

# COMMEMORATIVE 100<sup>TH</sup> EDITION



# ImagingWorld

The Most Trusted Name in Print in 5 Languages



PAGE 29

## INFORMING, EDUCATING and NURTURING THE GLOBAL IMAGING INDUSTRY

—RT Media's Sabrina Lao reveals what it takes to be the world's most read Imaging magazine in five languages

Issue 100 (US\$10.00)

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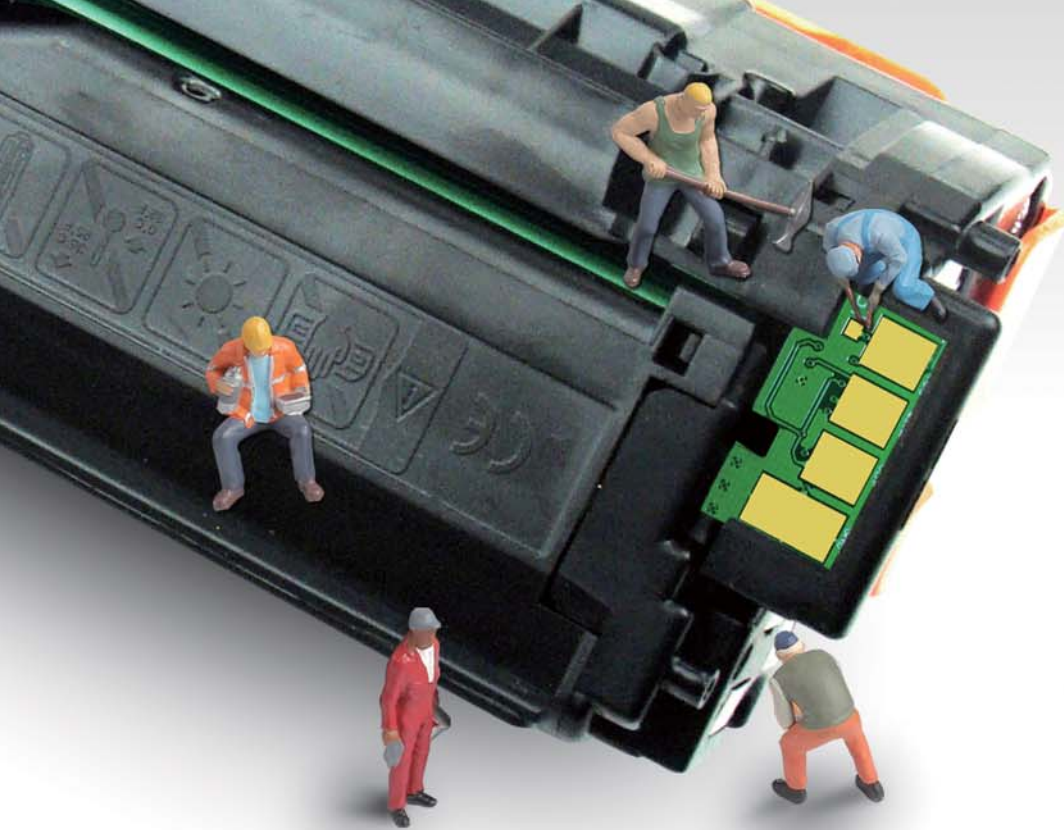
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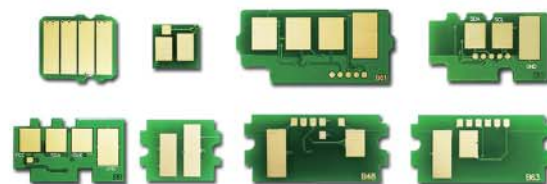




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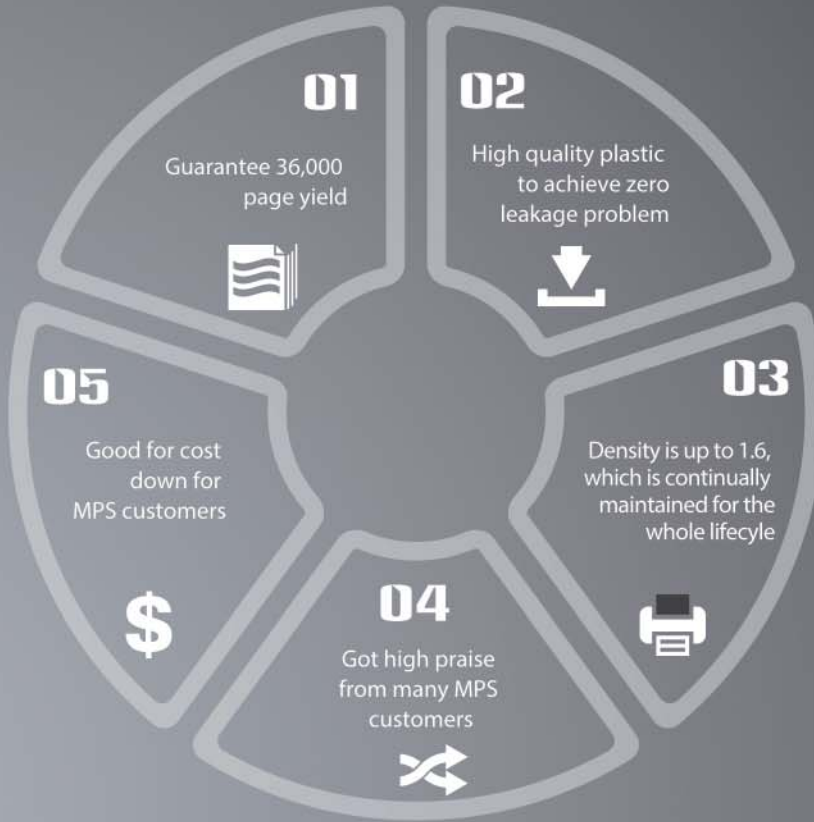


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# IMAGING WORLD

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*Korean-based Jin-Hyeok Hong (second from right), managing director of NDM Co., was one of four lucky draw winners at the RT Imaging Gala Dinner in Cancun, Mexico. He received his free accommodations ticket for RemaxWorld 2018 in Zhuhai China in October from RT Director David Gibbons (left), Senior Consulting Editor Tricia Judge, and RT Imaging World Espanol Editor Ivan Rosales.*

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*Informing, Educating and Nurturing the Global Imaging Industry*

—Sabrina Lao, director of RT Media



Recycling Times informs, educates, and nurtures the global printer consumables industry innovatively through an integrated broadcast, print, digital and social media strategy. As such, we honor and respect the intellectual property of all businesses and individuals. Consequently, we take a zero tolerance position to the manufacture, distribution and sale of patent infringing and counterfeit printer cartridges and components. We continue to strive to avoid promoting such in our advertisements, articles and editorial content.

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# David Gibbons



When we launched the Chinese edition 12 years ago, and then the English edition three years later, we were what you might call “the new kids on the block.”

This is now our 100th edition of the English language *RT Imaging World* magazine. Back in 2009, the popular U.S.-based *Recharger Magazine* was well and truly entrenched with 20 plus years under its belt at the time.

I remember, as a cartridge remanufacturer in Sydney, Australia back in 1995 (see photo), reading every edition of *Recharger* from cover to cover.

I was hungry for information that might help my Laser Advantage business to prosper. And it did. I would read Editor Tricia Judge’s editorials and features with great interest. I would attend her *Recharger World Expos* in Las Vegas. Little did I know back then—23 years ago—that Tricia (see photo) and I would be working together on this magazine. *RT Media* acquired *Recharger Magazine* five years ago, *RemaxWorld Expo* is now run in China and is even grander in size and attendance. I also moved to China, which has become the epicenter of the imaging supplies industry.

Working on this publication has given me the opportunity to meet and work with industry pioneers and giants, many of whom are no longer with us, including Ed Swartz, Art Diamond, Lester Cornelius and Dr John Wyhof. We take a moment to give tribute to them and others in this special edition. (Read more on page 45)

Despite maturing and consolidating, this industry is far from boring. In fact, it is more exciting than ever. Just look at the disruptions and innovativeness that are taking place by the captains of industry, both OEM and aftermarket alike.

In the seven years I have been living and working in China, I have had the good fortune to meet and work alongside the greats including Ninestar’s Jackson Wang, Print-Rite’s Arnard Ho and SGT’s Richard Yu. My biggest joy is to be working alongside Tony Lee and his wife Sabrina Lao (who is on the cover this month), together with whom I founded this magazine. We continue to be full of optimism, partly captured in Berto’s cartoon on page 56. In the thinking of the Chinese, there are new horizons with new opportunities.

We need have no fear of the future, unless we forget the journey we have been on these past years.

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Tricia Judge



David Gibbons

  
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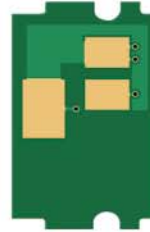
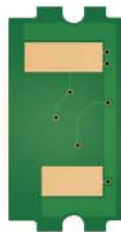
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## New Environmental Simulation Test Room for Copiers



HaoYinBao Printing Consumables Co., Ltd (HYB) has had to construct a new, larger environmental simulation testing room for copiers, thanks to the demand from its customers and improved testing standards.

“The new facilities in Zhuhai are an improvement on our existing testing room in Henan,” a spokesperson told *RT Media*. “The new test room has the capacity to maintain the extreme conditions, temperature and humidity of eight separate A3 copier machines, at the same time.” The calibration system is automatically updated and synchronized with the laboratory in Henan.

The Zhuhai Quality and Inspection Bureau is now negotiating with HYB to use the new testing facility as the standard copier environment testing room for the industry. ■



Read more

## Inkjet Printed Eggs-actly As Needed



More than 250,000 eggs are having codes printed on them every hour thanks to inkjet printers that have been customized into an eight-track grading machine.

According to Ink World, Georgia, USA-based Markem-Imaje is able to print codes containing useful safety and traceability information, such as best before dates and farm identification, directly onto the eggs. Such coding fulfills a legal obligation in many countries. However some egg producers choose to add this information, sometimes augmented by logos, as a way of differentiating their eggs as coming from a trustworthy source.

It is claimed the inkjet printer offers many features not available with other egg coding devices that can proactively protect uptime and keep costs under control. ■



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## 01

### Color Toners and Developers Launched

Minneapolis-based Katun Corporation has introduced new imaging supplies for Canon and Ricoh machines. The newly released Katun Performance™ color developers are for use in Canon iR Advance C5030 and C5045 MFPs, while Katun® Business Color toners are for use in Ricoh MP C306/C406/C307/C407 MFPs.

Customers can access the Katun online catalog, or find Katun customer service contact information at [www.katun.com/eu](http://www.katun.com/eu). ■



Read more



## 02

### Strategic Alliance Made

Carolina Wholesale Group ('CWG') has partnered with Canon U.S.A., Inc. as an authorized distributor of Canon imagePROGRAF large format printers, supplies, and media. This strategic alliance brings together the three premier brands of Arlington Industries, Carolina Wholesale, and Digitek as authorized imagePROGRAF distributors and enables

their customers to access Canon's award-winning large format printers and solutions. ■



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## 03

### Canon's Dongle Gear Case Discussed Passionately in Mexico

Legal experts discussed the validity of Canon's recently-acquired patents at the RT imaging Summit 2018, which was held in Cancun, Mexico. "We will fight Canon," said one US patent attorney who represents one of the defendants in the Canon case. "Canon's patents should be invalidated. They cannot be allowed to continue to broaden the base of their patent claims indefinitely." ■



## 04

### Authorized Resellers to Provide Support

Static Control has authorized two new resellers DGX and Recycler Ware to support remanufacturers and imaging professionals throughout Brazil. In addition to having two resellers, Static Control has appointed Waldir Leptich as a sales representative for the region. Leptich comes to Static Control as an industry veteran with more than 12 years of experience in the imaging industry. ■

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## 05

### Canon Granted Preliminary Injunction in Germany

The preliminary injunction was awarded to Canon and against Inkjets Toners and Cartridges Ltd. The litigation revolves around the alleged infringement of a patent relating to a drum unit and a process cartridge. The subject laser toner cartridges were sold via amazon.de under the Amazon Standard

Identification Numbers (ASINs) 6040800542, 6040800593, 6040800615, and 6040800623. ■



## 06

### CEO Appointed at Lexmark Switzerland

Lexmark Switzerland has appointed Hanspeter Heer

Read more



as new Managing Director and Channel Chief. He takes over the helm from Hans-Michael Voss. Heer comes from NRS Printing Solutions, where he worked in managed print services. ■





07

**Spain Sued for Waste Management Failures**



The European Commission is taking Spain to the European Court of Justice (ECJ) after repeated calls to establish appropriate waste management plans went unanswered.

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Spain was due to establish necessary waste management plans to cover the country by December 12, 2010, and subsequently evaluate and revise the plans every six years, but has failed to do so. ■

08

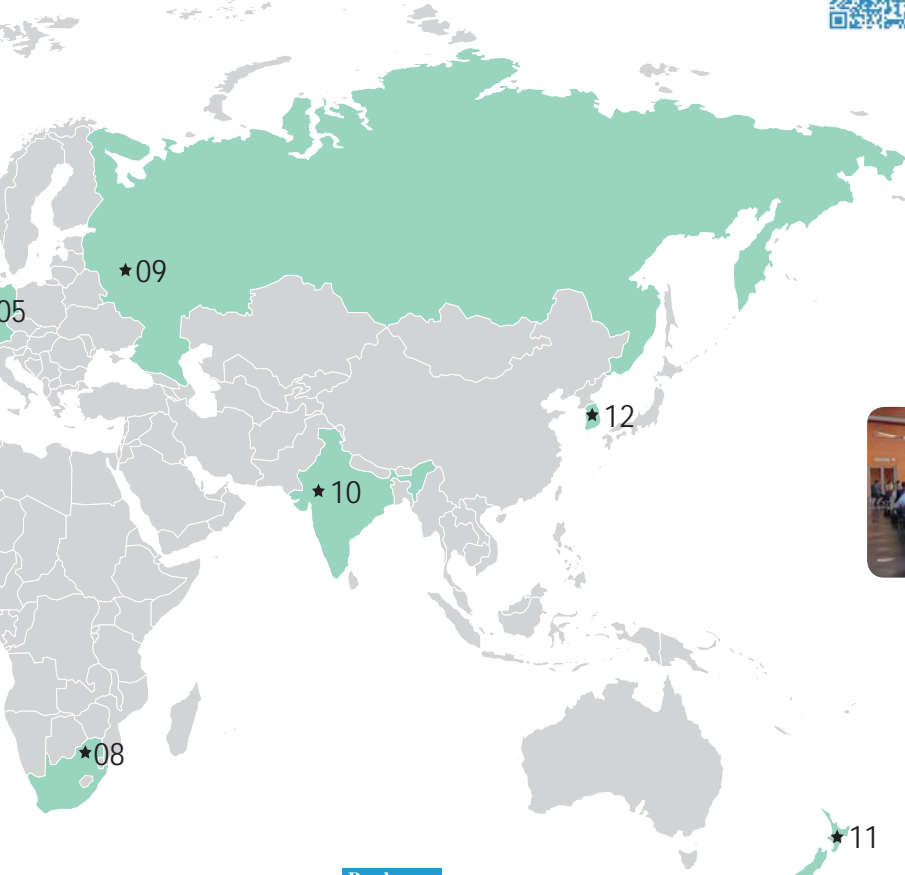
**Office Consumables & Spare Parts Seminar in South Africa**



China-based HYB and its distributor MR TONER will jointly present at a seminar on July 17-19 that will be held at Radisson Blu Hotel in Johannesburg.

Read more

HYB is planning a promotion for Konica Minolta toner cartridges TN217/414 and TN216. MR TONER is a long term partner of HYB and its exclusive distributor in Johannesburg. ■



09

**FOCUS on QUALITY International Conference in Russia in May**

Read more

The conference was organized by Russian Information Agency Business-Inform at the All-Russia Exhibition Center in Moscow. Representatives of leading



companies from the office printing industry shared their views on current manufacturing and promotion problems in the world and the Russian markets in particular. ■

10

**New HP Ink Tank Printers Launched in India**

Read more

HP Inc. India has announced the new and upgraded HP Ink Tank Printer series for the home and micro, small and medium enterprise (MSME) users. The key benefits of these printers are the use of high-quality ink, multiple device connectivity and easy, spill-free refill systems. ■



11

**OKI Appoints Bruce Koefoed First New Zealand Manager**



Bruce Koefoed joins OKI with more than 20 years of sales, management and product marketing experience in the New Zealand IT market.

Based at the OKI New Zealand headquarters in Auckland, Koefoed will be responsible for introducing OKI solutions throughout New Zealand and managing a team of resellers for ongoing customer service and support. ■

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12

**Hanp Inc to Issue Ninth Series Bonds**

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Hanp Inc, the South Korean-based OPC drum manufacturer, will issue its ninth series unregistered and unsecured public bonds with warrants, to raise 20 billion won (US\$186 thousand) in proceeds for operations. The maturity date for the bonds is July 12, 2021, with a coupon rate of one percent and yield to maturity of four percent for the bonds. ■



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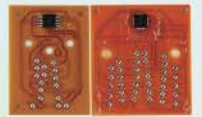
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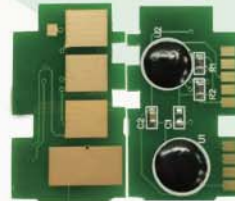
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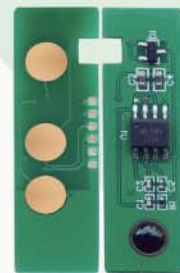
CF400 SERIES



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111 SERIES



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# REGIONAL ROUNDUP

Exciting events take place every day in different regions around the world. What is the latest local news that concerns you most? Take a look.



**Dr Stanislav Malinskiy**  
Russia

The international *Business-Inform office equipment, supplies and parts exhibition* took place on May 15-17 in pavilion 75 at the All-Russia Exhibition Center in Moscow. *RT Media* was pleased to be the co-organizer with Business-Inform—the information agency for the Russian government, corporations and business sectors. The 71 exhibiting companies came from Russia, China, USA, Japan, Germany, Turkey and Lithuania. 2,000 participants visited the 26 Russian and 38 Chinese exhibits, the two largest countries represented at the exhibition. 39 percent of visitors were Russian seller-companies while 28 percent were Russian buyer-companies that came from 69 cities and towns across Russia. Visitors attended from 20 countries.

**Patrick Naude**  
South Africa



Those with any knowledge of printing consumables including inks and toners are entering the low-employment markets in central to lower Africa, are targeting small businesses and corporations and offering savings of more than 45 percent. Aftermarket brands including Steamline Digital Inks, Jetbest and Nutec have already grabbed market share proving there is an opportunity here for global suppliers to find distributors.

There is also a demand for refurbished second-hand copiers in good working order for dealers of small office automation (OA) products. The dealers claim their customers are unable to afford new machines and are looking to save printing costs with rental devices. They want to be able to offer their customers a lower rental and cost-per-page solution and are calling on global support to meet this market opportunity.



**Ivan Rosales**  
Mexico

We have just concluded another successful imaging supplies event for the Americas—the 3rd *RT Summit & Expo* held in Cancun, Mexico. People from all over the continent gathered at the two-day show, with 80 percent of the attendees coming from the region.

The days where you used to be able to open a store and expect hundreds of customers to arrive to buy your cartridges are definitely over. This expo managed to bring the industry together to find new business opportunities and strategies the Aftermarket needs to consider in order to adapt and succeed!

**Dhruv Mahajan**  
India



I live and work in India, a developing market that is booming and where all the players are richer today than they were yesterday. However, two things are clear: first, attempting to make obscene profits, like the OEMs do, will bring ruin to the Aftermarket. Second, alternative Aftermarket solutions will always become available from the industry's leading players, sooner rather than later, and its not possible for the OEMs to launch that many new products every year to keep profitability high.

All players must adopt new, lean and mean business models and provide true value for their products and services with their customers. Given all the technologies, new marketing ideas and communication, I am quite convinced printing will continue for the next twenty-five years and beyond.

In the 11 years I have been working in this industry, I have seen technologies go through their own business cycles too. The majority went with inkjet, then switched to laser and soon inkjets will dominate again thru page-wide printing. Printing in color has been restricted here in India, but this will become available to everyone and the market will not tolerate the greed of the OEMs. India is surely becoming the focus of all players, with its growth in business that will soon match its global share of the population—one sixth.



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### Alternative Konica Minolta Drum Cartridges Released

In response to customer demand, Zhuhai HaoYinBao (HYB) has released remanufactured drum cartridges, or units, for use in Konica Minolta Bizhub C224/ 284/ 364/ 454/ 554. According to the company, the new release, namely HYB-KM-DR512, can print up to 120,000 pages in black, and 95,000 pages in color. In addition HYB has also released drum cartridges for newer machines like the Bizhub C226/266 and C308/368/258. ■



### New Kyocera Cartridge Chip Release

Apex had released new replacement chips for use in the new series of A4, color, single function and multifunction Kyocera TK-5270 series printers. These devices have a print speed between 30 and 35 ppm. According to Apex, these first-to-market replacement chips are an ASIC design, are guaranteed to provide consistent performance and can be easily installed in a remanufactured cartridge. ■



### Print-Rite Launches New Compatible Chips

After many years researching and developing compatible products for use in Kyocera printers, Print-Rite Technology Co., Ltd has launched its high-quality, compatible chips for use in the TK5270/ 5280/ 5290/ 1200 series. According to Print-Rite, these chips are developed through ASIC technology, which is capable of resisting any OEM firmware upgrades, while guaranteeing the performance to be comparable to the original. ■



If you want your new products in this monthly listing, please contact Maggie Wang, Magazine Editor at RT Media at <Maggie.Wang@RTMworld.com>.

# GENUINE OR INFRINGING?

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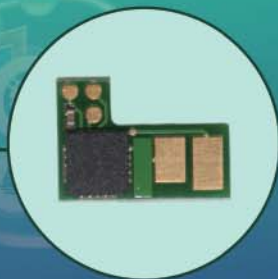
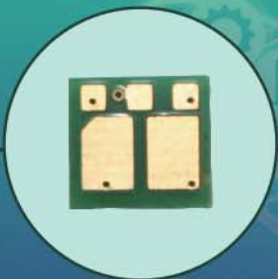


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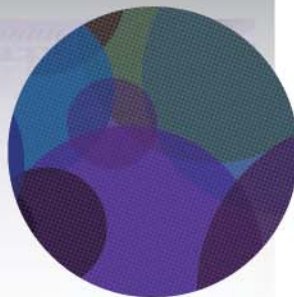
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CF500X-CF503X/CF510A-CF513A/CF530A-CF533A/CF540A-CF543A/CF540X-CF543X

**Our** company focuses on printing consumables of integrated circuit products research, development and production, carries a large variety of products of HP, Canon, Epson, Brother, Kyocera, etc.



## Vision

to be leading supplier and trustworthy partner or chip solutions



## Mission

fly to colorful world by chip "jet"!



## Values

Innovation, effort, excellence, win-win

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## 3D Printed Concrete Molds Used to Reconstruct Ancient Building



The New York architecture and engineering firm EDG has come up with

a cost-effective way to bridge architecture art and technology. They have developed a laser 3D scanning software called Modern Ornamental, which uses rendering software (like 3DSMax and Rhino) and algorithmic modeling programs to allow the company to recreate virtually anything, including concrete molds to restore historic and artistic building features. ■

## Chanel Unveils 3D Printed Mascara Brush

Chanel believes that the micro cavities in our eyelashes, which can be directly copied into a “printed” mascara brush, could ensure smooth and even application. The specialized form of the bristles should help relieve issues with clumping and allow the user to apply mascara without having to constantly ‘redip’ the brush in the mascara tube.



According to Chanel, the mascara is called Le Volume Revolution. ■

## World’s First 3D Printed Oral Drug Delivery Device



Dr. Jean-Christophe Leroux, professor of drug formulation and delivery at ETH

Zürich, has led the first human-based study of 3D printed drug-eluting mouthguards. Conducted in collaboration with researchers from Singapore and Canada, the work “demonstrates the immense potential of 3D printing as a platform for the development and translation of next-generation drug delivery devices for personalized therapy.” ■

## World’s First Habitable 3D Printed Houses

The Dutch city of Eindhoven will be the first in the world to have habitable homes made by a 3D printer.

The houses are designed to look like boulders, and blend with their environment.

The 3D printer being used is essentially a huge robotic arm with a nozzle that squirts out a specially



formulated cement, said to have the texture of whipped cream. ■



# TONER

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# Life Sal

—My 28 year journey

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# of a esman

in the aftermarket imaging supplies business

*Luke Goldberg*



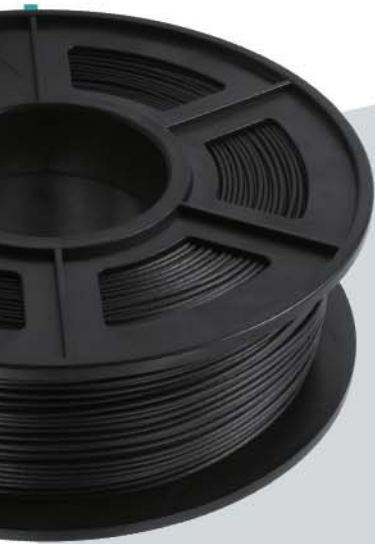
I started this odyssey way back in 1991, right here in southern California working for a company called Future Graphics. I was selling toner and OPC drums to a fledgling, and rapidly growing base of remanufacturers in the U.S. that would reach 7000+ strong by the year 1995. I didn't know much but as a recent college graduate who loved learning, I dived in, avowed to know everything I could to hone my craft and to bring value to my customers.

Since then, I have been privileged to work for the best companies in this industry, which I represented to the best of my ability and invested with complete confidence that my customers would be better off partnering with the companies I represented. Today, I am proud to represent Clover Imaging Group, which has empowered me to bring my ethos of service, value, and consultative partnering to serve Clover's global base of customers. I have been honored to visit more than 60 countries in these years and to gain a better understanding of the unique challenges, opportunities and cultural underpinnings of each.

I have met some incredible people over the years and have had amazing experiences. In short, I have been blessed to be part of this forever-in-flux business of ours. I have been blessed to make a living in a business that engenders consumer choice, enriches the lives and livelihoods of countless entrepreneurs while providing an environmentally sustainable option to global consumers.



## 3D PRINTING PEN



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WOOD ▶



## 3D PRINTER FILAMENT

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I was asked to write about what I have learned in these 28 years. I don't know that it can be encapsulated in just a few hundred words but I will aim towards brevity, which has never been my strong suit. I have always had certain maxims that have driven my personal and professional life. Fundamentally I have learned that developing certain core principals and staying true to them can be a recipe for success. That isn't to say we shouldn't evolve. We need to continually adapt to a changing world, and changing industry, BUT we have to stay true to ourselves and live and work with integrity.

In my experience, here are some of the absolutes that I have tried to honor in life and in work:

1. You can't fake it: be passionate about what you do and what you sell. No one wants to buy from someone who doesn't believe in what they are selling and a lack of commitment will come across every time. A big part of whatever modest success I have achieved is that I am a true believer. I believe in the value of our market's business proposition, and I have always steadfastly believed in the companies I represented. I did then, and do today, firmly believe if I created a new relationship that both parties would equally benefit from that association. If I stopped believing it, I could no longer represent that company and it was time to move on.

2. Be a student of the game: learn and absorb everything you can about your product, your industry, and your customers. Become an active listener. Don't be so caught up plotting your next sentence that you cease to listen. You will always learn more listening than talking.
3. Sales 101: mean what you say and BE your word. Early on, I succeeded because if I said I was going to do something the person on the other end KNEW I was going to do it. Sometimes circumstances or outside forces can make this difficult but you need to do everything in your power to be reliable, consistent and most importantly truthful!
4. Face to face visits: they are STILL critical and will never be replaced by technology. To create real relationships, your customers need to see you and get to know you. I have experienced this over and over again, especially in my international travel where the appreciation that I travelled 6,000 miles to see someone cannot be overestimated. You CANNOT understand a market, its customers, and its opportunities unless you get off your ass and go there.
5. Learn to manage every encounter with your staff or customers with empowering context. Don't worry about being right all the time, worry about being effective. Early in my

management career, I was passionate to the point of volatility. I was respected and feared. It didn't help that I am 6'2" (188cm), 230 pounds (104kgs), bald and ugly. I look like a Russian hit man crossed with the villain from the Avengers Infinity War, Thanos (see picture courtesy Marvel Cinematic Universe). I obliterated phones, computers, anything I could get my hands on. It was never directed towards anyone, just those inanimate objects. But, how did it occur to those who saw this behavior? Hardly empowering. Since then, I try, whenever possible to make sure anyone leaving my office doesn't leave feeling defeated or deflated, but motivated and empowered.

I want to thank the companies that I have worked for, and the executives who I have learned from and who entrusted me with marketing and positioning their companies. All of them have provided me with vehicles from which to learn and grow personally and professionally. I am not done yet and I am just as bullish about our industry as I was when I was selling those OPC drums for US\$32.00. I will leave it at this; there is never a time when we should stop learning other than when we leave this mortal coil. Being a student never ends. We are all works in progress and I have enjoyed the last 28 years with all of you in this industry all over the world. Thanks for helping to shape the Luke of yesterday, today and tomorrow. ■

# BLAME THE INTERNET



*Dr. Stanislov Malinskiy*





The Internet has entered our lives and has changed them forever. At first glance it appears that it is all for the better. Useful and necessary information can be found within seconds: bus and train schedules, restaurants, local, national and international news, and updates on what your friends and relatives are up to. You can also quickly connect with your commercial partners to discuss and coordinate plans, make sales and promote new products and services.

The Internet has changed our behavior, the amount of information received, and biased our decision-making. And the increase in our decision-making process is thanks to the ever-growing volume of useful information we receive.

And disinformation....

This is our modern reality. Many decisions, which may be correct today, may be outdated tomorrow. The vast amount of information and knowledge considered to be ultimate truth ceases to be such quickly. So quickly, that sometimes we fail to recognize it.

Recently it was quite evident—based upon the argument that laser printing devices were aimed at office printing while inkjets targeted home environment—that the cost per page for laser devices was much lower than that of inkjets. Inkjet printers were unjustifiably expensive for use at the modern office. Are those “truths” so undoubtedly true today? And what of the speculation that OEM cartridges are fit for remanufacturing but compatibles are not? The vast amount of information that may be true and useful today can become useless and sometimes harmful for decision-making tomorrow.

There are more instances where outdated information is becoming available, thanks to the Internet. It has become the source of knowledge for the majority of specialists. Outdated knowledge accumulates and continues to be trapped in the web. It keeps on growing and is analyzed and searched for by Internet search engines. The best search engines offer their users the information as present day “truth”, even when it is no longer true.

There is another unpleasant feature that the Internet possesses. Information placed on websites by their respective owners is rarely challenged. “Our company is the leader...”, “Our products have the highest quality...”, “Our brand is well-known internationally...” and the like. Such statements can be found on websites of both well-known, respected companies and unknown companies whose only virtue is their presence on the Internet. The activity of highly professional marketers in social networks (SMM- Social Media Marketing) and within the field of website optimization for social media integration (SMO – Social Media Optimization) can push information which is not the most up-to-date and may not be completely true. The SMM and SMO specialists promote to the highest rankings the information for which they are paid to promote within social media. They do not care about the quality or accuracy of this information. This becomes another source of false information.

And that is not all.

Unfortunately the Internet is a channel of totally fake information. The publishing of fake information often discredits a competitor company,

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- e Studio 2820C/2830C/2330C (TFC28C/M/Y/K)
- e Studio 855/853/755/723/655/603/555/523 (T7200/8550)
- e Studio 810/650/550 (T-6510)
- e Studio 506/356/306/256/206L (T4590)
- e Studio 455/355/305/255/205L (T4530)
- e Studio 453/452/450/353/352/350 (T3520)
- e Studio 282/280/232/230/202L/200L (T2320/2340E)
- e Studio 245/243/225/195 (T2450)
- e Studio 242/212/182/181 (T1810)
- e Studio 205/203/ 165/163 (T1640)
- e Studio 203SD/203S/202S (T2021)
- e Studio 161 (T1620)
- e Studio 150/15/ 12 (T1200)
- e Studio 80/65/55 (T6570/T6570E)
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the competitor's products and non-existent defects. Many methods of unfair competition have become common in the modern informational market.

By providing information and knowledge, the Internet has become a very influential part of the modern market, because more and more buyers choose and purchase products this way. The power and influence of the Internet grows each year. The old generation specialists—whose first career steps were taken in times before the Internet through the study of professional literature—is being replaced by the new generation of specialists who were influenced by the Internet even when at school. Computer games, social media discussions, news feeds and popular websites are the main source of the new generation's knowledge. They are the ones who have become the majority of buyers on the modern market, and set to become the overwhelming majority of customers.

Customers have always been an integral part of any market. As such, they have the power to bring profit to some sellers and not to others. Much research is conducted on customers and the creation of tools to influence them—from the OEM to distributor to reseller to end-user. When you consider the dynamics of the development and its

intellectual functioning of the Internet within the context of the modern market, the Internet can either become a “killer” for suppliers of quality products or a “driver” of high quality product sales. Today market development is at the point of bifurcation. The direction the market will go is largely based on the actions of quality product manufacturers and the large distributors of such products. All that is required from them today is to focus the attention of potential buyers to the issue of quality (and not only the product's quality, but also the quality of information regarding the market).

The modern informational market has now reached a status-quo. The sellers (resellers) are trying to offer the buyer a wide range of products of varying quality and at different prices. They are not emphasizing the quality of the products, nor the quality of information about the products industry. They simply do not need to. Instead of explaining to buyers the value and economic benefits of quality products (as well as quality information), the sellers simply adapt to the situation dynamics of the market. Such a situation puts the market chances of all companies on the same level regardless of whether they are established or unknown. The customer's lack of quality knowledge and quality information regarding the modern

# IN MY VIEW

How has *RT* helped you?



**Japan**

**Lemori Kanetoyo**

CEO  
Sunwise Information Corporation

It is entirely thanks to Recycling Times' supplying us (Sunwise Information Corporation) with the English version of "RT Imaging World" that we have been supplied with real-time news, important exhibition information, and trends analysis for worldwide supplies of OA machines and 3D printers. Japanese subscribers, like us, have gained valuable business insight from the extensive expertise and very valuable editorials that have appeared in your magazine. We use this information daily in our sales and service business with our numerous clients in Japan. Well done.



**The Netherlands**

**Mark Dawson**

Director & Owner  
Internet of Printing BV

Internet of Printing, BV, is a young company. Before we began building our customer base, we had to establish the correct strategic vendor partnerships. *RT Media* was instrumental in helping us identify potential partners and introduce us to the key decision makers. We use the *RT* website as our go-to resource for up-to-date industry news. The insights, information and knowledge we gain from your channels increases our credibility and authority when engaging with the market. Thank you, *RT Media*.



**USA**

**Merritt Blakeslee**

The Blakeslee Law Firm

*RT* has enabled me to connect with clients and prospective clients in the printer consumables Aftermarket to assist them in operating legally in that market.

# Certified Quality



## Benefits of Certification

### Seal of Approval for Cartridges

STMC certification proves that the company certified uses the highest industry-approved standards in manufacturing its cartridges. The STMC logo means that the cartridge in the box has been remanufactured by a company that cares about quality.

STMC stands for the Standardized Test Methods Committee. This global committee formed to find and promote standardized test methods for the printer cartridge industry.

For twenty years, the International Imaging Technology Council has evaluated and monitored the STMC program, fighting for those who use it proudly and against those who misuse it.

Customers demand STMC. Join the hundreds of STMC-certified companies that these customers want to buy from. Get certified today. Contact [katie@i-itc.org](mailto:katie@i-itc.org) for more information.





market, its products and sellers makes this person a “hostage” to the knowledge which is only available on the Internet. They may not have access to the real truth in order to make a better decision.

The market players cannot influence the development of the Internet, nor can they influence the presence of various quality products on the modern market, and the presence of competitor companies. However they can significantly intensify their efforts to provide customers in the market quality information. To accomplish this here are: exhibitions, magazines, training courses, etc. Become an expert, the media and the events control the introduction of information (on the Internet as well) and its quality distribution (again on the Internet as well).

A dissatisfied buyer, who has bought products two or three times from “XYZ” brand, will be absolutely sure that “XYZ” is a low quality brand. But what of the Aftermarket? It is, of itself, a brand—the other choice a customer has when they are not buying an OEM. Think of the harm done by the production and

distribution of low quality products. Even a single manufacturer or distributor can cast a shadow over the whole industry. The buyer who has bought cheap, low-quality consumables two or three times will be absolutely sure that all aftermarket products are low quality as well.

It follows that the leaders of the aftermarket—the manufacturing companies (which treasure the interests of the industry and their own brand) and their distributors—must show leadership and take action.

Of course one might do nothing; leaving everything as it is. What happens next? Internet technologies will continue their development. The volume of information and knowledge within the Internet will continue to grow. The share of proofed and quality information will continue to shrink. Internet manipulation will gain traction resulting in the opinion regarding the aftermarket industry becoming worse. The only “perceivable” advantage will be the prices of compatible products. They will decrease, as will the margins... Time shall tell! ■



USA

Ray J. Stasieczko

*RT Imaging World* is a publication with passion. I enjoy sharing and reading the thoughtful comments from the industry leadership. The magazine’s progressive information ignites inspiration in myself and our industry. Tony, David and the RT Media team, congratulations on your 100<sup>th</sup> edition and your continued passion for keeping our industry informed. “It’s only with information one can challenge what they thought they already knew.”



USA

ED O’Conner  
Litigation Chairman  
Avyno Law

*RT* has been a major factor in getting the message out about the extreme importance of legal battles in defending the ability of this industry to function and succeed in the face of OEM never-ending attempts to stifle competition from those who care about recycling plastics. We have achieved enormous success at the U.S. supreme court in overturning cases that allowed patent owners to misuse the patent laws to create illegal monopolies. *RT* has covered those cases and our success in great detail, and has been the most instrumental force in educating this industry about those all important legal issues.



USA

Katie Bandle  
International Imaging  
Technology Council (I-ITC)

*RT Media*, and *Imaging World Magazine* in particular, has helped support and spread the news about STMC and the need for standardized testing. It has been a resource to keep the technical community together and on the same page for testing and technological advances. It helps level the playing field when competing with the OEMs. I especially want to thank Mike Josiah for the comprehensive work he has done on his monthly technical pieces.



RT Mobile Application Events | News | E-Magazine | Blog

# RT ImagingWorld



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[www.RTMworld.com/2D](http://www.RTMworld.com/2D)





# Informing, Educating and Nurturing the Global Imaging Industry

—RT Media's Sabrina Lao reveals what it takes to be the world's most read Imaging magazine in five languages

## What was your vision and what were your reasons for commencing a publication ten years ago?

Ten years ago, there were a number of different regional publications available for the global print consumables industry, including our very own Chinese edition of this magazine. However, as the industry evolved, it became more internationalized. Manufacturers sourced the component parts they needed to remanufacture cartridges from different parts of the world and those products were sold on to different countries. Industry publications that only focused on regional information didn't fit the trends. So, our vision was to produce a publication that could serve the industry as a whole, no matter where the reader was located.

## How do you think having different language editions has helped the industry?

As I mentioned, internationalization has become the industry trend. This has become very obvious at our very own RemaxWorld Expo, the largest industry event in the world. We host exhibitors and visitors from virtually every continent of the planet (except Antarctica). Our audience told us they wanted the industry information not only in English but also in their own languages. Therefore, we decided to publish our magazine not only in Chinese and English, but also in Spanish, Russian and, more recently, in Arabic.

## What have been some of the greatest industry moments over the past 100 editions?

There are so many, but let me list the most memorable:

1. The first "337 investigation" in the US back in 2010 brought a lot more attention to IP issues;
2. Ninestar's separate acquisition of two iconic brands: Static Control and Lexmark. Ninestar's acquisition of Static Control saw the merging of two, fiercely competitive major aftermarket players. The acquisition of Lexmark extinguished the great divide between OEMs and the aftermarket, effectively turning a key aftermarket player into a powerful OEM.
3. The US Supreme Court's overturning of wrongful patent law in the *Impression Products vs Lexmark* case effectively exhausting all OEM patent rights to a product after sale both within the US and in sales made outside of the US. This is a great "win" for all remanufacturing industries and for the aftermarket.

## What were the reasons for your success given the recent demise of most of your competitor magazines that were thriving ten years ago?

Four key reasons come to mind: First, it is by no accident we are based in

Zhuhai which has been dubbed the "Capital of Print Consumables." Zhuhai has become, and continues to become, the hub for the world's printer consumables business. There are more manufacturers, R&D centers and testing facilities in Zhuhai than anywhere else on the planet.

Second, we are well connected and working with industry partners in different parts of the world, including the USA, Russia, South America, Europe, India, Australia, the Middle East and South Africa.

Third, because the founders of the company and the magazine, David, Tony, and myself have lengthy industry experience. We are devoted to this industry. "By the industry and for the industry" was our motto when we first produced the magazine, we have our audience in mind.

Finally, we have a pool of over 100 well-known, supportive contributors who are willing to share their views and industry insights via our publications. I thank them for their trust in us and their generosity in sharing such knowledge over these past 100 editions.

## Given the new ways people access information today, is there still a place for an industry magazine?

The way we access information is changing. The industry is constantly evolving too. For this reason, we have continued to search for new ways to get industry information and insights to our global audience. In the past ten years, we have upgraded our websites and developed APPs.

There will always be a need for a "magazine," but the method of delivery will need to change as our readers' habits migrate to newer technologies. Our mission is to provide a better experience through the sharing of the most valuable information and insights so our audience can keep in touch with the industry and better develop their own businesses. Digitalization is something we are working on, and soon we expect to announce a fresher experience for our audiences. ■



Sabrina Lao, director of RT Media, <[sabrina.lo@rtmworld.com](mailto:sabrina.lo@rtmworld.com)>



What I



# The Future of the Industry: Know for Sure

*Tricia Judge*

What I know for sure is...that the question of what the future holds for the industry is by far the most-often asked question I encounter by association members, industry investors, analysts and event attendees. Like everyone else, I have had my opinions and scenarios. Like everyone else, I have no crystal ball.

Right now, I know for sure that the imaging supplies industry is at a real crossroads. The competition between new-built and remanufactured cartridges has come to a tipping point. The proliferation and greatly-reduced cost of new builds has greatly reduced the market share of remanufactured cartridges.

There are two very real possibilities for this “war,” but neither is an absolute. The outcome will be dictated by whether Canon wins its recent suit against the host of new-build manufacturers it has sued for patent infringement.

First, let’s consider that Canon will lose. Ninestar has hired fine attorneys from fine firms. They are going to attack Canon’s patents, and attempt to get them declared invalid. They are also going to fight at the U.S. International Trade Commission and attempt to stop Canon from securing a general exclusion order.

Canon does not have an airtight case. It’s new action attempts to revamp the patents it claims are infringed and then pre-date them. The issuance of an exclusion order by the USITC is also not a foregone conclusion. Both companies have war chests, and the fight will be mighty.

A Canon loss might mean that some new-build cartridges will be admitted into the U.S. without concern for intellectual property concerns. At the lower price points these offer, the already beleaguered remanufacturing industry could shrink even more.

Or maybe not? The remanufactured industry offers one feature that new builds



can never. They are environmentally friendly. Some consumers and institutional buys want that.

A major U.S. buyer recently invited me to speak to its 600 purchasing agents. They currently buy only three percent remanufactured cartridges. They want that number increased dramatically. Remanufacturers could still enjoy a healthy niche market.

Now let's consider that Canon wins. Canon has also got some fine attorneys. They did not bring this suit to back down from it. And the law favors their positions in civil court and at the U.S. International Trade Commission.

As the aftermarket developed workarounds after Canon succeeded in its first round of lawsuits, Canon began filing "continuation" patents specifically targeting the non-tilting dongle designs. Although filed with the patent office after the aftermarket designs were released, these continuation patents are treated as though they were filed in 2006 – when Canon first filed for protection on the dongle gear design.

There was no prior art for the non-tilting dongles that dated back that far. And it's a well-settled rule of patent law that a patent holder can file a continuation application claiming its invention in a slightly different way.

By obtaining patents covering movement of the dongle toward or

away from the OPC drum, Canon has put the aftermarket manufacturers in a very difficult position. How will the aftermarket design a dongle gear that doesn't rely on such movement, while also providing smooth installation and removal of the cartridge from the printer? Moreover, even if new build compatible manufacturers come up with yet another functional design that gets around one or more of Canon's patents, there is nothing stopping Canon from filing even more continuation patents covering those new designs.

A Canon win means one thing for sure. As it was before the arrival of the new-built cartridges, remanufactured cartridges, with reused OEM gears, may once again be the only legitimate competition for new OEM ones.

We could look to Japan for guidance on this. AJCR, the Association of Japanese Cartridge Remanufacturers, has been hard at work promoting its remanufactured status. And it even recently was awarded an environmental award along with Canon! The association has done a great job keeping infringing products out and informing customers of the pitfalls of new builds in the age of Canon's litigation.

Remanufactured cartridges would once again reign as the best alternative to new. A remanufacturing renaissance might

follow. Although new builds will forever be found on the internet, they will not make it into the mainstream marketplace.

### **The Market Moving Forward: Find Synergy with the OEMs and New Partners**

Win, lose or draw on the supplies front, success no longer turns on selling more cartridges. It means selling solutions.

Like our brethren in the copier industry, dealers have been forced to choose, adapt and reorganize their businesses. The BTA's *Office Technology Magazine* just ran articles on the great industry "reboot."

Both OEMs and independent dealers of imaging products are no longer offering just printers and cartridges. They have to give their dealers and customers more, so they are rounding out their product offerings with services. They are selling managed print services (MPS) or even managed network solutions (MNS). Enlightened dealers are going up the IT food chain within their customers to provide tailored-fit solutions. No US\$3 cartridge can compete with that!

"What we have seen emerging as a macro trend over the last couple of years is the delineation of business models between transactional resellers and service providers who are selling





solutions that are contractually based,” said Luke Goldberg, executive vice president of global sales and marketing for Clover Imaging Group. “The transactional model is continuing to suffer from extreme commoditization and the ‘Amazonization’ of things. This model will seek to add value by layering services, which might include subscription-based delivery of print, programs such as auto supplies replenishment, and more.”

LMI Solutions CEO Gary Willert shares this opinion regarding selling boxes versus selling solutions. “Regardless of the type of consumable being sold (OEM, remanufactured, etc.), from the end user’s point of view, the products are commoditized,” he said. “The internet has provided these customers with ‘perfect knowledge’ of substitutes and pricing to the dealers’ offerings. Selling consumables as part of a services offering—whether it is full managed print services or automatic replenishment for supply chain efficiency—adds true value, differentiation, and an annuity stream for the dealer.”

In the services arena, Willert sees dealers of remanufactured cartridges have an advantage. “When offering these types of services, the dealer will soon discover that remanufactured

consumables are in fact not a commodity. The true yield and quality of the cartridges matter, because the dealer is now managing all of the risk associated with those factors—not the end user. Dealers will discover that quality, high yield remanufactured cartridges provide them with the lowest cost per page and the highest quality for a services-based business model.”

As the OEMs and copier dealers are offering everything from printer fleet management to security of data, so too must the aftermarket. “On the contractual side of the business, we will continue to see everything offered as a service model take hold,” Goldberg said. “More and more dealers will seek to become more than print service providers, they will seek to evolve beyond the device, to the user, and finally to the document. Outside of print more dealers will become true MSPS (managed service providers) that will seek to address user pain points pertaining to the document and beyond it to security, workflow, etc... In today’s world, even more evolved service providers are very centered on the “things” we sell; supplies, hardware, parts, even software. The dealers of the future will be less preoccupied with the “what” than with the how, and why of business mechanics.”

While this sounds daunting, there are a host of opportunities out there to reorganize businesses and become a solutions provider. Successful BTA members have led the way and provide sound advice in making it happen. Chief among the suggestions: partner up! There are many software or other solutions providers available right now. You’ve done the hard part; you’ve secured the customers.

“The good news is that channel partners, CIG included, will partner with dealers to create highly consultative partnerships and turnkey solutions dealers can white label to expand their services revenue with minimal investments. Bottom line: the underpinnings of our business are not going away; print is still a huge business and will continue to be viable long after I retire. What is changing and will evolve quickly is how we deliver print and how we add value beyond the device and output.”

What I know for sure about the future is this: It is what we make it to be. Basic evolution principles still hold true. The strong will adapt and survive. Others will not. But the industry is mature enough now and so replete with resources available from its associations, vendors and supporters, no one will perish without cause, or alone. ■



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The Toner Cartridge Remanufacturing Industry:  
**Technical Challenges**  
..... **We Have Faced**

*Mike Josiah, Technical Director at Uninet*





When I was first asked to write this article, I started to reflect on the last 30 years and all our industry has accomplished and overcome along the way. Looking back to where we started, we have as an industry come quite a long way! As the years have gone by, we have grown, adapted to market changes and reacted to social changes. While our industry is a long way from where it started, I don't see it going away any time soon. I'm proud to have been a part for so long and look forward to the future!

When our industry first began, there was no internet and no remanufacturing aftermarket. Information on how to take a cartridge apart and remanufacture it was hard to come by. Chenesko Products (the company I started with in the industry) developed a "fax on demand" system where you would call in from the handset on your fax machine, punch in

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the document number you wanted and it would fax it back to you, all on the same call. It may sound primitive now, but at the time it was high tech! Around the same time Chenesko produced a series of “How to” videos. All were produced using a local NY film crew on tape and (painfully!) took an average of 4-8 hours to film for each one. Those two items helped start getting remanufacturing information out there.

The first cartridges to be filled were Canon PC (A20) and HP LaserJet 92285A (CX) (see Image 1), The PC used positive toner and the CX cartridges used negative. By trial and error, it was found that there were some Canon copier cartridges (tubes) where the toner could be dumped out and used in these cartridges to refill them. The prints were not dark black, more like a dark gray, but they worked, and saved people money. The aftermarket industry was born.

Soon after that the industry started making and selling “drill and fill” kits. At first the components in the cartridges were extremely durable and if the cartridges were cleaned out reasonably well, they mostly worked... not great, but they worked. Then suddenly the cartridge

components didn't last very long and quality became a big issue. The industry almost died before it got going.

Those quality issues and the new SX cartridge changed the industry in that we now learned to take the cartridge apart and remanufacture it. The SX drums failed after a few cycles, and the cartridges really needed to be taken apart and cleaned properly. The dedicated aftermarket supplier industry was born as new drums and wiper blades were now being manufactured.

Around the same period of time, IBM released the 4019 series of printers (see Image 2). They used a design completely unlike the Canon-based cartridges we had seen so far. They weren't terrible, but they used a plastic plate to keep the gears in place, all held together with plastic rivets. Great care had to be taken in removing those rivets, drilling holes for screws and keeping the plates with their respective cartridges. If you mixed up the plates, the gears could be misaligned when the cartridge was put back together. Some companies had jigs to help with this when drilling but it still was safer to keep the plates with the correct core.

In my opinion, the first huge hurdle from a technology point of view that we ran into was with the HP LaserJet 3Si printers (NX). At first they were fine, but then Canon/HP made a change to the PCR. The new PCR's had a gray coating instead of the original black coating (see Image 3). This new coating barely made it through the original cycle and really never made it through a remanufactured cycle. Once they failed, the cartridge produced “background” and ghosted badly. The aftermarket industry responded in a number of ways. There were systems to strip the gray coating off and recoat them, systems to place a more conductive coating without stripping the old off, and then finally the true solution... new replacement PCRs. It was a long period of time from when the first gray PCRs appeared and new replacement PCRs that worked became available. The aftermarket supply industry learned much from this.

New machines continued to be released by HP and Canon, but the nice thing was that most were based on the same cartridge. The HP 3Si became the 4Si, the HP LaserJet 4 became the 4+ and then the 5. Life was good for the Aftermarket.



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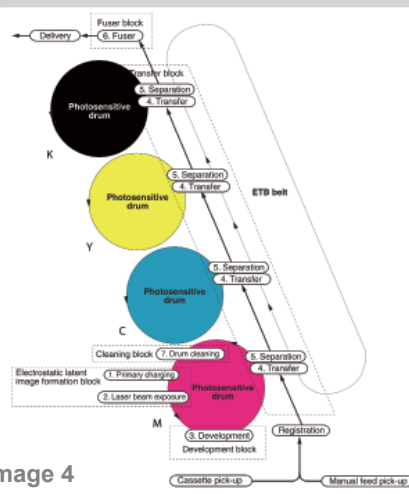
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▲ Image 3



▲ Image 4

Other manufacturers also made their own laser engines and the number of cartridges we could remanufacture grew fast. In 1995, Chenesko Products released the first cross reference guide, which allows you to look up a printer model number and identify the engine used. There were so many printer models available, the guide became a necessary tool. We also started to include cartridge theory in the instructions where merited (see Image 4). The theory wasn't necessary to know to remanufacture a cartridge, but it definitely was good to know when a cartridge failed post testing and you needed to troubleshoot them. Another helpful tool was a comprehensive repetitive defect chart. You could measure the distance between repetitive defects and refer to a chart for that cartridge. Those charts quickly helped narrow down the possible problems.

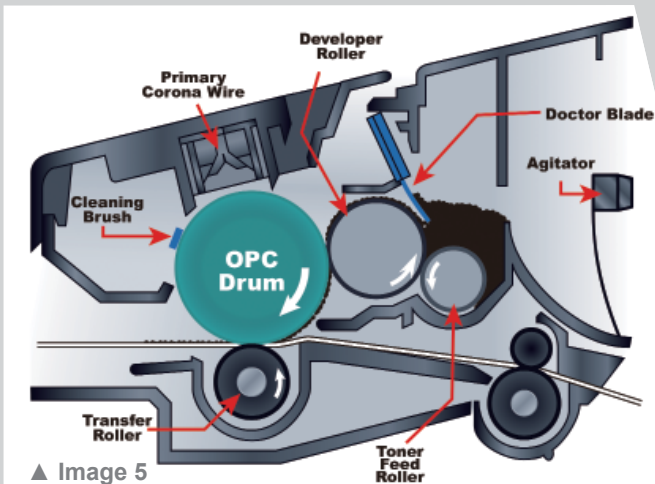
When Brother jumped into the industry in 1999, they went about things in a truly different way—as they still do (see Image 5). Their toner used a positive charge as opposed to the negative charge used in other laser printers. In addition, these units used a unique process to clean the drum, compared with the conventional

wiper blade and waste chamber system. Rather than being put into a separate waste chamber, the “waste” toner—by means of a charge brush in the drum unit and a switching power supply (reverse polarity on the developer roller)—caused the toner to be drawn back into the toner supply chamber to be mixed with the new, unused toner. New replacement toner had to be able to accept both charges, and it also had to mix well with the used toner. The toner itself had quite a few additives that helped the printing process, but also caused issues within the Aftermarket. If the old toner wasn't completely removed from the supply chamber—when the toner cartridge was “empty” it still had approximately 80g of mostly toner additives left inside—the toner cartridge would gum up the charge brush in the drum unit which caused backgrounding and ghosting. The only way to fix this was to clean the charge felt in the drum cartridge and completely clean out all the toner in the toner cartridge and replace it with new toner. To this day, Brother still uses engines based on this initial system.

The STMC Committee was formed in 1999 at Rochester Institute of Technology

(RIT). This committee continues to be actively comprised of volunteers and uses standards from ASTM, ISO, ISTA and ANSI to train companies on very strict rules for objectively testing finished cartridges. At the time the committee was formed, there were no real standards for the Aftermarket. In my view, these standards helped establish our industry as a direct competitor to the OEM. In the early days of RIT, we sent them two new OEM EX cartridges and two remanufactured EX cartridges. One set (remanufactured and OEM) was tested using all the new standards in January (during winter) and one set in July (during summer). This was before they had access to a humidity chamber. The difference in yield and density with the change in humidity was dramatic. We always knew humidity played a part but never realized how much it actually did.

The next big challenge was in 2005 with the HP Color LaserJet 2600. It wasn't the first HP color cartridge/engine, but probably the hardest to master that we had seen. It was the first cartridge where having a complete system of parts really became important.



▲ Image 5



▲ Image 6

The toner was chemically manufactured and the waste chamber was small, so the toner had to be very efficient. Color reproduction was tricky which meant the toner, drum, PCR, developer roller and doctor blade all had to work together as a system. Initially those parts were made by a number of different manufacturers to match OEM parts. Then, as the industry learned, they were made to match dedicated Aftermarket systems. There were a number of technical issues with these cartridges that made them tricky to do well. The cartridge drum end caps were not removable so the drum had to be cut, in order to be removed.

There was a metal hinge pin that had to be drilled to remove a plastic locking pin that required a special screw-removing tool. The doctor bar needed to be gapped properly. There were also a number of internal electrical contacts that were easily damaged if you were not careful. Eventually, new Aftermarket waste chambers with end caps became available, as well as internal seals and

blades, which greatly helped the quality on these cartridges.

The most frustrating aspect of these cartridges was that sometimes, even if you did everything right, they still had issues.

Some type of “reset” or “lock out”

**The most frustrating aspect of these cartridges was that sometimes, even if you did everything right, they still had issues.**

device was now becoming the norm for most cartridges. Some machines used chips or fuses. Others had specific reset menu commands that needed to be followed for the printer to accept the new remanufactured cartridge. To help with this, Summit Laser (new name for Chenesko Products) introduced their first version of the Reset Guide in the February 2001 issue of the Recharger Magazine.

This guide listed all the known menu commands that might be needed, and if the cartridge had a fuse, or chip. If it had a chip, it also listed whether the chip could be reset, or it needed to be replaced.

As time went on, most cartridges adopted chip technologies, but for the most part they could easily be made by the Aftermarket, or in some cases didn't need to be replaced at all.

When IBM sold off their printer division to a new company called Lexmark that started to change. When the 4069 cartridge was released, it had a chip that

was very difficult, at first, to emulate. The aftermarket came up with “piggy-back” boards that used the original OEM chip, but bypassed parts of the code. Eventually, new replacement chips became available.

“Prebate” cartridges—single use cartridges that were sold at a discount with the agreement that the customer would mail them back to





the manufacturer after use—had been out since the earlier 4059 cartridges. Prebate cartridges suddenly became an issue because they did not have the same chip preventing them from being remanufactured at the time. It often seemed that each time the Aftermarket made a breakthrough on the chip technology front, Lexmark would release new firmware that stopped the chips from working. The Aftermarket did manage to keep up and finally beat the system.

When the T520 cartridges were released, the aftermarket world changed. It took a long time for the Aftermarket to catch up with the encryption technology used on these chips. The late Lester Cornelius, a guru and advocate of the Aftermarket industry, called these chips “ARDs” (Anti-Recycling Devices). Those chips were the start of what we are still dealing with today (see Image 6).

Many printer manufacturers now work with the Aftermarket in chip development in order to manufacture chips that do not infringe or let the user think they had an OEM cartridge. Sadly, some printer manufacturers continue to fight us with

new “ARD” type chips. These chips may be harder to legally make (not a clone) but we still get there.

A few years ago the Aftermarket industry stepped up again and started creating new replacement chips that use microprocessors programmed with the appropriate encryption to speak with the printer. These chips typically have a single dedicated microprocessor on the board covered in a black epoxy for protection. These type of chips are made in huge volumes from silicon wafers and are very reliable.

The good news is while OEM cartridge technology has advanced, so has the Aftermarket. The OEMs have new toner formulations, toner manufacturing methods, coatings on mag/developer rollers, and drums that can print extremely fast with a high DPI. They also use chips that are now incredibly small, fast and use very sophisticated encryption technology. The Aftermarket, for the most part, has found workaround solutions as quickly as new OEM cartridges are released. The sophistication on both sides is quite high. ■

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# Mike Josiah

## Remanufacturing the HP LaserJet Pro M154, MFP M180 (CF510A-204A Series) Black and Color Toner Cartridges

### Patent Product



Patent No.201621182202.3

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First released in July 2015, the Pro M252/277 series of color laser printers are based on a 17ppm black & color, 600 dpi engine. (3600 DPI with RET).

The M154 cartridges use HP's "ColorSphere 3" toner and the chips have "JetIntelligence".

The first page out is stated at under 11.6 seconds. Standard installed memory for the M154n is 128MB, the M180 and the M181 both come standard with 256MB.

New cartridges do not come with a drum cover. They use a plastic box insert to protect the cartridge. It's a good idea to have your customers save these inserts. (See Figure 1) The starter cartridges that ship with the printer are rated for 700 pages CMY and 800 pages black.

|                            |
|----------------------------|
| HP LaserJet Pro MFP M180nw |
| HP LaserJet Pro MFP M181nw |

**The cartridges used in these machines are (HP 204A series)**

|                  |             |         |
|------------------|-------------|---------|
| CF510A (Black)   | 1,100 pages | \$50.99 |
| CF511A (Cyan)    | 900 pages   | \$56.99 |
| CF513A (Magenta) | 900 pages   | \$56.99 |
| CF512A (Yellow)  | 900 pages   | \$56.99 |



▲ Figure 1

The end caps are plastic welded, and the DB has a left hand threaded screw, but once past the welds are not that difficult to do.

\* Pricing current as of May 2018. With the new machines shipping with 7-800 page starter cartridges, there is sure to be a fast growing demand for remanufactured cartridges!

**The printers currently based on the M154 engine are the:**

|                        |
|------------------------|
| HP LaserJet Pro M153a  |
| HP LaserJet Pro M153nw |
| HP LaserJet Pro M154a  |
| HP LaserJet Pro M154nw |



RT's Cartridge Library



## LOOKING FOR STEP-BY-STEP GUIDES FOR CARTRIDGES?

Mike Josiah's popular toner cartridge procedures has been available online since the middle of 2013 as a library of more than 400 cartridge models. This service is provided exclusively to Recycling Times Media readers by UniNet Imaging: www.uninetimaging.com





# Honor Roll



As we reflect on the past 100 editions of the magazine, we urge you to take a moment, with us, to remember those pioneers of the imaging industry that passed away during this time.



**Art Diamond**—September 2, 1930 ~ 24 August 24, 2016 (age 85)

Diamond was a 58-year veteran of the imaging industry dating back to the days of early xerography and was known internationally as a consulting chemical engineer, holding 15 US imaging patents, and author of the "Handbook of Imaging Materials." As a leader, mentor and visionary, he launched the first Toner Conference in 1984. Many regarded him as the founding father of the remanufacturing industry. Diamond passed away quietly at home and leaves his wife Diane, son Glenn and daughter Eve.



**Lester Cornelius**—July 27, 1953 ~ September 15, 2011 (age 58)

Cornelius was president of Optical Technologies in Long Island City, New York, and a principal in Remanufacturing Technologies Corp. (RTC) in Las Vegas, Nevada. Both companies produced unique protective coatings for plastics, and RTC produces coatings for blades, OPC drums and other imaging components.

Cornelius served as the founding chairman of the International Imaging Technology Council, president of the Remanufacturing Industries Council, and founding chairman of STMC (the Standardized Test Methods Committee.) Cornelius wrote hundreds of article for a host of industry publications, and devoted countless hours to industry advocacy and leadership. Cornelius is survived by his wife, Tricia Judge.



**Peter White**—unknown ~ 2012

White was a pioneer, particularly in Europe, of the development of chips for the Aftermarket printing consumables industry. He was familiar with new technologies, and founded "Crums, It Works" in the 1990s developing the first Aftermarket solution for Xerox cartridges. He met Marco Torello, Federico Pastore and Riccardo Bonardi in 1993 and founded Italeco Srl in Italy, which was the first to find a "killer-chip" solution for Lexmark Printers. In just three days, they founded Printchip Ltd, the first company to be focused totally on the development of "killer-chip" solutions. White passed away as a result of an accident while gardening in his home on November 28, 2012 leaving his partners to merge Italeco and Printchip into Universal Imaging Industries, based in the USA, while investing their energies in his memory into the development of the business in Europe, Middle East and Africa.



**Alex Hyles**—1956 ~ 2008 (age 52)

The sudden death of Hyles shocked the Australian and global industry. Hyles founded Toner Express in Sydney in 1987, which rapidly became one of the leading remanufacturers and suppliers of toner cartridges with offices in Melbourne, Brisbane and Canberra. He was also one of the founding members of ACRA, the remanufacturing trade association in Australia in the early 1990s. His NSW manager at the time, Susan Gale, said, "You could not ask for a more conscientious, caring and visionary boss. He was fussy about quality and he wanted his clients to have a choice – a choice to be greener, as well as saving money without compromising on quality."



**Merlin Graves**—1950 ~ 2016 (age 66)

Graves was a member of the printing consumables industry for 25 years before he succumbed to complications from a knee surgery at the age of 66 and passed away on April 12, 2016. Graves got his start in the copier industry. He joined Future Graphics in 1992, and served that industry institution for ten years. In January 2002, he joined Unitone Imaging Supply Co. in Canoga Park, California, as the director of ISO and technical support. Graves shared his technical expertise with the industry with dozens of articles in Recharger Magazine.



**Ed Swartz**—December 13, 1935 ~ November 4, 2013 (age 77)

Swartz founded Static Control Components in Sanford, USA in 1986, growing the company to 1,000 employees as the leading global supplier of quality components for the printer cartridge Aftermarket. The Sanford Herald called Swartz the "most prominent businessman" of the county. He also ran several other companies including Santronics Inc. and the 3M facility in Sanford. Laura Heywood, UKCRA's Correspondence Secretary likened the visionary Swartz to the great Henry Ford of 100 years ago, "who saw an opportunity for the smaller company on a budget to have the same opportunity for quality print output as an original product, but at an affordable price."



**Dr John Wyhof**—May 19, 1943 ~ January 13, 2018 (age 74)

Wyhof was a passionate advocate of quality remanufacturing and travelled the globe as Technical Director of Imaging Supplies at Static Control Components. He earned his Masters and PhD in Physics from Oklahoma State University in 1967 and 1970 respectively. The author of several patents, industry standards and test methods, Wyhof was an expert in his field of reprographics, specializing in copiers, toners and ink. He also served as Chairman of ASTM committee F05 Business Imaging Products for many years. He derived great pleasure in mentoring and teaching best practices. He is remembered by his co-workers, friends and family for his sense of humor, analytical mind and curiosity. He was a devoted husband and father.



**Bill Duffy**—1946 ~ 2006 (age 60)

Duffy worked for Lexmark International for years, and earned infamy in the imaging supplies Aftermarket for representing Lexmark and supporting its prebate program at a New York hearing in April 1998.

Shortly thereafter, Duffy retired and became the executive director of the Imaging Supplies Coalition, the OEM association that fights counterfeiters around the globe. In this capacity, Duffy approached the Int'l Imaging Technology Council to work together to fight counterfeiting. From that point forward, the aftermarket worked with the ICS. Duffy contributed many articles to aftermarket publications regarding the counterfeiting threat. He invited the Aftermarket to take part in U.S. government efforts to fight counterfeiting and other illegal sales scams. He died of a heart attack while in Eastern Europe, where he was taking part in a counterfeit investigation.





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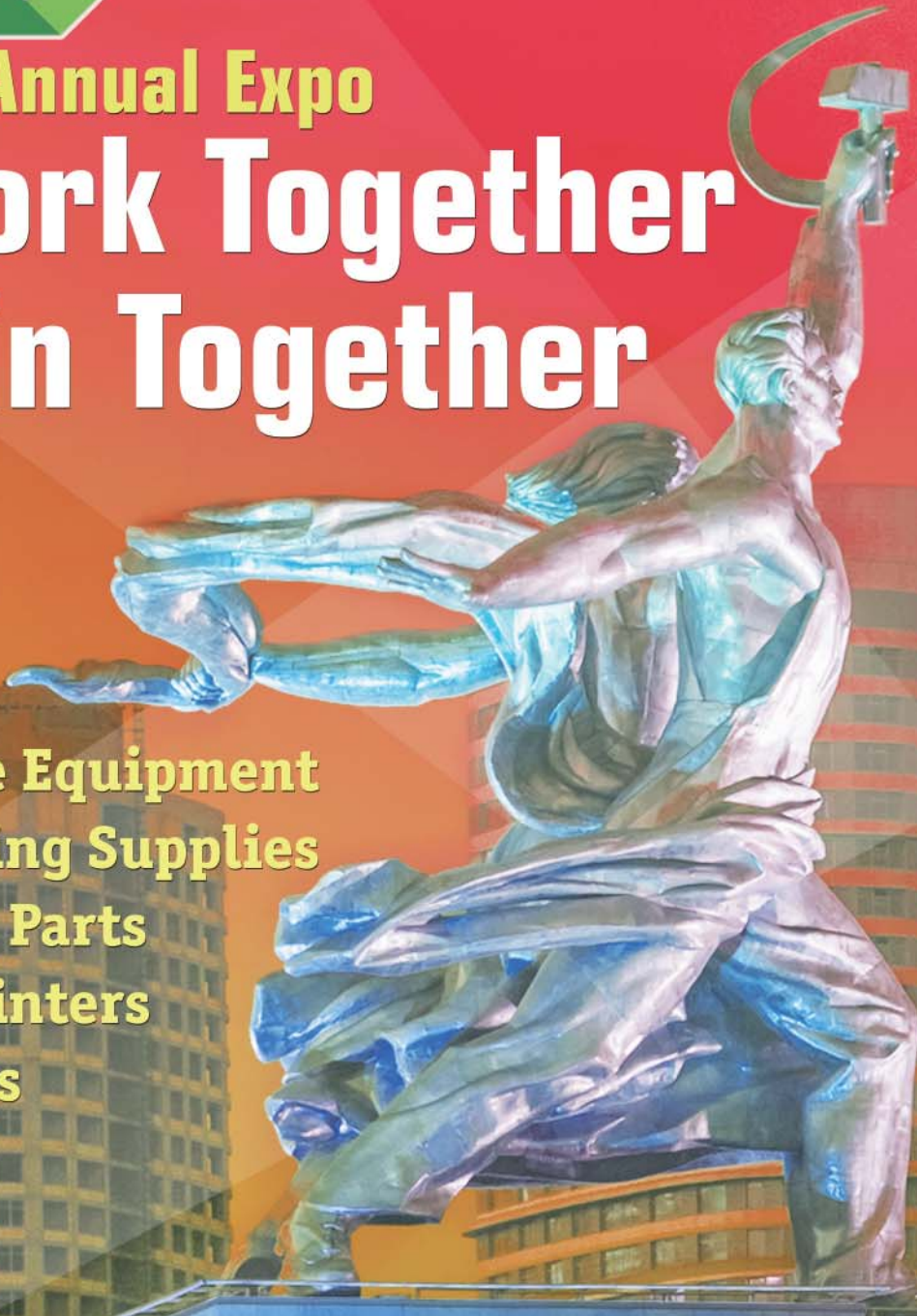
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# Mark Dawson



## The Future of the Imaging Supplies Industry is More than Imaging Supplies!

The single biggest trend impacting everything in society is a shift away from ownership and accumulation of objects to placing more value on experiences.

We have all read the OEM-sponsored white papers telling us that print is not dead, that physical documents remain critical to modern business processes and that our industry has a bright future.

I agree with most of those points. However, there is a danger. A trap. No amount of marketing can protect an industry that is myopic, or ignores technological, societal and behavioural changes. Ask Kodak.

Yes, the global imaging supplies business is huge—commonly valued at about US\$80 billion. However, can you show me an OEM that is growing share, or one that is increasing the EBITA it generates from supplies?

Toner cartridges are not going to go away in a hurry. There is no extinction event on the horizon. But this is not a pleasant space in which to operate. The market is mature. Significant consolidation is long overdue. Cut throat competition results in constant price compression. So, it is one big blood red ocean out there. New oceans are required. Blue ones.

Technology is driving change. Change always presents opportunity. But sometimes we need to look beyond technology to identify the most pertinent drivers of change and then build business strategy accordingly.

The single biggest trend impacting everything in society is a shift away from ownership and accumulation of objects to placing more value on experiences. The need and desire to deliver “Everything as a Service” promotes technological innovation. Not the other way around.

From Google, to Facebook, to Uber and countless others, the big winners are clearly



companies whose products are not objects at all, but services and experiences. Closer to home, this movement is ultimately what forced HP to break itself up, and what made IBM dump its PC business and focus on services.

There is desire in every enterprise to change. Like consumers, these businesses no longer want to purchase assets. Rather, they want access to what those assets deliver. They want to pay only for what they use, as the concept of “Everything as a Service” takes hold.

I read somewhere that in the U.S., employers prefer not to hire workers anymore. Apparently, more than a third of the U.S. workforce is now “on-demand.”

The imaging supplies channel may not fully appreciate it, but it is ideally placed to take advantage. OEMs and channel resellers have evolved from selling objects like copiers, printers, faxes, to renting them, then moved on to MPS/MDS business models. Often they transform into full MSPs. The corporate enterprises served by these providers have millions of assets outside of hardcopy devices, which present a huge opportunity to pivot out of all things hard copy, into provision of supplies and services

to an infinite existing (and future) installed base of other assets.

Success cannot be attained without focus as most channel resellers can attest. They are strong in serving the public sector, logistics, finance, construction, manufacturing companies or whatever. Providers of print, however, can extend their reach to deliver other supplies and services. This is done by applying their proven MPS models to the other assets within their current vertical markets.

HVAC – Heating, Ventilation and Air Conditioning represents just one group of assets. There are many more. I ask, which industry knows more about transitioning from a purely transactional sales model to a pay-as-you-go model than the imaging supplies industry? The skills, experience and knowledge acquired during this transformation must be applied to many other groups of enterprise assets.

This is the way to pivot into blue oceans that will deliver new revenue streams, and avoid myopia. ■

*Mark joined the imaging supplies industry in 1987, as a graduate mechanical engineer, and began his career in quality assurance and then production management before moving into sales & marketing. He has held senior positions with both American and European Corporations, most recently establishing the MSE Brand in Europe, Middle East & Africa and following acquisition by Clover, leading the integration strategy to position the various CIG brands in EMEA. He has a MBA from the International Business School and is a frequent speaker at industry events. He can be reached at <[mwdawson@zeelandnet.nl](mailto:mwdawson@zeelandnet.nl)>.*

# The Plan is to Have a Plan

—key elements of a digital marketing plan and how to choose a consultant who can help you succeed in 2018 online

Zoltan Matyas

As promised in my previous article, I will review the key elements of a well-structured digital marketing plan. This will help those of you paying for such a plan to assure you are getting good value.

I will also list ten questions you should ask before hiring a social media and digital marketing consultant. *The digital marketing plan is the blueprint of your digital strategy, and an expert consultant is someone who can make a huge difference between a good or bad digital investment.* So both of them are equally important.

Let me take the opportunity to look back at the recent *RT Summit* in Cancun where I made a presentation about the importance of leveraging the internet in 2018 and using a framework to make your plan work.

What I said during my presentation resonates well with my previous article and can be summarized practically with one phrase:

*“The internet is changing the game and if you are not trying to find ways to make this change work to your*

*advantage you run the risk of quickly becoming irrelevant.”*

The key is to understand where your customer’s attention is focused and develop a plan to efficiently produce value content to inspire or provoke your desired outcome. And this should be it. The plan is to have a plan!

Just as all great achievements in history started with a good plan, digital marketing is no different. It is actually very similar to a traditional marketing plan using similar aspects and elements but from a digital point of view.

The basic elements of any plan—both on or offline—are as follows:

1. Goals and objectives
2. Analyzing the current situation
3. Actions
4. Available resources and budget
5. Timing and measuring results

The difference between a digital marketing plan and any other business plan you prepare are the number of variables you need to know and control. When it comes to going digital in 2018, there are many brand new variables

that are often very hard to control if you are not a social network and digital platform expert.

There are technological aspects, automatization aspects, individual social network rules and functions, available on-line tools and SaaS products built on social networks, audience attention shifts and constant platform algorithm changes that, if they are unknown to you and you are not an everyday practitioner, it is practically impossible to control.

As I said during my Cancun presentation: *“The big question is not if this thing called digital marketing works: it is do you know what to do with it?”* I often say to our consulting customers that moving forward with the digital marketing plan you have the following three options:

1. Bring in a full-time expert in-house, on payroll, who develops your plan and does the execution for you while working closely with your departments;
2. Outsource the plan to a digital marketing expert and get that person to train one of your employees to





execute it for you (I often find this the best way);

3. Outsource both the plan and the execution and only look at the key performance indicators (KPIs) and pay the monthly fee.

Depending on the size and goals of your organization you can choose any of the three options and if all is done well, things will start happening.

There another two things to note at this point:

1. Any of the three options you choose will cost you money, so prepare for an investment. The good news is that in the digital world everything is math and ROI is quite measurable.
2. Digital marketing is not magic, and you will not see results the next day. Most of the plans I have seen are planning to show real progress within 12 months, not before.

No matter which of the three options you choose you must choose your expert wisely. Their expertise will define how successful the project will

be. In order to help you with that I will share ten key questions BEFORE you decide upon an agency or individual—courtesy of my friend and a great digital marketing mentor, Mr. Pedro Rojas (@SeniorManager):

1. Who were you working with before? How many similar plans have you developed or executed before? Experience is key.
2. Do you have experience in my sector? – Plans are sector specific. If your person does not understand your business and your values it will be difficult to get the results you really want.
3. May I see social media accounts you manage? –The best indicator! “Don’t listen to what I say! Look at what I do.”
4. What did you do before the digital boom? –Pre-digital business understanding and experience is a good indicator.
5. What areas of social media are you specializing in? –Nobody does everything well. I haven’t seen a person who is a great SEO

expert and a great social network expert at the same time. These are complementary skills and there are specialists for each.

6. Which social networks shall I use? –If he tells you Facebook and Instagram without analyzing goals and understanding your business, you can start wrapping up the chat.
7. What tools will you use to measure the effectiveness of the strategy? – An open and transparent response identifying the tools and KPIs is required. There can be no secrets here.
8. How many posts will you guarantee me per day? per week? per month? This is a tricky one. If he provides you with a number, he has no idea what this is all about.
9. How quickly will I see results? – Another tricky one: without some deep analytics of the goals and the actual situation, it is not possible to answer this one. If you get an answer, start running.
10. For how long should I hire you? –Unless you fully outsource

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everything this should not be no longer than developing a plan (5-8 weeks) and training your staff (4-8 weeks) and to continue doing it with periodical supervision of KPIs.

Wanting more? Here is another list with the key elements of a good digital marketing plan:

1. A well defined digital marketing goals and “SMART” objectives — goals and objectives are not to be mixed up!
2. A SWOT analysis—strictly from a digital point of view!
3. Further analytics of the: Web/Blog usability and functionality –the key is to eliminate friction.
4. Identify the audience, define where their attention is online, their onboarding requirements and which funnel content they respond to best.
5. Choosing and augmenting the

selection of the social networks in accordance to the available resources.

6. Available recourses and budget to see the plan and execution fully funded.
7. Definition of the actual strategy and secondary specific “mini” strategies. (Keyword strategy, content marketing strategy and calendar, database strategy, social media campaigns, SEO and SEM strategy, Email marketing strategy, influencer strategy... etc)
8. Timing of implementation, monitoring and KPI measurement.

I hope you enjoyed the read and it delivers some really practical value that helps you get started.

*If you want to move forward with digital marketing in the imaging Aftermarket, please feel free to contact Zoltan by email at [zoltan@ecow.es](mailto:zoltan@ecow.es) or*

*LinkedIn at <https://www.linkedin.com/in/zoltanmatyas/> ■*

*Zoltan Matyas has a 15+ year track record in the imaging aftermarket, and is an active member of the European remanufacturing industry. He is also an expert in developing digital marketing and social media strategies for both for B2B and B2C operations in and outside of the industry.*

*He holds a university degree in digital and social media marketing, as well as being an active practitioner in consulting and developing digital marketing projects for SMEs in various sectors. He is familiar with concepts such as online engagement, community management, digital lead generation, and inbound and content marketing. <[Zoltan.Matyas@wta-suhl.de](mailto:Zoltan.Matyas@wta-suhl.de)>*





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# Steve Weedon



## Is There a Future for Remanufacturing?

**Customers may buy on price but they come back because of quality.**

This is a serious question and one I often get asked. So many question “if” the cartridge remanufacturing industry has a future. The question itself volumes and gives automatic cause for concern.

Over recent years several key events and decisions have shaped our industry landscape and have brought us to this point-in-time, exactly where we are today. There is little question about the fact that cartridge remanufacturers are somewhere on the path towards buying new built compatibles for resale. At the end of that journey, remanufacturing, as we have known it, will be dead.

The demand for imaging consumables will not go away any time soon, for sure. A paperless society will not happen, paper is too interwoven into the fabric of our societies for it to disappear, and there are no new technologies that will replace copiers or printers that make as much money for the OEMs like copiers and printers do.

Yes, I accept some business run paperless, but the world is a long way off from being paperless. It may never happen at all. Printed documents give comfort and security. And you don’t need a power source to read them.

For the purposes of answering this serious question, it becomes necessary to remove the misleading rhetoric, purported by some, that is just plain wrong. Not every cartridge coming out of China is a “clone,” is “patent-infringing” or “counterfeit.” In fact, most are non-infringing and are consistently high quality alternatives to the original OEM. Not a “clone” which is defined as an exact replica, but new design alternatives to the OEM. If a new build cartridge can be redesigned to



ensure non-infringement of patents held by any patentee, then that cartridge becomes a legitimate product to buy, resell and use. That is a fact.

Over the years the manipulative control of empty cartridge prices and also their availability by brokers who sold out to Clover, forced Chinese remanufacturers to rethink their business strategy. Print-Rite is a good example of a company that invested wisely to fully understand the OEM patents and focus on new designs that work a-round the OEM and other patents to become legitimate products. Now they hold 2,700 patents of their own.

For many remanufacturers, the decision to switch from remanufacturing to reselling a new build cartridge is an easy one. New builds are much more consistent in quality since everything is new and matched. The product is cheaper than a remanufactured product, which of course has variable quality.

Does it answer all the questions about being good for the ecology of the planet? NO.

Customers buy on price but they come back because of quality.

I do have sympathies for the environmentalists who are hell-bent on

saving the planet. I get it, but the sale is made because of the price. The customer keeps coming back because of the quality.

It’s a paradigm shift but it’s a one-way street unless Mr. Trump includes these products in his China trade war. If that happens and import prices go up, it could be a shot in the arm for remanufacturing in the United States. Remember, thanks to Impression Products’ Eric Smith, the Supreme Court of the United States says empty cartridges imported from anywhere are eligible for remanufacturing in USA.

Remanufacturing is already in decline, which is why this question is so often asked. Non-infringing, new built cartridges are better and cheaper which means the distributor makes more money.

Unless import sanctions force prices to go up, I believe it is inevitable that we will see a further decline in remanufacturing in the U.S. as we are now seeing elsewhere. Once the Europeans become comfortable with the strong patent position of new build cartridges, they will also turn to what makes them more money. OEMs already know what threatens their market share the most. They are seriously worried! ■

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*Steve is an award winning CEO who has held senior management positions at various OEMs as well as Katun Corp and SCC. He was the original founder of The Recycler Magazine and of trade shows in Europe. He also established Static Control's Worldwide Subsidiaries and relocated to the US to become Executive Vice President. Steve headed up the global Cartridge World network after it was acquired in 2016. <steveweedon@utec.com.mo>*



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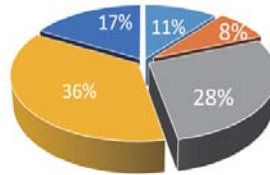


If just one year's global supply of discarded printer cartridges were placed end-to-end, they would circle the earth three times.

(Source: <https://blog.sepieline.com/10-unusual-printing-facts-that-youve-never-heard-of/>)

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(As at 15 June, 2018)

| OEM                                    | Prices     |            | Aftermarket                                 | Prices     |            |
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|  | Last Month | This Month |   | Last Month | This Month |
| Brother Industry (Yen)<br>(6448:Tokyo) | 2,492      | 2,297      | Ninestar (RMB)<br>(002180:Shenzhen)         | 37.72      | 29.15      |
| Canon Inc. (US\$)<br>(7751:NY)         | 34.28      | 33.90      | Hubei Dinglong (RMB)<br>(300054:Shenzhen)   | 11.52      | 9.40       |
| Seiko Epson (Yen)<br>(6724:TYO)        | 2,055      | 1,944      | Suzhou SGT (RMB)<br>(002808:Shenzhen)       | 13.12      | 10.40      |
| HP Inc. (US\$)<br>(NYSE: HPQ)          | 22.04      | 23.80      | (Sources: Google Finance and bloomberg.com) |            |            |

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