorous management of development processes, which led to lower CoGS and outsourcing expenses. As a result, the operating loss narrowed significantly year-on-year.

Orders for development projects often accompany the launch of new products. In 1H FY12/14, orders were sluggish as the company was late to launch new products. Still, orders have picked up in 2H, partly because the company expanded into new areas. The recovery remained strong going into FY12/15. According to the company, the time between receiving an order and booking sales is about six months. So it expects to report higher sales from 2H onward.

HI Corp. Kansai contributed JPY252mn to group sales over a nine-month period. U'eyes Design contributed JPY252mn over six months. In FY12/15, the company expects these companies to contribute to group sales over the full year, leading to higher sales overall.

Applications

- ▷ Sales: JPY127mn (-57.7% YoY)
- ▷ Operating profit: JPY42mn (+50.0% YoY)

The company is scaling down this segment as part of its restructuring plans. There were no new projects, but the company booked revenue on commissions for services already underway.

Income statement

Income statement (JPY'000)	FY03/08	FY03/09	FY03/10	FY03/11	FY03/12	FY12/12	FY12/13	FY12/14	FY12/15	FY12/16	FY12/17
	Simple sum	Simple sum	Simple sum	Simple sum	Simple sum	Cons.9 mo.	Cons. Act.	Cons. Act.	Cons. Act.	Cons. Act.	Cons. Act.
Total sales	4,116,737	4,363,531	4,954,267	4,931,552	4,565,225	2,633,289	3,685,419	3,826,206	4,156,911	3,835,853	3,636,018
YoY	23.0%	6.0%	13.5%	-0.5%	-7.4%	-	-	3.8%	8.6%	-7.7%	-5.2%
CoGS	1,901,988	2,273,601	2,818,224	2,783,018	2,871,108	2,221,966	2,542,916	2,492,712	2,878,801	2,272,354	2,033,955
Gross profit	2,214,749	2,089,930	2,136,043	2,148,534	1,694,117	411,323	1,142,503	1,333,494	1,278,954	1,564,523	1,602,062
GPM	53.8%	47.9%	43.1%	43.6%	37.1%	15.6%	31.0%	34.9%	30.8%	40.8%	44.1%
SG&A expenses	1,902,949	1,757,161	1,593,111	1,525,315	1,467,550	1,078,636	1,211,597	1,233,780	1,190,466	1,064,018	1,178,999
SG&A ratio	46.2%	40.3%	32.2%	30.9%	32.1%	41.0%	32.9%	32.2%	28.6%	27.7%	32.4%
Operating profit	311,800	332,768	542,931	623,219	226,566	-667,312	-69,093	99,713	88,488	500,504	423,803
YoY	-32.1%	6.7%	63.2%	14.8%	-63.6%	-	-	-	-11.3%	465.6%	-15.3%
OPM	7.6%	7.6%	11.0%	12.6%	5.0%	-	-	2.6%	2.1%	13.0%	11.7%
Non-operating income	9,033	27,901	6,059	1,558	9,346	6,399	34,455	13,778	3,746	4,611	646
Non-operating expenses	93,643	31,613	21,847	17,029	20,247	29,132	33,585	19,869	30,008	28,070	14,024
Recurring profit	227,192	329,056	527,143	607,749	215,666	-690,045	-68,222	93,621	62,226	477,045	410,425
YoY	-47.6%	44.8%	60.2%	15.3%	-64.5%	-	-	-	-33.5%	666.6%	-14.0%
RPM	5.5%	7.5%	10.6%	12.3%	4.7%	-	-	2.4%	1.5%	12.4%	11.3%
Extraordinary gains	4,366	-	27,989	3,849	35,121	413,052	134,257	15,887	37,275	5,341	216
Extraordinary losses	95,842	74,951	120,297	20,916	318,135	1,004,349	48,891	31,934	44,588	83,298	17,086
Tax charges	53,497	288,748	216,009	219,244	188,447	72,300	-25,667	17,284	18,929	58,576	18,763
Implied tax rate	39.4%	113.6%	49.7%	37.1%	-279.8%	-5.6%	-149.7%	22.3%	34.5%	14.7%	4.8%
Minority interests						-2,703	0	332	1,192	3,362	0
Net income	82,219	-34,643	218,826	371,438	-255,795	-1,350,939	42,811	59,958	34,791	337,150	374,791
YoY	-65.9%	-142.1%	-731.7%	69.7%	-	-	-	40.1%	-42.0%	869.1%	11.2%
Net margin	2.0%	-0.8%	4.4%	7.5%	-	-	1.2%	1.6%	0.8%	8.8%	10.3%

Source: Shared Research based on company data

Figures may differ from company materials due to differences in rounding methods.

The company was formed from a merger of CELSYS, Inc. and HI CORPORATION in April 2012, and thus FY12/12 is a nine-month period.

Figures from FY03/12 and before are simple sums of the two pre-merger results.

FY12/12 is an irregular period of nine months, owing to a change in accounting methods.

ArtSpark was established as a joint holding company in April 2012 as a result of the integration between Celsys Inc. and HI Corp, so FY12/12 was an irregular nine-month financial year and FY12/13 was the first 12-month financial year. In the table above, SR shows the simple sums of the two companies' results for FY12/09 through FY12/11. The two companies' performances had expanded on main products for feature phones. However, the core of the mobile phone market began shifting to smartphones from around 2010 and the companies' performances lost pace, a factor that led to the integration.

In FY12/12 and FY12/13, ArtSpark incurred operating losses as it restructured unprofitable businesses and recombined its segments. It has pared its dependence on feature phones. In Q4 FY12/13, it reported operating profits and sales in the core content support business, and sales from smartphones surpassed those from other cell phones. Though the UI/UX segment posted lower profitability (launch of a new project), the expansion of products for auto-related industries made progress. The company moved back into the black in FY12/14. The medium-term plan ArtSpark announced in July 2015 demonstrated a strategic shift: leveraging the group's intellectual property by focusing on proprietary products and services. Sales consequently fell in FY12/16, but profit rose. In FY12/17, sales and profit fell.

Balance sheet

Balance sheet (JPY'000)	FY03/08 Simple sum	FY03/09 Simple sum	FY03/10 Simple sum	FY03/11 Simple sum	FY03/12 Simple sum	FY12/12 Cons. 9 mo.	FY12/13 Cons. Act.	FY12/14 Cons. Act.	FY12/15 Cons. Act.	FY12/16 Cons. Act.	FY12/17 Cons. Act.
Assets											
Cash and deposits	2,522,632	1,770,238	1,344,987	1,988,715	2,191,488	1,294,740	1,323,533	1,086,746	1,323,640	2,152,234	2,491,012
Accounts receivable	589,366	960,410	1,292,257	1,109,019	1,410,763	561,478	552,076	880,145	490,332	259,294	320,305
Inventories	118,515	156,324	101,746	101,518	119,342	192,378	148,755	137,536	108,577	24,887	26,027
Deferred tax assets	-	-	-	-	-	-	-	-	-	-	28,903
Other	214,980	211,370	156,776	149,870	133,924	120,373	119,141	126,709	169,220	107,157	133,019
Allowance for doubtful accounts	-5,077	-16,194	-17,100	-33,602	-31,760	-10,389	-12,608	-16,381	-6,224	-1,432	-2,864
Total current assets	3,440,416	3,082,148	2,878,666	3,315,520	3,823,757	2,158,580	2,130,897	2,214,755	2,085,545	2,542,140	2,996,405
Buildings	37,814	27,453	58,448	51,278	47,142	41,794	35,755	40,325	26,214	24,124	29,194
Tools, furniture, and fixtures	66,350	62,310	45,700	47,343	36,062	28,271	19,977	31,227	26,642	25,881	41,012
Construction in progress	-	20,000	-	-	-	-	-	-	-	6,029	-
Other	-	-	-	-	-	-	-	-	-	-	6,561
Total tangible fixed assets	104,165	109,763	104,148	98,621	83,204	70,065	55,733	71,552	52,856	56,035	76,767
Software, software in progress	372,056	659,988	863,294	1,051,745	1,378,467	911,681	944,035	1,159,427	1,176,660	879,742	711,493
Goodwill	2,924	4,772	14,013	15,722	17,964	34,955	27,964	134,174	-	-	-
Other	14,955	11,769	8,874	11,389	10,055	32,607	31,041	32,775	32,415	32,163	30,489
Total intangible assets	389,935	676,529	886,181	1,078,856	1,406,486	979,243	1,003,040	1,326,376	1,209,075	911,906	741,982
Investment securities	84,496	150,600	213,863	429,187	338,856	599,132	203,623	111,991	103,449	58,517	81,681
Deferred tax assets	82,917	20,663	19,557	24,804	34,232	-	-	-	-	-	-
Other	114,376	384,128	331,730	285,862	294,441	207,568	249,496	239,819	148,950	130,476	127,278
Total other fixed assets	281,789	555,391	565,150	739,853	667,529	806,700	453,119	351,810	252,399	188,993	208,959
Total fixed assets	775,889	1,341,685	1,555,482	1,917,331	2,157,220	1,856,010	1,511,893	1,749,740	1,514,332	1,156,935	1,027,710
Deferred assets	-	-	-	-	-	10,349	7,914	5,478	3,043	608	-
Total assets	4,216,307	4,423,833	4,434,149	5,232,853	5,980,979	4,024,939	3,650,704	3,969,974	3,602,921	3,699,684	4,024,115
Liabilities											
Accounts payable	155,279	226,229	178,477	173,764	276,578	170,305	168,904	211,822	149,730	68,135	80,707
Short-term debt	42,550	28,160	10,000	133,332	503,136	438,576	596,879	558,012	473,141	357,329	274,964
Other	339,410	561,269	409,156	442,612	338,023	413,537	255,223	471,384	353,011	330,673	320,731
Total current liabilities	537,239	815,658	597,633	749,708	1,117,737	1,022,418	1,021,006	1,241,218	975,882	756,137	676,402
Long-term debt	38,160	10,000	-	66,668	324,940	474,391	267,512	276,203	87,011	36,372	18,080
Other	37,403	40,350	46,804	54,041	102,324	179,074	75,973	89,750	100,222	108,956	162,162
Total long term liabilities	75,563	50,350	46,804	120,709	427,264	653,465	343,485	365,953	187,233	145,328	180,242
Total liabilities	612,803	866,009	644,439	870,418	1,545,002	1,675,884	1,364,491	1,607,172	1,163,115	901,466	856,644
Net assets											
Capital stock	1,830,390	1,841,000	1,853,409	1,974,133	2,113,508	1,000,000	1,000,320	1,003,158	1,024,122	1,056,688	1,063,930
Capital surplus	1,534,233	1,544,843	1,352,927	1,473,253	1,612,626	1,867,600	479,447	482,285	503,249	535,815	543,057
Retained earnings	226,779	192,137	590,776	934,999	648,594	-658,100	773,184	832,467	867,258	1,190,994	1,545,457
Treasury stock	-	-	-	-	-	-71	-609	-958	-1,786	-2,946	-3,085
Other	12,101	-20,156	-7,402	-19,951	61,248	139,627	33,871	35,440	35,500	17,667	18,112
Total net assets	3,603,503	3,557,824	3,789,710	4,362,434	4,435,976	2,349,056	2,286,213	2,362,802	2,439,806	2,798,218	3,167,471
Working capital	552,602	890,505	1,215,526	1,036,773	1,253,527	583,551	531,927	805,859	449,179	216,046	265,625
Total interest-bearing debt	80,710	38,160	10,000	200,000	828,076	912,967	864,391	834,215	560,152	393,701	293,044
Net debt	-2,441,922	-1,732,078	-1,334,987	-1,788,715	-1,363,412	-381,773	-459,142	-252,531	-763,488	-1,758,533	-2,197,968

Source: Shared Research based on company data
 Figures may differ from company materials due to differences in rounding methods.
 The company was formed from a merger of CELSYS, Inc. and HI Corporation in April 2012, and thus FY12/12 is a nine-month period.
 Figures from FY03/12 and before are simple sums of the two pre-merger companies.
 FY12/12 is an irregular period of nine months, owing to a change in accounting methods.

Assets

The largest item in assets is cash and deposits, followed by intangible fixed assets like software. Changes in assets during FY12/16 reflect an upturn in operating performance and the sale of Hi Corp. Kansai during FY12/16. At end FY12/17, current assets were up JPY454mn YoY at JPY3.0bn; fixed assets were down JPY129mn YoY at JPY1.0bn. During the year, cash and equivalents increased by JPY339mn and accounts receivable increased by JPY61mn. Intangible fixed assets declined by JPY170mn due to software depreciation.

At end FY12/17, the company held JPY82mn in investment securities. This centered on software-related companies in Japan and overseas that ArtSpark may have synergy with. As the group is oriented toward research and development, it believes that mergers and acquisitions, as well as partnership strategies, are important. It will consider M&A and tie-ups.

Liabilities

At end FY12/17, on its consolidated balance sheet total liabilities were JPY857mn, of which current liabilities were JPY676mn and long-term liabilities were JPY180mn. Total liabilities are in a downtrend on the back of a business turnaround and sale of HI Corp. Kansai.

Net assets

At end FY12/17, net assets on the consolidated balance sheet were JPY3.2bn, up JPY369mn YoY. Accordingly, the equity ratio rose from 75.2% to 78.3%.

Cash flow statement

Cash flow statement (JPY'000)	FY03/08 Simple sum	FY03/09 Simple sum	FY03/10 Simple sum	FY03/11 Simple sum	FY03/12 Simple sum	FY12/12 Cons.9 mo.	FY12/13 Cons. Act.	FY12/14 Cons. Act.	FY12/15 Cons. Act.	FY12/16 Cons. Act.	FY12/17 Cons. Act.
Cash flows from operating activities (1)	100,877	228,683	297,551	1,154,289	273,344	137,818	358,484	672,554	837,494	1,435,075	1,021,462
Cash flows from investing activities (2)	-486,572	-933,578	-712,016	-916,091	-1,052,154	-622,300	-163,135	-508,476	-539,941	-551,610	-577,430
Free cash flow (1+2)	-385,695	-704,895	-414,465	238,198	-778,810	-484,482	195,349	164,078	297,553	883,465	444,032
Cash flows from financing activities	1,370,332	-22,001	-28,281	401,469	869,543	-355,593	-48,473	-238,659	-64,272	-58,486	-108,862
Depreciation and amortization (A)	191,641	235,534	355,424	520,037	655,477	469,339	519,223	574,714	595,441	651,849	687,552
Capital expenditures (B)	-394,729	-561,315	-588,708	-709,427	-980,638	-552,470	-563,377	-815,302	-631,804	-427,410	-550,392
Working capital changes (C)	46,459	337,903	325,021	-178,753	216,754	-669,976	-51,624	273,932	-356,680	-233,133	49,579
Simple FCF (NI + A + B - C)	-167,328	-698,327	-339,479	360,801	-797,710	-764,094	50,281	-454,562	355,108	794,722	462,372

Source: Shared Research based on company data

Figures may differ from company materials due to differences in rounding methods.

The company was formed from a merger of CELSYS, Inc. and HI CORPORATION in April 2012, and thus FY12/12 is a nine-month period.

Figures from FY03/12 and before are simple sums of the two pre-merger results.

FY12/12 is an irregular period of nine months, owing to a change in accounting methods.

In FY12/16, cash flows were affected by an upturn in operating performance and reflected the concentration and allocation of financial resources, including the selling of shares in HI Corp. Kansai. Cash flow conditions were favorable in FY12/17 as well, due to solid operating cash inflows. As a result, cash and equivalents rose by JPY335mn YoY to JPY2.4bn at end FY12/17.

Cash flows from operating activities

Since being established in April 2012, the company has restructured, and cash flows from operating activities are trending upward, with annual inflows of over JPY1.0bn since FY12/16. In FY12/17, cash inflow from operating activities was JPY1.0bn, down JPY414mn YoY. The decrease was mainly due to an increase in accounts receivable (there was a JPY199mn decrease in accounts receivable in FY12/16, and an increase of JPY61mn in FY12/17).

Cash flows from investing activities

For the company, whose main operation is development of software, cash flows from investing activities change mainly on acquisition of intangible assets. In FY12/17, ArtSpark spent a net JPY577mn on investing activities. Principal outflows included JPY506mn in acquisitions of software and other intangible assets, and JPY44mn for the purchase of tangible fixed assets.

Cash flows from financing activities

There was an outflow of JPY108mn in cash flows from financing activities in FY12/17. Though there was an increase in short- and long-term loans worth JPY200mn, the company also paid down short-term debt worth JPY217mn, long-term debt worth JPY83mn, and paid out JPY20mn in dividends.

News and topics

Other information

History

ArtSpark Holdings Inc. is a holding company, established in April 2012 as a result of the integration of Celsys Inc. and HI Corp. The companies are now wholly owned subsidiaries of ArtSpark. Celsys and HI were mainly operating in services for feature phones. ArtSpark was established to harness the popularity of smartphones, and build a competitive company by combining Celsys' application technologies in 2D graphics and HI's middleware technologies and design capabilities in 3D graphics.

Celsys was founded in May 1991. The company grew quickly by selling software enabling users to create animations and comics on personal computers. The company's software is used by more than 90% of TV animation studios in Japan. It also has a high market share in distributing electronic comics to mobile phones.

HI was established in April 1989. The company initially engaged in custom development of computer systems for corporate clients, but the success of MascotCapsule, a 3D rendering engine for mobile devices launched in 2001, helped fuel its performance in the following years. HI has delivered MascotCapsule to major telecom carriers and device manufacturers in the world. Its share is over 90% in the market of 3D rendering engines for feature phones in Japan.

History of ArtSpark and the two subsidiaries:

History of ArtSpark Holdings

April 2012	Established as a joint holding company when Celsys Inc. and HI Corp were integrated. Listed on the TSE second section.
February 2014	With the intent of expanding the UI/UX segment, subsidiary HI Corp acquires 91.7% of outstanding shares in HI Corporation Kansai, making HI Corporation Kansai a second-tier subsidiary.
April 2014	With the intent of expanding the UI/UX segment, subsidiary HI Corp acquires 60.6% of outstanding shares in U'eyes Design, Inc., making U'eyes Design, Inc. a second-tier subsidiary.
June 2015	Sale of all shares in U'eyes Design, Inc. as part of restructuring
July 2016	Transfer of all shares in HI Corp. Kansai held by consolidated subsidiary HI Corp.

History of Celsys Inc.

May 1991	Establishment of Celsys. Starts custom production of media content.
Sep. 1993	Release of Retas!Pro Ver1, software for production of animations.
Aug. 2001	Release of ComicStudio Ver1.0, software to produce manga.
Nov. 2001	Starts mobile solutions for au (KDDI Corp, TSE1: 9433).
Nov. 2003	Release of Claytown, clay animation software for consumers.
Jan. 2004	Starts providing mobile solutions for NTT Docomo Inc. (TSE1: 9437).
Dec. 2004	Starts mobile solutions for Vodafone (now SoftBank Mobile Corp).
Feb. 2006	Overseas release of MangaStudio, the English-language version of ComicStudio.
Oct. 2006	Upgrade of manga viewer ComicSurfing to the total e-book viewer BookSurfing (BS Reader).
Dec. 2006	Listing of company's stock on the Nagoya Stock Exchange's Centrex market (delisted in January 2011).
Dec. 2008	Release of Retas Studio all-in-one animation production package.

Apr. 2009	Release of the color painting and illustration tool ILLUSTRATION download edition.
Nov. 2010	Listing on the Second Section of the Tokyo Stock Exchange.
Nov. 2010	Celsys and Prime Works Co Ltd start providing the total e-book viewer BS Reader for Android for SoftBank Mobile's smartphones as preinstalled software.
Mar. 2011	Starts exclusive sale in Japan of Panelfly, North America's largest e-book solution. Comprehensive tie-up, development and sale of e-book solutions for iPhone and iPad.
Apr. 2011	E-book solutions of Celsys and Voyager Japan Inc. are adopted by LISMO Book Store, a KDDI e-book store.

History of HI

Apr. 1989	HI Co Ltd established for custom development of systems for corporate clients and providing programming seminars for advanced learners.
Oct. 1992	HI is officially incorporated.
Dec. 1996	Starts development and sale of packaged software.
Mar. 2001	MascotCapsule V1, the world's first real-time 3D rendering engine for mobile phones, is introduced.
Mar. 2001	Begins integrating MascotCapsule with mobile phones for J-Phone Group (now SoftBank Mobile).
Apr. 2001	Shifts the core target of development from PC software to mobile content.
May 2002	NTT Docomo adopts MascotCapsule for its mobile phones.
Mar. 2003	KDDI begins integrating MascotCapsule with its mobile phones.
Apr. 2003	Enters an alliance with Macromedia Inc. (now Adobe Systems Inc.) of the US and Bandai Networks Co Ltd of Japan on integrating Adobe Flash Lite with NTT Docomo's mobile phones.
May 2003	Signs a license agreement on MascotCapsule with Motorola Inc. (USA).
Jan. 2004	Signs a license agreement on MascotCapsule with Sweden's Sony Ericsson Mobile Communications AB.
Sep. 2004	Victor Co of Japan (now JVC Kenwood Corp, TSE1: 6632) adopts MascotCapsule for its hard disk camcorder, the first-ever mounting on a home electronics device.
Sep. 2004	Signs a license agreement on MascotCapsule with Qualcomm Incorporated (USA).
Jun. 2005	Signs a license agreement on MascotCapsule with Samsung Electronics Co Ltd (South Korea).
Aug. 2005	Signs license agreement for MascotCapsule with LG Electronics Inc. (South Korea).
Oct. 2005	Starts integrating MascotCapsule with Willcom Inc.'s mobile phones.
Apr. 2006	Signs a license agreement for MascotCapsule with Sagem Communication (France).
Apr. 2007	HI stock listed on the JASDAQ Securities Exchange.
Jun. 2008	Signs a license agreement with Sun Microsystems Inc. (USA).
Oct. 2009	Signs a license agreement with Pantech Co Ltd (South Korea).

Shareholder return

The company recognizes that returning profits to shareholders is important and, going forward, will seek to improve return to shareholders in the form of dividends by setting its dividend payout based on the level of earnings, while at the same time balancing the need for internal reserves to assure the company has the financial wherewithal to cope with changes in the operating environment. As part of this policy, the company intends to make a single dividend payment at the end of each fiscal year. The internal reserves the company is looking to fortify will be used as a source of internal capital to fund systems development work, the hiring of additional personnel, and other investment spending needed to sustain growth in the future.

Major shareholders

Top shareholders (as of end-Dec. 2017)	Voting rights ratio
Mizuho Securities Co., Ltd.	1.36%
SBI Securities Co., Ltd.	1.35%
Monex, Inc.	1.32%
Credit Suisse Securities (USA) LLC SPCL. for EXCL. BEN	1.30%
Matsui Securities Co., Ltd.	1.29%
Rakuten Securities, Inc.	1.21%
TMS Entertainment Co., Ltd.	1.10%
Kimiaki Tojo	0.85%
Mieko Kobayashi	0.83%
Yuya Takada	0.81%

Source: Shared Research based on company data

Top management

ArtSpark President **Shinya Nozaki** (born 1965) graduated from Nihon Kogakuin College in 1987 and joined Suda International Gear Works, Ltd. After moving to Cadix, Co., Ltd., he established Celsys Inc. in 1991, serving as its representative director and president. He was appointed as Representative Director and President in March 2016 after the former Representative Director, Chairman, and President Yosuke Kawakami, who was also one of the founders of Celsys Inc., resigned from his post.

Employees

As of end December 2017, ArtSpark Holdings had 167 employees on a consolidated group basis, of which 14 are holding company employees.

Other

The company's name is ArtSpark Holdings. The Art component encompasses a variety of meanings, such as technology, design, and creative works. The Spark component reflects the idea of companies involved in these fields forming a group, and sparking with light as they fire each other up.

Glossary

Glossary sources include company materials and BINARY, an IT term dictionary.

Engine: In the field of IT, an engine is a program that processes input data according to preset aims and rules and returns outputs. It also refers to general-purpose software that performs a core or essential function for other programs in a system.

Rendering engine: In graphic design, a rendering engine is software, equipment or a system that processes sets of data denoting images and content of screens (figures, parameters of equations and descriptions of drawing rules) with computer programs and constitutes concrete sets of image pixels. The process is called rendering, which adds shading, color and lamination to a 2-D or 3-D wireframe. The word rendering engine is not used for a single application or system, but for a factor or part of some software or a system that shoulders a drawing function. Depending on objects of drawings, there are such types as a 3D rendering engine (for 3D graphics) and an HTML rendering engine (for displaying web pages).

BS Reader: BS Reader is an application for viewing e-books developed by Celsys and distributed jointly with Voyager Japan Inc. and Neos Corp. Users can browse e-books based on the BookSurfing (ComicSurfing) format of Celsys and those on the book format of Neos. There are applications for Japanese mobile phones, iOS devices and Android terminals, and BS Reader for Browser can be used for Windows and Mac PCs. In viewing comics, additional effects can be added, such as expansion of a small frame of manga into a full display of a mobile phone and inserting background music or sound effects.

BS BookStudio: BS BookStudio is an integrated tool to produce analog or digital manuscripts into content for distribution. It contains a professional tool for each working process, covering all production stages from scanning, author's review to generation of distribution data. As there are abundant functions to produce content for feature phones, smartphones and tablets, users can efficiently produce content usable for multiple devices.

CLIP STUDIO PAINT: CLIP STUDIO PAINT can represent all processes of manga production in a digital environment, from making storyboards, frame cutting, inking, toning, to the inputting of speech into balloons. There are abundant plugins of fonts, screen tones and others. Pen tablets are usually used for works. There are such functions as 2DLT rendering function, which automatically converts data into drawing lines and tones, and 3DLT rendering function, which imports 3D modeling data and automatically converts the data into drawing lines and tones.

MascotCapsule: HI's 3D rendering engine for embedded devices. As the engine needs neither an FPU (floating point unit) for calculation nor a large amount of memory, it is appropriate for embedded devices and mobile phones with limited resources. It has been adopted for mobile phones of all carriers in Japan, NTT DoCoMo, au (KDDI/Okinawa Cellular), SoftBank Mobile, Willcom and Emobile, and overseas makers like Motorola, Sony Ericsson Mobile Communications and Samsung Electronics, with accumulated global shipments of cell phones mounting the engine surpassing 600mn units (end March 2010).

Retas Studio: Celsys' software suite for production of animations. Its former name was Retas! (Revolutionary Engineering Total Animation System), which is the company's registered trade mark. Celsys is engaged in the development of software for production of animations and manga and content services for comics for mobile phones and e-books. Retas Studio has widely penetrated production studios of animations in Japan.

UI/UX: UI is short for User Interface and UX is short for User Experience. UI is designed to link products and services to users. In the case of a software product, UI is a display viewed by the user, i.e., a point between equipment and man that has a large influence on the sense of use of the equipment. UX is how users feel about products and services and how they respond to them. UX refers to aesthetics, usability and reliability.

Profile

Company name	Head office
ArtSpark Holdings Inc.	Nishi-Shinjuku, Shinjuku-ku, Tokyo, Japan 4-15-7
IR Phone	Listed on
+81-3-6820-9590	Tokyo Stock Exchange, second section
Established	Exchange listing
2012/04/02	2012/04/02
Website	Fiscal year-end
http://www.artspark.co.jp/ (Japanese only)	December
IR web	
http://www.artspark.co.jp/irinfo/ (Japanese only)	-
IR mail	IR phone
ir@artspark.co.jp	03-6820-9590

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Contact Details

Shared Research Inc.
 3-31-12 Sendagi Bunkyo-ku Tokyo, Japan
 URL: <https://sharedresearch.jp>
 Phone: +81 (0)3 5834-8787
 Email: info@sharedresearch.jp