

## **Eastman Kodak Company (KODK)**

### *Gone in a Flash*

We are short shares of Eastman Kodak Company (“Kodak”, NYSE: KODK), a 138-year old commercial printing and imaging company whose stock has more than doubled since announcing a blockchain and cryptocurrency licensing partnership.

Fittingly for a long-time provider of motion picture film products, Kodak’s sudden rise resembles something out of the movies. A dying relic of American manufacturing licenses its brand to a blockchain project and immediately creates over \$300m of value. Along the way Kodak board members conveniently grant themselves shares the day before the announcement, a stock promoter with a checkered past is engaged for PR, and a group of German copyright trolls reinvent themselves as blockchain-enabled image platform managers.

Blockchain and cryptocurrencies are exciting technologies with the potential to disrupt many industries; their use in media rights licensing by KODAKOne will not be one of them. The use of blockchain in operating an image copyright platform accomplishes nothing. KODAKOne intends to utilize smart contracts and a crypto-asset to solve the problem of copyright infringement, but the business idea is flat-out silly. Cryptographically hashing an image into a blockchain doesn’t prove the provenance of intellectual property, a blockchain does not reduce the resources necessary for copyright enforcement, no photographer would rather be paid in KODAKCoins over real money, etc. KODAKOne is little more than a moribund company’s hollow attempt to chase the ICO craze. It’s a PR stunt – a distraction that will pass when the company reports earnings and reminds investors of its distressed financial position.

Unsurprisingly for such a nonsensical business concept, the team behind KODAKCoin has zero credibility. The chairman and founder of a key firm behind the ICO is a stock promoter who was previously banned from a Canadian stock exchange. KODAKOne’s executive team is unknown within the blockchain developer community. KODAKCoin is not a serious attempt to apply new technology to a real problem – it’s a last-ditch stock promotion gambit for a company hurtling towards bankruptcy.

Kodak faces significant debt maturities, tightening liquidity, and restrictive debt covenants while financials are in free fall. The company is a sub-scale player in a highly competitive, secularly declining industry. Management has repeatedly failed to stem negative free cash flow and botched long promised asset sales. The situation is grim and these same set of circumstances bankrupted the company 6 years ago. Kodak doesn’t have the luxury of hoping startup blockchain projects succeed – it’s staring at the possibility of default and a debt restructuring in the next 12-18 months. Potential ICO proceeds and royalty payments from KODAKOne do not change the high probability of these events. Rather than dreaming of a “new economy” for photographers, shareholders should be concerned about an eventual wipe-out. We view the equity as worthless, implying downside of -100%.

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## I. Research Highlights

### **KODAKOne is a Flawed Concept that Will Never Deliver Promised Benefits**

- The application of blockchain technology in IP management is not a novel solution to an “unsolvable problem.”<sup>1</sup> Management claims that blockchain will: 1) fix the problem of proving IP ownership, 2) cause “all the costs from complicated and expensive royalty accounting [to] cease to exist”<sup>2</sup> and, 3) enable a new cryptocurrency that is “all about paying photographers fairly.” This is all unsubstantiated hype designed to entice investors.
- In the words of an IT director and author of several blockchain-related blogs, **“They are claiming to photographers that they will magically enforce their copyright and cause money to rain down upon you, but there’s no detail how that would or could happen in a way that it doesn’t already.”**
- Descriptions of an “encrypted, digital ledger,” and “AI-enabled image recognition” are just buzzwords – there is no practical advantage to using blockchain for an image rights management platform, and even less for a “photo-centric” cryptocurrency.
- Cryptographic hashing will not prove the provenance of IP and using blockchain does not diminish the resources necessary for infringement detection and enforcement.
- There is no reason for a new cryptocurrency except as a transparent attempt to capitalize on speculative mania.
- The KODAKCoin ICO is only being offered to “accredited investors.” Unless photographers meet the necessary financial qualifications, they will not be able to participate in the ICO. Rather than “democratizing photography,” KODAKCoin faces a slew of restrictions that greatly hinder its adoption as a means of exchange.
- These technological and legal problems will render the platform unworkable. As a blockchain expert we spoke with put it, **“When the mania goes, this will go with it, and what will be left will be a dry husk of a software application that will never do what it was marketed to do.”**

### **Board Members Have Engaged in Highly Suspicious Trading, Company Faces Risk of SEC Investigation**

- On January 8, 2018, exactly one day before Kodak announced its “Major Blockchain Initiative and Cryptocurrency,” five board members awarded themselves 370,974 restricted stock units.<sup>3</sup>
- We carefully reviewed relevant publicly available documents with two experts: a senior partner at a highly-ranked global law firm, with 25 years of experience in securities law, including experience defending company directors, and a former senior counsel in the Enforcement Division of the SEC with 13 years of experience planning and conducting investigations into potential violations.

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<sup>1</sup> KODAKOne press release, January 9, 2018.

<sup>2</sup> <https://www.linkedin.com/pulse/how-blockchain-affect-ip-market-jan-denecke-1/>

<sup>3</sup> [SEC Form 4 filings](#) for Directors: George Karfunkel, James Continenza, Richard Bradley, Mark Burgess, William Parrett, Matthew Doheny, and Jeffrey Engelberg.

- **The former SEC Enforcement Division lawyer stated, “If I was thinking about buying the company’s stock, I would be worried about an SEC investigation lowering its value, I think it’s a legitimate concern for the company or for anyone that is considering being an investor of the company.”**
- Both lawyers thought the transactions “look[ed] bad,” found irregularities and inconsistencies in Kodak’s Form 4 filings, and believed **the company has a non-trivial probability of drawing an SEC inquiry.**
- Neither found sufficient documentation to negate the assumption that the transactions were done on the basis of material, non-public information. The transactions suggest board members personally benefited from information that properly belonged to the company – a violation of their fiduciary duty.

### **The KODAKCoin Team has Zero Credibility**

- AppCoin, a 7-month old ICO marketing and PR services firm hired by WENN Digital to facilitate and market the KODAKCoin ICO, is led by Cameron Chell, a stock promoter and motivational speaker with a history that includes: 1) being **banned from a Canadian exchange for the improper sale of securities**, 2) being a **known associate and business partner of a convicted perpetrator of securities fraud** which resulted in the indictment of 58 people, 3) being forced to step down as CEO of the tech incubator he founded, only to be replaced by someone arrested 5 months later for running a boiler room telemarketing scam, and 4) having a **second board member at his tech company sued for pumping and dumping penny stocks** before eventually serving jail time for impeding the IRS.<sup>4</sup> Chell’s track record is atrocious. Two of the public companies that Chell is often cited for helping found and develop, Slyce and UrtheCast, have been failures since his involvement.<sup>5</sup>
- AppCoin is deeply intertwined financially and operationally with WENN Digital and the planned KODAKCoin ICO. AppCoin has only 2 executive officers and zero employees.<sup>6</sup> Below is a recent photograph of AppCoin’s stated business address. Based on property records, it appears to be the back entrance of a private home owned by Chell:<sup>7</sup>

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<sup>4</sup> See Section II: Investment Overview for full discussion and references.

<sup>5</sup> <http://startupmindset.com/cameron-chell-tech-entrepreneur-describes-his-triumph-over-adversity-in-power-of-success-event/>

<sup>6</sup> AppCoin SEC Form 8k filed 12/29/17.

<sup>7</sup> Per SEC Form 8k filed 12/29/17, AppCoin’s principal offices are located at 561 Indiana Court, Venice Beach, CA 90291. The front of the pictured structure is 561 Brooks Avenue, Venice Beach, CA 90291, a home that according to property records is owned by Cameron Chell.

### Business Address of KODAKCoin ICO Lead Strategic Advisor<sup>8</sup>



Source: Kerrisdale photographer, 2/1/18.

- WENN Digital purports to have “deep expertise” in “proprietary blockchain development,” “big data,” and “AI-enabled image recognition” and yet is so primitive that it had to receive a \$100k, 7% bridge loan from AppCoin last November.<sup>9</sup>
- A highly-regarded, well-connected blockchain developer with over 20k Twitter followers, and named by Fortune magazine as one of the top accounts to follow on Twitter for his insights on cryptocurrency, had this to say about the KODAKCoin ICO and its developers:

***No one I know who is reputable – nobody – has said anything good about this scheme. These are people not necessarily who are skeptics; these are people who work on Lightning, and people who work on Bitcoin, and people who are really tight with the whole Ethereum crew, so these are people who have been around and who are quite bullish on crypto generally, and even they look at the Kodak thing and say “we’re very wary of this, we don’t know who’s running it, we’re not familiar with them, we haven’t seen them before.”***

### **KODAKCoin Began as IP Troll-Backed Cryptocurrency for Paparazzi**

- WENN Digital is a newly formed company with origins as a German-based IP troll named RYDE GmbH (“Ryde”).<sup>10</sup> [Descriptions](#) of the KODAKOne project mirror Ryde’s suspect business model; a “FREE image audit!” is proffered and, in the event copyright

<sup>8</sup> Cameron Chell is listed as “Lead Strategic Advisor” on the [KODAKOne](#) website.

<sup>9</sup> AppCoin Innovations Inc., Form 8-k filed December 29, 2017.

<sup>10</sup> WENN Digital’s [Form D filing](#) with the SEC lists “WENN Ryde Holdings, Inc.” as a previous name. Before recently being taken down, the Ryde website listed WENN Digital CEO and CEO of the KODAKOne project, Jan Denecke, as its managing director.

infringement is found, is followed with offers to bill you at a rate lower than what it would cost to settle a potential legal case.

- News reports suggest that as recently as 6 days prior to announcing its partnership with Kodak, Ryde/WENN Digital was trying to launch [Ryde Coin](#), a cryptocurrency designed to “benefit the community of countless paparazzi and media conglomerates with whom we do business” – a departure from the lofty language in Kodak’s press release which describes the platform’s goal of “empowering photographers” and “democratiz[ing] photography.” When Ryde Coin got no traction, WENN turned to Kodak.

### **Kodak KashMiner is a Scam**

- At CES 2018, Kodak showcased a Kodak-branded Bitcoin mining rig called the [Kodak KashMiner](#). Bitcoin mining contracts that promise a fixed payout schedule, as documented in [images](#) taken at the convention, are clear examples of deceptive marketing. Several companies that had promoted similar offerings have turned out to be [frauds](#).
- Kodak’s KashMiner product is yet another futile attempt to use the cryptocurrency mania to distract investors from the company’s struggling core operations.

### **KODAKCoin and Kodak KashMiner are Acts of Desperation; Kodak Remains on Path to Eventual Restructuring**

- Kodak’s three largest revenue segments: Print Systems, Enterprise Inkjet Systems, and Consumer and Film dropped -10% year-over-year in the 9 months ended 3Q17.
- Print Systems EBITDA, the largest contributor to total profitability, will decline an estimated -42% in 2017, with margins contracting -300bps despite years of layoffs and cost-savings initiatives.
- In 3Q17, full year EBITDA was slashed from \$92.5m to \$62.5m and Free Cash Flow cut from positive \$5m to negative \$(65)m.<sup>11</sup> These sharp negative revisions to full-year 2017 with only one quarter left in the fiscal calendar indicate a **total lack of operational visibility and poor execution**.
- Potential asset sales are not a reason for optimism – the company disposed of over \$1.0bn in assets from 2011-2013.<sup>12</sup> Management’s year-long effort to sell the most attractive remaining business, PROSPER, failed when bids were deemed unattractive.<sup>13</sup>
- **Liquidity is far tighter than the face value of cash on the balance sheet would suggest.** Half of the cash is overseas and subject to restrictions. US cash and facility availability is \$174m. **Gross Leverage is a staggering 9.5x.**<sup>14</sup>
- Neither royalty revenue from a doomed-to-fail licensing platform, nor Kodak’s likely modest cut of ICO proceeds will keep the company from tripping covenants in 1H19.

<sup>11</sup> Figures represent midpoints of guidance as per slide 8 of 3Q17 Earnings Call Presentation, November 8, 2017.

<sup>12</sup> Eastman Kodak 2013 Form 10-K.

<sup>13</sup> Per Company press releases. Kodak announced the sales process for PROSPER in March 2016, reiterated commitment through all of 2016, and then cancelled the effort in April 2017.

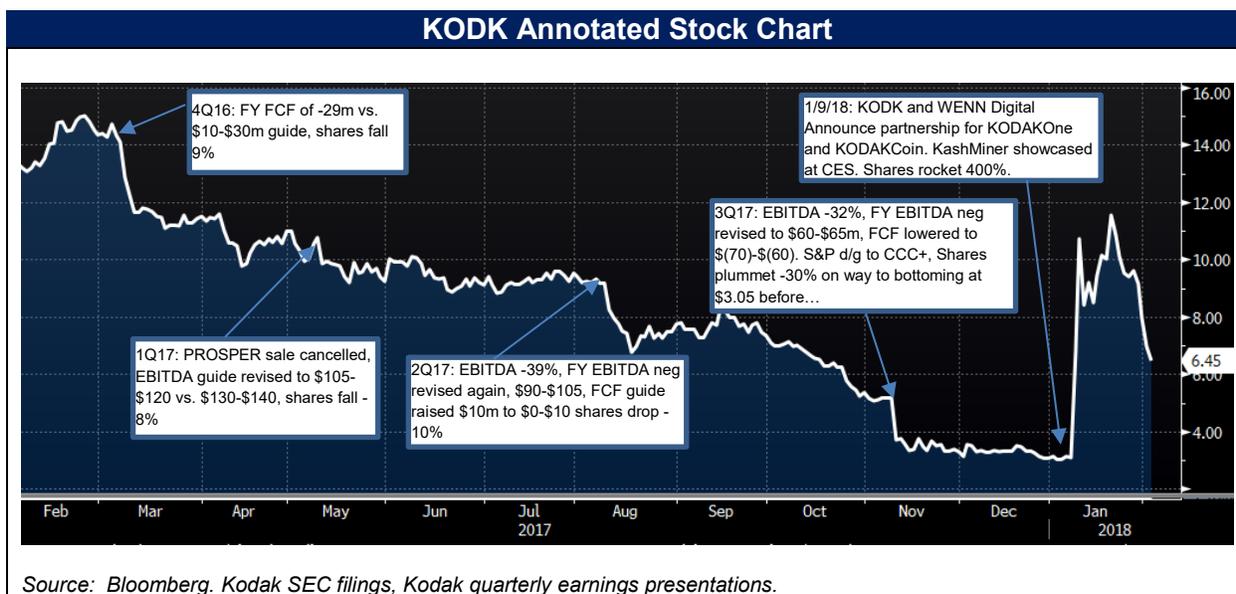
<sup>14</sup> Assumes \$200m of mandatorily redeemable 5.5% preferred equity is treated as debt and midpoint of 2017E operational EBITDA guidance (\$60-\$65m).

**Shareholders should be concerned that a second restructuring will once again wipe out all equity value.**

- Kodak CEO Jeffrey Clarke *twice* stated at CES that the licensing deals “[do not] change the fundamentals in a way that means the stock should double.” If not even Kodak’s CEO believes that its crypto ventures are worth hundreds of millions of dollars, why should anyone else?<sup>15</sup>

## II. Investment Overview

### Recent Developments



Kodak stock began the new year testing new lows – punished by years of revenue decline, negative free cash flow, multiple negative EBITDA guidance revisions, a scuttled key asset sale, an inability to collect on licensing fees, and rapidly evaporating covenant headroom.<sup>16</sup> These same issues precipitated the company’s first bankruptcy filing in January 2012.

Then came CES 2018. On January 9<sup>th</sup>, Kodak and a newly formed company named WENN Digital announced a “Major Blockchain Initiative and Cryptocurrency.” Kodak licensed its brand to WENN Digital to create KODAKOne, a rights management platform for photographers that would utilize blockchain technology, and KODAKCoin, a cryptocurrency that would serve as a payment mechanism for photographers wishing to buy/sell images and related photographic services.<sup>17</sup> The ICO for KODAKCoin was scheduled to open on January 31, 2018, but was delayed several weeks because of what the company stated was the need to verify the “accredited investor” status

<sup>15</sup> [Barron’s Tech Trader Daily article](#), January 9, 2018.

<sup>16</sup> Per 3Q17 10Q, the EBITDA cushion against its senior secured leverage coverage ratio had declined to \$13m, down 84% from YE16. To put this in perspective, 2017E guidance calls for a decline of \$40m from reported 2016A EBITDA.

<sup>17</sup> [KODAKOne press release](#), January 9, 2018.

of potential buyers.<sup>18</sup> In an unrelated announcement at CES, Kodak showcased a Bitcoin cloud mining operation to which it had also licensed its brand, Kodak KashMiner.

Despite having zero prior experience or affiliation with blockchain technology, and the fact that it is merely a licensor of its brand in support of these endeavors, Kodak's stock proceeded to *triple*. At its peak, Kodak's stock captured over \$300m in additional value based purely on *concepts* for a new photo licensing platform and cryptocurrency. This \$300m of ascribed value was based solely on vague descriptions of a project, from developers with disturbing backgrounds, and defied common sense.

## **Dotcom Stock Promotion 2.0**

Given the myriad technological, operational, financial, and legal hurdles in launching any disruptive tech company, a key area investors should diligence is the management team. Researching management is one way to gauge whether a project is legitimate or a scam.

So, who is the team behind KODAKOne? For all the attention Kodak has received as part of the partnership announcement, it's worth noting the [KODAKOne](#) website doesn't bother to mention a single person from Kodak. That's for good reason – now that Kodak has given the partnership its name, there isn't anything else Kodak can contribute. The [press release](#) states WENN Digital's "live operational copyright infringement management system" will form "Phase 1" of the platform. Therefore, evaluating the likelihood of success of KODAKOne doesn't rest on Kodak – it rests on WENN Digital and its lead advisor, AppCoin. There are red flags all over both.

On August 17, 2017, a Nevada incorporated business named Redstone Literary Agents, Inc. was renamed AppCoin Innovations Inc., and began operating as a provider of blockchain and ICO-related advisory services and PR. AppCoin's sole client is WENN Digital.<sup>19</sup>

AppCoin owns 7.5% of the common stock of WENN Digital, and entities partly owned by AppCoin's chairman own an additional 12.5%. Upon completion of the ICO, AppCoin will be given 20% of the aggregate number of coins or tokens raised in the offering. For a company ostensibly retained for PR and consulting, AppCoin has a large vested interest in this project.

AppCoin's chairman is a serial entrepreneur and motivational speaker named Cameron Chell. Chell has had a less than pristine career in the securities industry. During the dotcom bubble, Chell worked as a broker in Canada before being fined and banned from the securities industry for violations relating to the improper offer and sale of securities. Chell was also charged under the Criminal Code of Canada with knowingly causing his assistant to forge a client's account-opening signature.<sup>20</sup>

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<sup>18</sup> [KODAKCoin website](#).

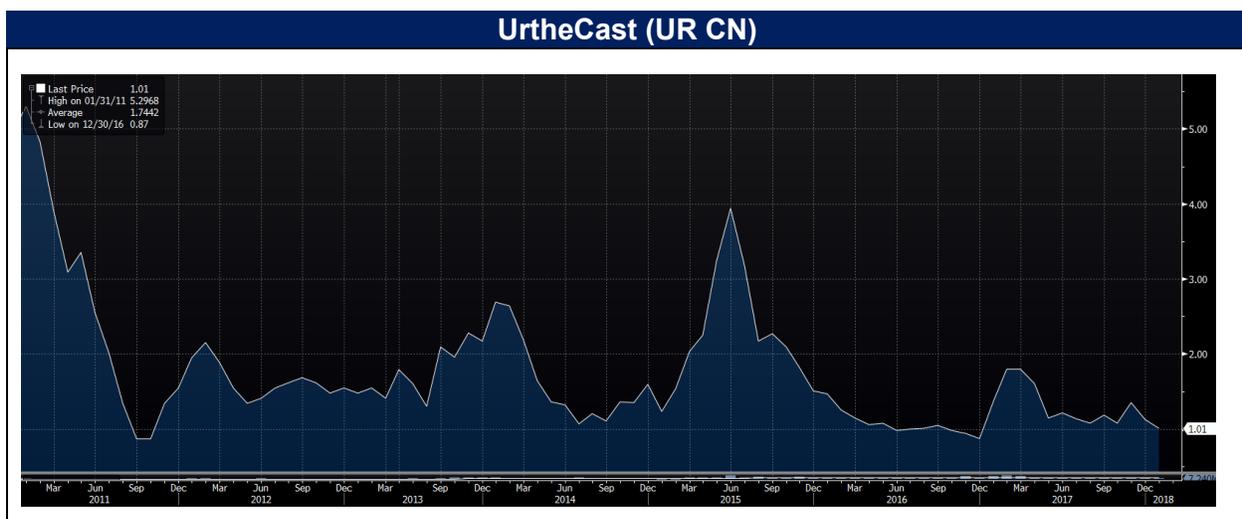
<sup>19</sup> AppCoin Innovations Inc., Form 8-k filed December 29, 2017.

<sup>20</sup> Disclosed in Chell Group's SEC Form 10-K, August 31, 2003. See also "Chell Group's chairman nabbed in boiler room raid," [Canada StockWatch](#), December 18, 2002.

In July 2002, Chell lost control of the tech startup advisory firm he founded, Chell Group Inc., after surfacing in an investigation by the Ontario Securities Commission into the activities of disgraced broker, Mark Valentine. Chell was a “known associate” and business partner of Valentine.<sup>21</sup> The Commission cited Valentine for improperly handling three of Chell’s stock promotes.<sup>22</sup> Valentine was later arrested, charged and pled guilty to securities fraud in a massive sting operation.<sup>23</sup>

Two former directors of Chell’s tech advisory firm, Adrian Towing and Shelly Singhal, have also had careers marked by fraud. In November 2002, 5 months after Chell was stripped of control of his company, Towing was arrested and charged with running a series of boiler rooms that engaged in fraudulent telemarketing of office supplies.<sup>24</sup> In 2010, Singhal was indicted for conspiracy, securities fraud and stock manipulation involving penny stocks<sup>25</sup>, and eventually sentenced to prison in 2013 for conspiracy to impede the lawful functions of the IRS.<sup>26</sup>

Chell has boasted of creating “several billion-dollar organizations” early in his career<sup>27</sup>, but our examination of the companies he’s been closely involved with only revealed a string of failures. Below, we show the stock price charts for 2 publicly-traded firms Chell describes as co-founding, UrtheCast, a satellite-based earth observation tech company, and Slyce, a company specializing in mobile image recognition. The charts show stock price performance since the beginning of Chell’s involvement, as stated in his [LinkedIn profile](#).



<sup>21</sup> <https://www.theglobeandmail.com/report-on-business/the-rise-and-fall-of-broker-mark-valentine/article4137451/>

<sup>22</sup> [http://www.osc.gov.on.ca/documents/en/Proceedings-SOA/soa\\_20020624\\_valentine.pdf](http://www.osc.gov.on.ca/documents/en/Proceedings-SOA/soa_20020624_valentine.pdf)

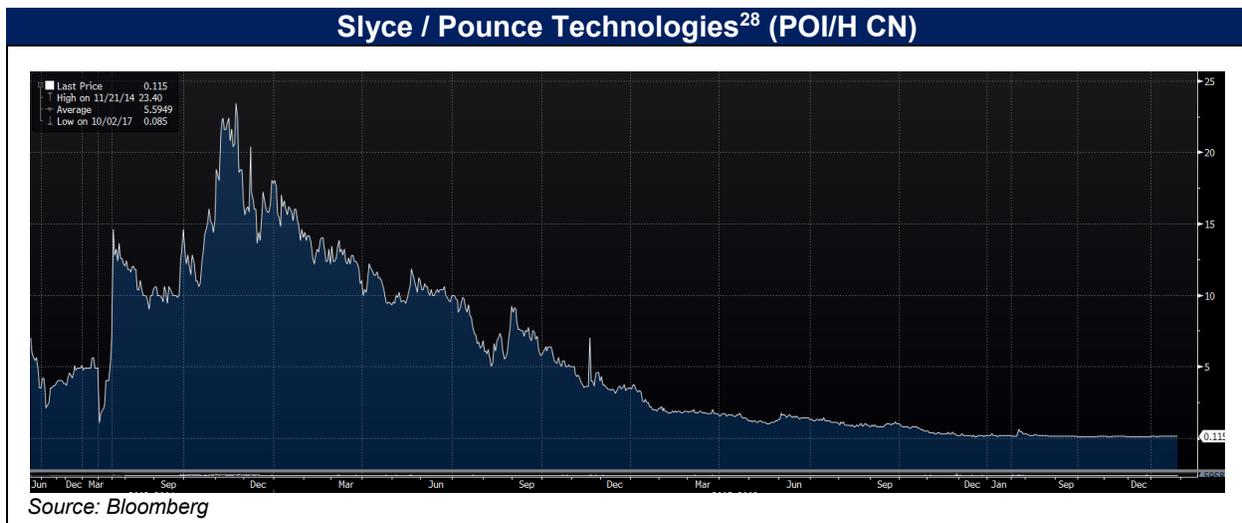
<sup>23</sup> <http://www.cbc.ca/news/business/mark-valentine-arrested-in-fbi-stock-fraud-sting-1.303880>

<sup>24</sup> [Canada StockWatch](#), December 18, 2002.

<sup>25</sup> <https://archives.fbi.gov/archives/washingtondc/press-releases/2010/wfo042710a.htm>

<sup>26</sup> <https://archives.fbi.gov/archives/washingtondc/press-releases/2013/former-ceo-and-two-associates-sentenced-to-prison-terms-for-conspiracy-to-impede-the-lawful-functions-of-the-internal-revenue-service>

<sup>27</sup> <https://consciouslivingradio.org/overcoming-adversity-cameron-chell/>



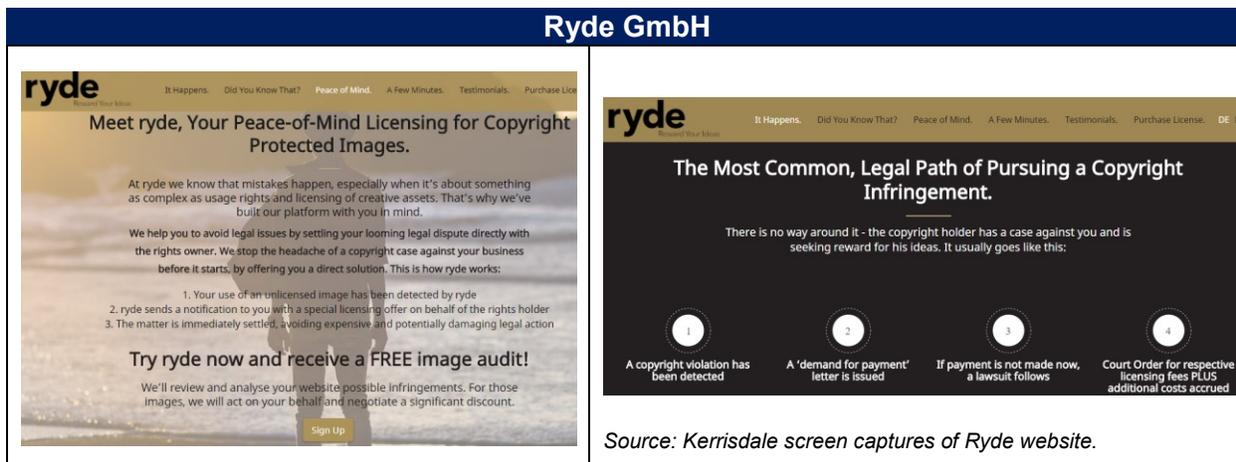
We believe the backgrounds of the parties involved in KODAKOne warrant investor skepticism over the quality of the underlying operations, the ability to create lasting value, and the likelihood of material financial benefit ever accruing to Kodak.

### ***WENN Digital Background***

As for WENN Digital, its origins stem from a German firm named RYDE GmbH. Ryde’s website listed current WENN Digital and KODAKOne CEO, Jan Denecke, as its managing director, though the site was recently taken down. Denecke’s [LinkedIn profile](#) still lists him as the present CEO and Founder of Ryde. Denecke is not a computer scientist nor a developer – he is a [copyright lawyer](#).

KODAKOne and Ryde can both be characterized as IP trolls. Examine the below screenshots of Ryde’s website (which we captured before the site was removed):

<sup>28</sup> On January 27, 2017, Slyce [announced](#) further to its press release of January 27, 2016, it would change its corporate name to Pounce Technologies and begin trading on the TSX Venture Exchange under the new name and new trading symbol, “POI.”



Ryde offers customers who are concerned about infringement the chance to receive a “FREE image audit!” and, should copyright infringement be detected, offers to bill the infringers at a lower rate than if they were being sued. The image on the right depicts steps in enforcing copyright infringement: 1) Violation, 2) “Demand for payment” letter issued, 3) Lawsuit commenced if payment is not made. The site ominously states, “there is no way around it – the copyright holder has a case against you...”

Now, compare this business model to the WENN Digital CMO’s description of the planned KODAKOne platform:<sup>29</sup>

*We can get a photo, lock it into our blockchain, then we can sort of assign the IP to the individual, then we can look through the entire internet and find where that photo is being used, and if it's not being used correctly, then we can reach out to them with an automated system that says, 'hey, you might not have known that you're using this photo without a license, why don't you get a license to that', and then that money comes back and gets paid back to the photographers, and that whole transaction happens with that KODAKCoin cryptocurrency.*

— Bruce Elliot, CMO WENN Digital (January 11, 2018)

This is simple IP-trolling made to sound more sophisticated by (needlessly) throwing in the concept of blockchain. Unfortunately for Kodak, blockchain can do nothing to improve the practice of IP-trolling and the pursuit of copyright infringers.

We asked a veteran media consultant who advises SMBs on marketing and content strategy what normally happens with instances of infringement. She described a very basic process: a cease and desist order is received and, 9 out of 10 times, one just takes down the infringing IP, replacing it with one of billions of other images that are free or covered within an existing subscription plan. The idea of paying for a new license is rarely entertained and the threat of some “looming” legal threat never enters the equation. Ryde has no authority of its own to pursue copyright infringement – it is web-crawling for infringement and collecting a finder’s fee.

<sup>29</sup> <http://www.zdnet.com/article/kodak-bitcoin-miner-on-display-at-ces-2018/>

According to reporting by [Ars Technica](#), Ryde/WENN Digital signed a licensing agreement with Kodak following a failed attempt to launch “Ryde Coin,” a cryptocurrency aimed at “benefit[ing] the community of countless paparazzi and media conglomerates,” which is less illustrious sounding than the “empowering photographers and agencies” described by Kodak in its partnership announcement.

Ryde’s desire to help paparazzi get paid makes sense. WENN Digital is the result of a combination between Ryde and WENN Media, a celebrity and entertainment news service that works with many paparazzi. The decline of traditional print, the abundance of free, high-quality images on Instagram posted by celebrities themselves, and the *de facto* duopoly of Getty and Shutterstock has made profiting from celebrity photography increasingly difficult. The problem is that launching a currency that helps bush-hiding paparazzi isn’t the most sympathetic of causes, and it probably didn’t take long for Ryde management to realize Ryde Coin was going to fail as a cryptocurrency scheme. Ars Technica reported that less than one week before the announcement with Kodak, Ryde’s crowdfunding page had only 10 backers who pledged a total of \$875.

What Ryde needed was better marketing (i.e., AppCoin) and it needed a brand, hence Kodak.

### ***KODAKOne is a Sham***

Blockchain and cryptocurrencies are exciting technologies with the potential to disrupt many industries; their use in media rights licensing by KODAKOne will not be one of them. In speaking with blockchain and database experts, lawyers, a buyer of media licenses, and a founder of a digital content agency, we encountered a wall of incredulity and ridicule in reaction to nearly every aspect of KODAKOne’s plan. The overwhelming conclusion was that KODAKOne does not provide “keys to solving what felt like an unsolvable problem” and instead represents a hollow attempt to chase the ICO craze. As one expert stated, “WENN [Digital] is without a doubt trading on Kodak’s name to make an otherwise sketchy proposition seem more legitimate than what it really is.”

Let’s begin by stating the problem for which blockchain technology is purportedly the solution: digital copyright infringement, combined with a lack of market transparency, is resulting in lost revenue for photographers. KODAKOne management has stated that by using blockchain technology, the platform will provide greater security in assigning IP ownership while streamlining the process of copyright enforcement and payment. These claims do not hold up under scrutiny.

First, cryptographically hashing an image into a blockchain is not a great way to prove the provenance of intellectual property. KODAKOne’s management has claimed that “a Blockchain [will] provide a tamper-proof method of proving ownership.”<sup>30</sup> That is simply not true. Recording licensing data in a blockchain does not irrefutably establish rightful ownership.

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<sup>30</sup> <https://www.linkedin.com/pulse/how-blockchain-affect-ip-market-jan-denecke-1/>

Imagine a scenario where an image is slightly altered with a tweak to the resolution or contrast – that small change would result in a completely different hash. Blockchain doesn't "know" the altered image is really the same as the first but with an imperceptible difference. Someone can therefore take an image, alter it, and register/upload it as their own. Or, more simply, someone can obtain a photo from a Flickr account or from one's own Shutterstock license, register those in the blockchain as one's own, and expect payment. Now, the immutability of a blockchain becomes a hindrance because there's no way to correct the error and no way to reverse a payment. Ironically, blockchain has now enabled someone to defraud a content creator, not protect him. KODAKOne's management just glosses over these real challenges that negate the benefit of using blockchain. What one really needs is a largely automated process with an administrator that can edit the database based on competing claims and rectify disputes. That is precisely what already exists at Shutterstock, Getty Images, Adobe, and a dozen other firms.

Getting photographers paid for unlicensed usage of their work is best achieved via web crawlers, tracking down infringers, and sending cease and desist orders. Blockchain contributes nothing to these steps. Web crawling involves indexing the invariant features of an image contained in the registry and then using a bot to scan billions of webpages for matches. There are already several robust providers of this technology including Google, Microsoft, and TinEye. It makes no sense for KODAKOne developers to reinvent the wheel. Once a match is found, there's a level of manual review before a cease and desist letter on legal letterhead is sent out. Nothing about this enforcement process is sped up or enhanced simply because the registry is on a blockchain.

Using blockchain to support a marketplace that must be scalable and responsive is also a terrible, pointless exercise. Even tech-savvy photographers and buyers are not going to bother setting up their own individual clients to directly access the KODAKOne blockchain. If anything, they would use a theoretical KODAKOne web portal. Thus, while KODAKOne management talks about the data being distributed and decentralized, from a practical standpoint interaction with the KODAKOne registry will take place in a very centralized manner. Photographers looking to disintermediate agencies like Shutterstock would simply be swapping one centralized platform that pays U.S. dollars for another that pays unusable KODAKCoins.

KODAKOne won't store entire images in the blockchain – that would take up far too much data and degrade performance. Instead, KODAKOne will store a hash of the image in the blockchain, which means that the web portal would need a separate system to store the actual image (i.e., the thumbnail). The web portal would then need to be able to quickly access and search the registry of licenses based on user inquiries. According to a blockchain expert we spoke with, "decrypting blockchain ledgers is computationally expensive, they're poorly indexed, and they don't have the advantages of good, modern database software." Translation: It is impractical to decrypt the entire KODAKOne blockchain every time someone needs more search results. Instead, KODAKOne will likely use a fast database engine, probably sharded (partitioned), localized, and hosted in Amazon AWS. So in effect, KODAKOne won't use the blockchain to access licensing data *at all*. It will use SQL replicas of the blockchain. The fact that there is a blockchain copy is entirely irrelevant. As the expert explained, "if power went out in the room

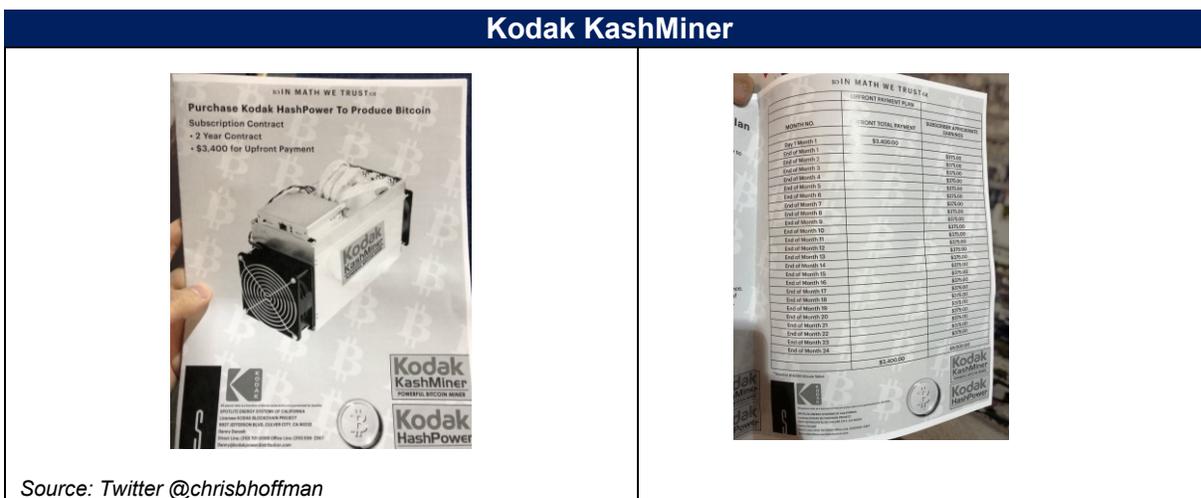
with the KODAKOne blockchain, no one would notice...there is literally no way in which it is useful.”

Lastly, the use of KODAKCoin as a means for paying photographers makes no practical sense. As David Gerard, author of “Attack of the 50 Foot Blockchain,” a book about blockchain and smart contracts, and IT administrator at a publishing company, put it, “There is no reason any professional photographer would take Kodak-branded magic beans over actual money.” Because the KODAKCoin ICO will be offered under SEC guidelines as a 506(c) exempt token security, it will be marketed only to accredited investors. This means unless a photographer makes \$200k a year or has a net worth of over \$1m, he or she cannot participate in the ICO. The tokens cannot be transferred or sold for a year after the offering, at which point it can be more freely exchanged, but only until the number of token holders reaches more than 500 accredited or 2,000 non-accredited individuals, at which point a separate registration requirement under Section 12G of the 1934 Securities Exchange Act kicks in. This all means the cryptocurrency will not be widely used by photographers or image buyers anytime soon, only cryptocurrency speculators.

Kodak’s cryptocurrency ploy hits all the major buzzwords – blockchain, smart contracts, distributed ledger, ICO, etc. But look through the PR spin, examine the true merits of using blockchain for the proposed service, and it’s obvious the project is poorly thought out and will never work as promoted.

**Kodak KashMiner is a Racket**

In addition to the KODAKOne announcement at CES, Kodak also showcased an even more dubious product to which it sold its name: Kodak KashMiner. Below, to the left, is an image of a flyer circulated at the show:

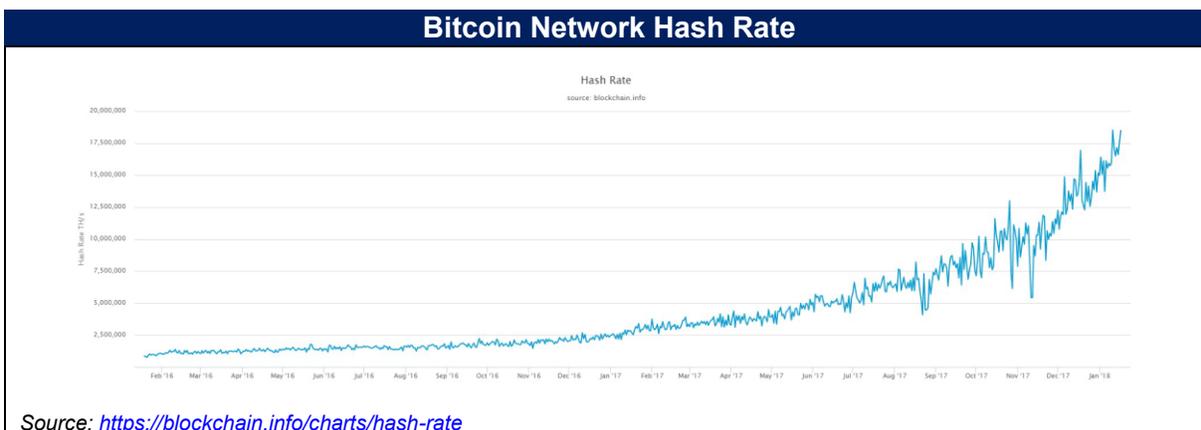


Kodak licensed its brand to Spotlight America. The device pictured in the brochure however, bears a strong resemblance to an image of a [Bitmain Antminer S9](#) we found on jet.com, with the Antminer logo scrubbed off and a Kodak label slapped on the right panel.



Captured in the image of the payout schedule are some of the terms of the cloud mining contract. Under “In Math We Trust,” the schedule depicts paying \$3,400 upfront to lease the equipment which will be owned and operated by Spotlight. Spotlight then takes 50% of the coins mined by the device during a 2-year contract. At a price of \$14,000 USD/BTC (Bitcoin is currently at \$7,500), the contract pays out a constant stream of \$375 per month for 24 months, a \$5,600 profit and impressive return of 165%. The contract breaks even after only 9 months. If this offer sounds too good to be true, that’s because it is.

Showing returns which assume a fixed Bitcoin price without accounting for *some* level of continued increase in mining difficulty is unrealistic. The cumulative computation power that competes to mine Bitcoin (illustrated by the Bitcoin Network Hash Rate chart below) has consistently and dramatically increased over the past 2 years:



This increase in mining difficulty crowds out excessive returns. More mining rigs chasing the rising price of Bitcoin reduces the number of Bitcoins each can mine per day.

Rather than trusting the math in KashMiner's poster, we applied the stated contract terms to readily available historical Bitcoin mining difficulty data and Bitcoin prices over the past 2 years. The calculated 2-year profit was a respectable, but far less tantalizing \$1k, a 32% return, and the breakeven point was near the very end of the contract, month 21. Had Bitcoin not surged parabolically in November and December of 2017, the profit would have been closer to \$500-\$600 or 20%, pre-tax, undiscounted, and assuming perfect equipment uptime. Bitcoin mining is presumably about profiting from exposure to cryptocurrency. But juxtapose 20-30% returns against the 3,803% return in Bitcoin itself over the last 24 months, and it's questionable why anyone but the most naïve, late-to-the-party, crypto-hobbyist would find this attractive.

[Financial news outlets](#), [Bitcoin-related websites](#), [technology journals](#), and [photography forums](#) have described the Kodak KashMiner as a scam. Google: "Kodak Scam" and it returns 390k results. The reason the backlash has been so swift is because the cryptocurrency community has seen this kind of offer before. HashInvest, HashPoke, ColIntellect, BiteMiner, HashOcean, and the biggest of all, GAW Miners, all crashed as pyramid schemes promoting some variation of steady returns.<sup>31</sup> The [GAW Miners](#) CEO defrauded investors of \$9m and is facing a 20-year jail sentence for wire fraud.

## Kodak is a Dying Company and Blockchain Will Not Save It

Capitalization and Summary Financials						
\$ in Millions, except per Share Data						
Capitalization (as of 9/30/17)			Summary Financials			
Share Price	\$5.80					
Basic Shares Outstanding	43					
Market Capitalization	<b>\$247</b>					
Cash and Equivalents	342	Revenue	1,709	1,643	1,501	1,390
Sr. Secured Term Loan (L+625, 1% FI.)	398	Change YoY (%)		-4%	-9%	-7%
Capital Leases	6	Operational EBITDA <sup>(1)</sup>	125	107	64	65
Total Debt	<b>\$404</b>	Change YoY (%)		-14%	-41%	2%
5.5% Series A Convertible Preferreds	200	FCF <sup>(2)</sup>	(138)	(56)	(65)	(30)
Total Debt and Preferred	604	Change YoY (%)		-59%	16%	-53%
Net Debt and Preferred	262	<b>Valuation:</b>				
Total Enterprise Value	<b>\$509</b>	EV / EBITDA	4.1x	4.8x	8.0x	7.8x
		<b>Credit Metrics:</b>				
		Total Debt / EBITDA	4.8x	5.6x	9.5x	9.3x
		Net Debt / EBITDA	2.1x	2.4x	4.1x	4.0x
		Adj. Net Debt / EBITDA <sup>(3)</sup>	2.9x	3.4x	5.8x	5.7x
		EBITDA / Cash Interest	2.1x	1.8x	1.5x	1.5x
		EBITDA / (Interest+Capex)	1.2x	1.1x	0.8x	0.9x
					0.8x	0.8x
<b>Cash Detail</b>						
Cash in U.S.	154					
Cash in China	106					
Cash in Other Intl.	82					

Source: Kodak SEC filings, Kerrisdale estimates.

- As defined by the company.
- EBITDA less: Cash Interest, Capex, Cash Taxes, Change in Working Capital, Legacy Payments, and Cash Restructuring Charges.
- Net Debt excluding cash held in China given repatriation restrictions.

<sup>31</sup> <https://themerkle.com/top-6-bitcoin-cloud-mining-scams/>

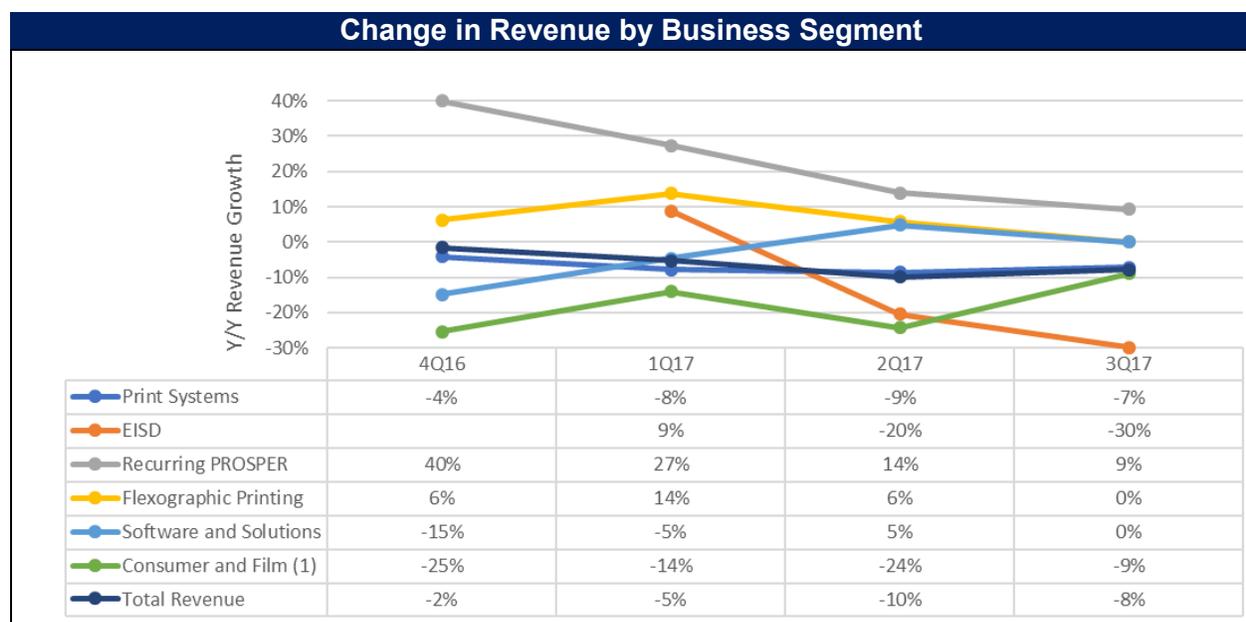
*“This doesn’t change the fundamentals in a way that means the stock should double.”*

— Jeff Clarke, CEO Eastman Kodak (January 9, 2018)

The above quote is noteworthy because it refers directly to the increase in Kodak’s share price following the KODAKOne announcement. It also comes from a CEO who has a history of over-promising on the strategic value of his assets, not conservatism. Even *he* thinks that Kodak’s crypto ventures are not worth hundreds of millions of dollars.

Kodak’s outlook is not as sanguine as the price action and current valuation of 8.0x EV/EBITDA suggests. 3Q17 results showed a significant drop in key operating segments, particularly in growth-oriented business lines previously relied upon to offset declining legacy revenue. Management blamed a slowdown in the broader commercial printing market, but industry checks and a review of public comments from peers suggest the decline is idiosyncratic and attributable to the weakening competitive positioning.

Management has repeatedly highlighted the growth in PROSPER recurring revenue and its Flexographic Packaging segment as offsets to revenue declines in more mature, legacy segments.<sup>32</sup> Recurring PROSPER revenue refers to the sale of inkjet printing-related consumables and services which support the Kodak PROSPER printing system. Flexographic printing involves the printing of custom labels on a wide range of materials and packaged goods. In 3Q17, both revenue streams ceased to provide a meaningful lift to overall results. After growing 40% year-over-year in 4Q16, recurring PROSPER sales slowed to just 9% growth in 3Q17, implying on a sequential basis (quarter-over-quarter) revenue growth has flatlined. Flexographic Packaging, after 5 quarters of growth, was flat year-over-year in 3Q17, -8% sequentially. Below we provide a graph and table of the estimated and reported growth rates for Kodak’s key business segments which shows deteriorating revenue trends across the company.



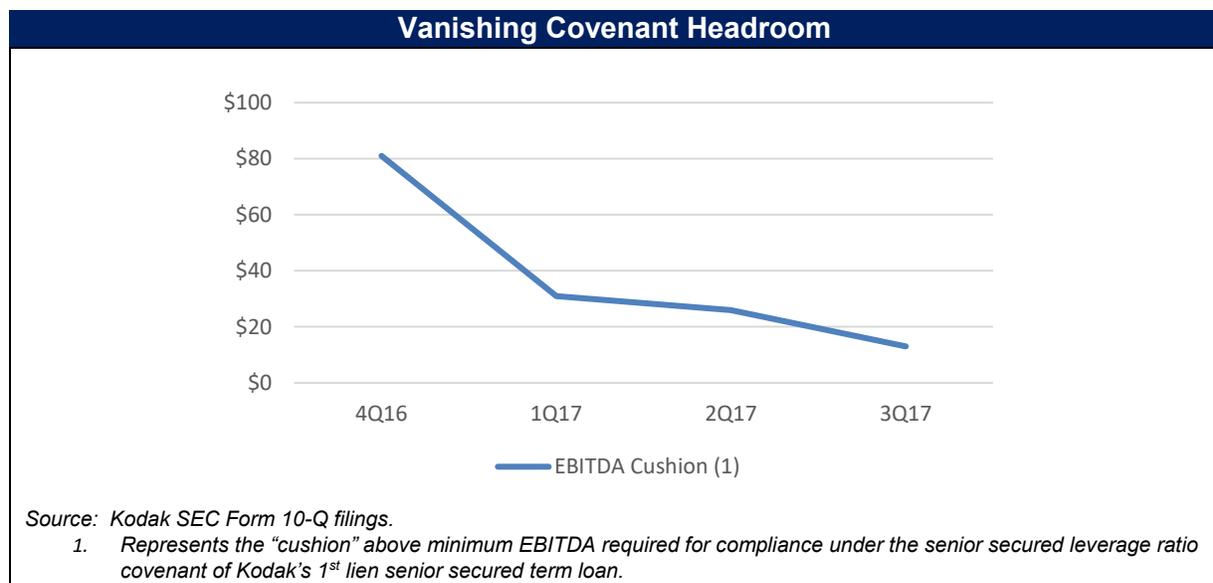
<sup>32</sup> 1Q17 and 2Q17 Earnings Call transcripts.

Source: Kodak SEC earnings press releases, Kerrisdale estimates.

1. 3Q17 adjusted for timing of \$6m payment related to contractual minimums royalties and extension of a brand licensing arrangement

With low single-digit operating margins, even after years of considerable cost cuts, Kodak has limited ability to offset this level of continued revenue pressure. Total EBITDA in 3Q17 fell -32%, requiring the company to negatively restate full-year guidance for a third consecutive quarter, and by a shockingly high amount at that: -36% with only 1 quarter remaining in the fiscal year.<sup>33</sup> Free cash flow was also revised downward, from an initial flat outlook to a negative cash burn of \$60-\$70m. The inability to stabilize EBITDA has plagued the company continuously since emerging from bankruptcy in 2013. 2017E EBITDA is an astonishing -87% below the projections provided in Kodak’s Chapter 11 disclosure statement.<sup>34</sup>

One of the key consequences of these poor results is the company’s rapidly vanishing covenant headroom. In just 4 quarters, Kodak’s cushion above the minimum EBITDA required for compliance under its senior secured leverage covenant has declined from \$81m to just \$13m. Kodak’s 2017E Operational EBITDA guidance represents a year-over-year decline of over \$40m; thus \$13m of cushion indicates extremely limited flexibility against covenant levels should operational improvements or asset sale attempts not materialize.



Management has blamed the poor revenue performance on a “marked” slowdown in the commercial printing market, but that excuse lacks evidence.<sup>35</sup> There was no “marked” sequential slowdown in the reported results of commercial printers, RR Donnelley or Quad Graphics, or from equipment manufacturers like Fujifilm and Xerox. None of them noted a sharp change in market conditions in 3Q17 or significantly revised full-year guidance. Kodak

<sup>33</sup> 3Q17 Earnings Call Presentation, p. 8. Midpoint of full year 2017 Operational EBITDA guidance revised from \$97.5 to \$62.5m.

<sup>34</sup> Kodak Disclosure Statement for Debtors’ Joint Plan of Reorganization Under Chapter 11 of the Bankruptcy Code, Appendix D-1. 2017E Commercial Imaging EBITDA after Corporate was estimated to be \$494. Midpoint of current 2017E Operational EBITDA guidance is \$62.5m.

<sup>35</sup> Kodak 3Q17 earnings call transcript and accompanying earnings presentation.

management cited Xerox as a competitor that also witnessed a decline in equipment sales, but this is misleading. While Xerox's equipment sales did decline, Xerox stated on its 3Q17 earnings call, "Equipment revenue declines in Q3 *improved sequentially, as expected*, with the strongest year-over-year performance in the quarter coming in September [emphasis added]." We asked the President of a 25-year-old commercial printing company and former customer of Kodak if anything dramatic occurred in the second half of 2017, to which he replied, "I don't think there's anything specifically in the market that was unique this year which would raise a flag for Kodak... the rap on Kodak in our marketplace is that they kind of fell asleep at the wheel as far as not getting on the bandwagon with regard to digital print processes... I think the space that they're playing in – there's plenty of opportunity and there's companies and competitors who are growing in that space."

Kodak's results and significant negative guidance revisions are not the result of an industry-wide slowdown; they are symptomatic of poor execution, an uncompetitive product set, and lack of operational visibility. Kodak shareholders are underwriting an increasingly vulnerable credit profile. In an S&P report following 3Q17 results, downgrading the rating on Kodak's credit to CCC+ / Outlook negative, the agency noted diminished liquidity reserves, low covenant headroom and estimated recoveries of ~65% for the senior bank debt in the event of a default.<sup>36</sup> For retail equity investors unsure of the implications of that statement, it means that S&P sees so little value in the company that even the most senior of creditors will not be made whole and the equity is worthless.

Nothing in the announced blockchain and cryptocurrency initiative will save a highly levered company that has shown no ability to generate consistent cash flow from an eventual restructuring. KODAKOne is barely more than a concept and will not provide substantial royalty revenue to help maintain debt covenant compliance and service the company's \$600m of high coupon debt obligations. In 3 short weeks, Kodak KashMiner has already become synonymous with "scam."

In our leverage and free cash flow forecast, we conservatively assume cost-saving measures succeed in keeping operational EBITDA flat and Free Cash Flow improves from 2017, but remains negative. Even with this relatively optimistic set of assumptions, we estimate Kodak will violate its senior secured leverage ratio covenant of 2.75x by 1H19.

Covenant Analysis										
Period	Current (3Q17)	4Q17E	1Q18E	2Q18E	4Q18E	4Q18E	1Q19E	2Q19E	3Q19E	4Q19E
Senior Secured Credit Facility	398	398	398	398	398	398	398	398	398	398
Less: US Cash	(154)	(169)	(154)	(146)	(154)	(152)	(146)	(159)	(151)	(147)
Net Senior Debt	244	229	244	252	244	246	252	239	247	251
LTM Operational EBITDA	80	64	69	73	74	65	63	61	60	58
Covenant EBITDA Add-backs (Implied) <sup>(1)</sup>	22	22	22	22	22	22	22	22	22	22
Covenant Defined Consolidated EBITDA	102	85	91	95	96	87	85	83	81	80
Senior Secured Leverage Ratio	2.40x	2.68x	2.69x	2.66x	2.54x	2.83x	2.98x	2.88x	3.03x	3.15x
Cushion (\$M) <sup>(2)</sup>	13	2	2	3	7	(3)	(7)	(4)	(8)	(12)
Senior Secured Leverage Ratio Covenant Compliance?	2.75x Yes	2.75x Yes	2.75x Yes	2.75x Yes	2.75x Yes	2.75x No	2.75x No	2.75x No	2.75x No	2.75x No

Source: Company filings, Kerrisdale estimates. See over for footnotes.

<sup>36</sup> S&P Global Ratings. Eastman Kodak Co. Downgraded to 'CCC+' From 'B-' on Lower Cash Balances, Operating Weakness; Outlook Negative, November 14, 2017.

1. *Kerrisdale estimate. Implied amount of add-backs to operational EBITDA permitted under the Senior Secured First Lien Term Credit Agreement dated September 3, 2013, to arrive at the "Consolidated EBITDA" used in calculating Secured Leverage Ratio.*
2. *Per 3Q17 Form 10-Q, Kodak's EBITDA, as calculated under the Term Loan Credit Agreement, exceeded the EBITDA necessary to satisfy the covenant ratio by approximately \$13m.*

### III. Valuation

Below we provide the basis for why we think the equity is worthless. We use a 5.5x EBITDA multiple, in-line with the high-end of where shares have traded since 2014. We use a forward 2018E cash balance to capture ongoing cash burn while excluding cash held in China, given repatriation restrictions which limit its availability for debt service and general corporate purposes. We include \$25m in crypto-assets despite the negligible value Kodak will recognize in the eventual ICO.

Kodak Price Target	
2019E EBITDA	58
Target Multiple	5.5x
Implied Enterprise Value	\$319
Less: Total Debt and Preferred	604
Plus: 4Q18E Cash (ex. China) <sup>(1)</sup>	233
Plus: \$25m Crypto-Assets <sup>(2)</sup>	25
Implied Equity Value	\$0
Basic Common Shares Outstanding	43
Implied Share Price	<b>\$0.0</b>
% Change from Current	<b>-100%</b>

*Source: Company filings, Kerrisdale estimates.*

1. *We exclude current \$106m of China-domiciled cash as it is unlikely Kodak would be able to repatriate these funds in a liquidity stress scenario.*
2. *Kodak will have a minority stake, 3m coins or 10% of the proposed ICO of 36.5m coins, targeted to raise \$20m.*

### IV. Conclusion

Every groundbreaking innovation that captures market fascination has talented developers who apply the technology in a thoughtful manner. It also has imposters, looking to trade on the promise of the technology without any legitimate chance of delivering. Kodak has licensed its brand to the latter. As a result, the story behind the rise in its shares, which couldn't have been scripted any more bizarrely, will not have a Hollywood ending. ICO proceeds and distant royalty revenue will not be enough to avoid equity dilution or a credit event. Eventually, possibly as soon as the next time Kodak reports earnings, a share price levitating on the hopes of blockchain technology will give way to the gravity of dying, old-world fundamentals.

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