



## The ExOne Company: Irrational exuberance obscures black clouds building around 3-D printing

by Sonya Colberg, Senior Investigative Reporter - 8/28/2013 9:41:02 AM

The ExOne Company's (NASDAQ: XONE) surprise stock offering last week [irritated](#) investors.

The 3-D printer maker is diluting investors' shares to raise millions just six months after its public offering. But the company has buried reasons for even more irritation deep within the S1 registration papers it [filed](#) after the bell Aug. 21.

The chief executive and his interests get far more money under this deal than the company itself.

It's roughly \$100 million for him versus \$72 million for the company. That's 1.55 million shares and 1.1 million shares respectively at an estimated \$65 per share listed in the filing. The registration papers specify the shares will be offered by the company and by "selling stockholders." A dig through the gibberish reveals those "selling stockholders" are actually CEO Kent Rockwell - through his two entities and trust.

Funny timing on that trust. Exactly *one day* before the offering announcement, Mr. Rockwell, through an entity, boldly gave his [trust](#) 450,000 shares worth about \$30 million.

The stock reached \$70 on the [day](#) he gave away the shares. As is common, share prices dropped right after the company announced the offering, briefly hitting below [\\$65](#). The stock price closed Tuesday at \$70.04.

And there's more to this trust arrangement. Mr. Rockwell himself ultimately stands to benefit yearly from his charitable deed.

The "[remainder trust](#)" benefits Lafayette College, Rockwell's alma mater. It requires Lafayette to pay Rockwell's entity 5 percent of the trust's assets each year for 10 years (likely over \$1 million the first year). Whatever's [left over](#) after a decade goes to Lafayette.

Once approved, the stock offering could also include up to 398,400 additional shares held by Rockwell's entities, President David Burns (whose total 2012 compensation exceeded [\\$3.5 million](#)), Chief Financial Officer John Irvin (whose compensation exceeded \$1.8 million) and two other execs. These are over-allotment shares exercisable within 30 days of the offering if the public demand is high enough.

The other millions of shares are locked up for 90 days or the end of November.

Yet another lockup release date hits just around the corner in early September. One minute before midnight on Friday, Aug. 30 is when the 180-day post initial public offering [lockup](#) expires, potentially unleashing more than 7 million shares onto the market. The lockup release initially set for Aug. 5 was delayed until after the company reported its 2Q earnings in mid-August.

At nosebleed valuations, the company and Mr. Rockwell are likely to sell far more stock than if the valuation had been depressed.

### Personal piggy bank

XONE reported proceeds of about **\$92 million** from the initial public offering in February. But about **\$16.6 million** of this went into Mr. Rockwell's pockets through his entities for things such as land payments, and repayment of loans and one entity's entire debt. He also sold more than **\$10.2 million** of stock in the IPO.

After subtracting costs such as offering expenses, our figures show XONE realized IPO proceeds of about \$63.3 million.

The initial public offering made Mr. Rockwell about \$26.8 million richer.

Indeed, Mr. Rockwell seems to be having a lot of success in making XONE his own personal piggy bank. The two offerings potentially could make him \$97 million to \$127 million wealthier at these levels.

Mr. Rockwell's ownership has gone from 71.1 percent pre-IPO to about 22-23 percent or over 3 million shares, **according** to the filing. They're currently worth somewhere around \$200 million. Yet he's apparently not afraid to pinch pennies - he charges XONE hundreds of thousands of dollars for the use of his entity's **airplane** and services.

### Inferiority complex

The offering deals are just more black clouds building on top of the past six stormy months. The stock has risen on hopes and fallen on missed earnings its entire public existence.

**"This is the kind of company you want to buy when you've had 15 cups of coffee and 20 hours of sleep," said analyst Fred Russell of Fredric E. Russell Investment Management Co.**

**"It's the kind of company you approach with a little bit of naiveté and a great deal of enthusiasm."**

Investors caught up in the 3-D printer hype have been buying XONE since it went public at \$18. The stock has rocketed in the last six months. Just yesterday, CNBC analysts commented on XONE, briefly sending the price back above \$71.

But we think the company faces more share-zapping storms, particularly since we believe its technology is inferior.

Indeed, TheStreetSweeper's sources have talked with representatives of companies that bought XONE's machines. And some don't even use them.

Additionally, one aeronautics company uses XONE for prototyping but reported it likely wouldn't buy another machine because - like the stock itself - they are **too expensive** at up to \$1.4 million.

Other companies report skepticism that the 3-D industry's prototypes and production parts will ever meet their needs. For example, GE Aviation, a part of the world's biggest manufacturer GE, is choosing to **build** its own 3-D printers so it can print bits for jet engines - and eventually other needs - rather than buying one from XONE.

An ice cream maker owns an XONE 3-D printer that sounds about as useful on the plant floor as a museum exhibit.

One of our sources asked a plant manager, “Do you ever use it?”

“No. I can make the part faster on my own,” said the manager.

“What if the part doesn’t work?”

“I’ll just make a second part.”

Primarily using heavy sand in the case of XONE, the 3-D printers use computer images to print, layer by layer, three-dimensional objects. The company’s pokey biggest printer, Max, takes **24 hours** to print just one job.

XONE’s printer is also distinguished in that it is an MIT brainchild, the company boasts. But it’s also old technology - 17 years old - a real dinosaur in technology-years. And forebodingly, the technology is so ancient that XONE shows no signs of having to fend off any patent infringers who like the technology enough to bother copying it.

Mr. Rockwell even hinted at a lack of confidence in his company’s technology.

“Obviously, we have to enhance our machine technology,” Mr. Rockwell **said** during the last earnings call.

Our sources visited XONE’s factory and were amazed to see that behind a roped-off area about 10 employees were tediously hand-building one single printer. It would take six weeks to make just one of these million-dollar babies, visitors were told. Six weeks. Such a handcrafting feat undoubtedly would be impossible if XONE ever wanted to mass produce the machines.

But everything suggests the demand will never justify mass producing these machines, anyway. Our sources found that the potential customers they spoke with would be interested only in machines that produce functional products rather than just molds or prototypes or some sort of plastic sample.

Suppliers have some misgivings, too. Xerox has been selling printing heads to the 3-D industry for a decade, according to **CNBC**.

“I just think the (additive manufacturing) market will be small (for Xerox),” said Kevin Lewis, head of Xerox's 3-D initiatives.

Buried in hopeful commentary, XONE executives themselves nervously acknowledged that customers are struggling with the company’s machines.

“And so while we feel we’ve made dramatic progress in terms of our ability to appeal to the industrial base in terms of quality and in terms of the cost per piece that we’re manufacturing, *we are finding customers that are struggling a little bit to find ways to implement what we can sell them,*” Mr. Burns, the president, said during the last earnings call.

So, trouble’s mounting as customers, suppliers and even execs voice doubts about this technology. And, sadly for XONE, nobody’s going to be lining up to buy old, expensive technology.

### **A perfect storm**

“You have to feel invincible. You have to feel nothing could go wrong with your investment,” in considering a company like XONE, said Mr. Russell.

“Nothing had better go wrong considering this type of price-to-earnings ratio,” he said.

XONE's estimated price-to-earnings ratio for 12 months ending in December 2013 is a staggering 2000-plus, according to FactSet. And for 2014, XONE's estimated ratio of 111 is still ominous enough to set off the tornado sirens. That's about three times higher than its rivals and about seven times higher than the overall industry.

Mr. Russell said it reminded him of the Internet boom.

He recalled the days when Yahoo sold for \$150 a share during the Internet bubble. A couple years later, MicroSoft pretty well shoved the company aside and Yahoo's stock got stomped back to under \$13. Now both are in the \$27 to \$33 range.

Even if XONE's P/E ratio doesn't zap out that invincible feeling from investors right now, it's definitely another black cloud in the perfect storm that we believe is fast approaching.

Always volatile, the 3-D printer stock prices rocketed Aug. 26 when a Citigroup analyst commented favorably and initiated coverage of DDD and SSYS. In July, the whole 3-D group got beaten down when a report hit suggesting ultra fine particles emitted during use may pose health risks. This is a big question mark that likely translates to the group having to take measures - probably expensive ones - at some point to address those concerns.

The 3-D printer sector appears to be in a bubble. That bubble could burst at any time, soaking investors.

Our research suggests that two companies will dominate after this 3-D storm calms down. And we believe XONE will be left out.

### Competition gets the razor-razor blade model

Market leader 3D Systems (NASDAQ: DDD) just stepped out in front with its plan to get printers into homes and small businesses. In May, Staples announced it became the first major retailer to stock 3-D printers when it began selling DDD's Cube for \$1,300. Japan's huge retailer Yamada Denki also began selling the Cube.

So DDD got the critical jump in this market. This is the area grabbing all the headlines - the mainstreaming of a technology that has been around some three decades.

We're seeing the economic "razor/razor blade" model in action with DDD. The Cube uses material cartridges that cost a pricey \$49.99 and the Cube PLA plastic cartridge in silver is "Not compatible with 1st generation Cube printer." Furthermore, the printer jet head replacement costs \$249.99 and is compatible with only the second generation Cube printer.

So investors can see that users of DDD printing machines become loyalists by necessity. They buy the printers and get locked into constantly buying expensive cartridges for it, plus an occasional jet head.

During the recent earnings call, DDD execs said demand for the Cube and Cube X trounced expectations so much so that the company expanded its manufacturing lines a second time. Indeed, DDD's products pushed the growth rate to 58 percent over six months for recurring revenue.

Likewise, the leader in 3D printing materials, Stratasys Ltd. (NASDAQ: SSYS) offers proprietary supplies that represent a growing recurring revenue stream. SSYS, which recently acquired Makerbot, enjoys recurring revenue through the sales of its resin and plastic consumables.

This recurring revenue disappointment is thanks to XONE's comparatively crotchety technology, dependence on print shops which can't really offer competitive recurring revenue and the limitations of primarily using that heavy, difficult-to-transport sand in its process.

As engineer [Brian Smith](#) ably put it: "... the vast majority (of) XONE's business revolves around creating sand molds into which molten metal can be poured to create usable parts. Unfortunately for 3D printing bulls (and XONE), it takes about 16 hours for each print to harden, two full days for each print to fully cure, and each sand-casting can be used to create just one usable part! Two days for one part!"

XONE [announced](#) in late July that it added iron infused with bronze to its materials portfolio. We applaud this but realize it could be mostly hype. A year-old article we found mentioned XONE's use of bronze at that time. And a source said XONE was using bronze infusion when he visited the Pennsylvania factory in June. Besides, an announcement worthy of investors' attention should have said a certain number of related orders are pending. Absent that detail, investors are forced to conclude the press release lacks substance.

XONE recently announced adding another printing material, tungsten. Announced just before the disappointing earnings release, this press release was more positive because XONE said the bonded tungsten use is tied to the pending sale of its cheaper [\\$350,000 machine](#) M-Flex to rapid prototype + manufacturing or "rp+m." But XONE's [filing](#) says this is the only M-Flex it has ever sold.

Unfortunately for XONE, customers looking for 3-D metal printing may choose from numerous public and private companies - including 3D Systems, [Electro Optical Systems](#) and [ARCAM AB](#).

### **XONE sells just four? Can it really sell 20 more this year?**

The company just sells a few of its expensive units in a quarter.

By a few we mean four.

That's right. XONE sold only four printing machines in the second quarter. That's the number sold the previous quarter, plus a cheaper laser machine sold in the first quarter. The previous quarter, [eight](#) machines were sold. XONE primarily blamed European weakness in 1Q and yen weakness plus two machine sales that [fell through in 2Q](#).

"And those two sales are simply not going to happen this year," Mr. Burns explained to obviously [concerned analysts](#) during the earnings call.

XONE's president continued, "... we had anticipated a couple of more machines being in the third quarter. It's not clear to me now that those programs are going to book out in the third quarter."

It looks like XONE is facing the monumental task of selling roughly 18 to 20 machines the next six months in order to hit the minimum 2013 revenue forecast of \$48 million.

Can XONE really average nine to 10 machine sales in the next two quarters? The executive's comments and company history suggest it's extremely unlikely.

XONE focuses on printers for industries such as aerospace, [automotive](#), heavy equipment and liquid and gas transmission - most of which have had difficulties and may face more of the same in the soft economy.

But DDD and SSYS boast highly diversified price points and uses that include prototyping, dentistry, healthcare, and research and development. And as [Canaccord Genuity notes](#) - they ship hundreds of units each and every quarter.

Here's a rough comparison of some interesting recent metrics, available [here](#) and [here](#) and [here](#):

	Share price	Employees	Revenue	EPS	P/S
XONE	\$70	169	\$ 38m	-.73	23
SSYS	104	1,155	215m	-.55	13
DDD	49	1,010	415m	+.43	13

No surprise that XONE's disappointing sales produced such underwhelming earnings in both quarters this year. Both revenue and earnings [missed](#) analyst estimates.

Everything considered, we wouldn't be surprised to see the same thing happen in 3Q. Absent changed estimates, we could see yet another miss in 4Q.

We wouldn't even be buyers of DDD and SSYS at current levels. But at least they're bigger and have about 10 times more employees, revenues, resources and, arguably, vision than XONE.

## Hello, Bull

Strip the "sexy" out of 3-D, tame the bull market and before you know it, the real deal shines through with companies like XONE.

"Exciting technologies seem particularly exciting during bull markets. Everyone drops their guard. Everyone believes the world will be revolutionized quickly," said Mr. Russell.

With all the irrational exuberance, the price-to-earnings ratios get bid up to absurd highs, like XONE's 2000-plus ratio.

"You've got to really, really have a lot of faith when you buy something with 2000-something times earnings," said Mr. Russell.

"I haven't had that much faith in a long time. Maybe I'm drinking the wrong kind of coffee," he said.

Even companies with exciting technologies can get a good soaking, he said. Apple and its iPhone seemed invincible two years ago - and then along came Samsung to stir up things.

"Barnes and Noble was once thought to have a concept that would guarantee profits for decades," Mr. Russell said.

Along came Amazon and almost put the bookstore out of business, along with Borders.

"You don't want to pay too much for an exciting technology. I certainly don't. I want a reasonable price for proven technology," Mr. Russell said. He added that XONE should sell for less than half its current price.

Like Mr. Russell, [Citron Research](#) presents some amusing and cogent thoughts about the 3-D bubble.

"We are not claiming that direct digital manufacturing has no place in the industrial landscape and that it won't grow incrementally as new technology enables new applications," Citron wrote. "We simply observe that appearances have become completely unhinged from reality when it comes to the mania created in so-called 3D printing stocks, and 3D Systems in particular."

For an eye-opening look at 3-D printing gone wrong, click [here](#).

## Conclusion

Like the 1990's dot-com bubble collapse that sent screaming high-fliers slamming back to earth, these 3-D printing companies - particularly XONE - likely face a killer storm.

*\* Important Disclosure: The owners of TheStreetSweeper hold a short position in XONE and stand to profit on any future declines in the stock price.*

*\* Editor's Note: As a matter of policy, TheStreetSweeper prohibits members of its editorial team from taking financial positions in the companies that they cover. To contact Sonya Colberg, the author of this story, please send an email to [scolberg@thestreetsweeper.org](mailto:scolberg@thestreetsweeper.org).*