



## Episode 11: **Business and History of DTG Printing**

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### TRANSCRIPT

Welcome to custom apparels startups podcast; your best source for information, news, tips and tricks to get you off the ground running and earn success with your custom apparel decorating business. So get ready to soak up some knowledge, now here are your hosts Mark and Mark

**Mark S:** Hey thanks for listening and welcome back to another episode of the custom apparels startups podcast, my name is Mark Stephenson.

**Marc V:** And I am Marc Vila, today we're with Don Copeland to talk about Direct to Garment Printing.

**Mark S:** We went way into the wilds of the sales department to recruit the product manager for DTG for ColDesi and honestly like Don I just don't want to go on too much because he has plenty himself. But Don is really like a founding father of DTG in the Americas and I think that's kind of what we want to start with, right?

**Marc V:** Yeah and I agree and I remember when I started in this industry I sold direct to garment printers for a while and I would meet with Don and his team once a month or a little bit more, and I gained so much knowledge from having known him early, I knew nothing about the industry at all, I would come to these meetings and he would talk a little bit and some other folks that were players here would talk and he's a wealth of information.

**Mark S:** So I got a challenge for him right off the bat for the first thing we talk about today, and that is a lot of our listeners have no idea what we are talking about. We say DTG, so would you do just like a brief 3 minute what the heck is DTG?

**Don C:** 3 minutes for me?

**Mark S:** Yes, it's a challenge.

**Don C:** Wow it takes me 3minutes to talk about how to do a two minute egg, DTG stands for Direct to Garment Printer and to kind of reduce it to the simplicity its ink jet printing directly on to a finished garment. Mostly for the cotton persuasion or the natural fibers, there are some advances on printing on polyesters but it's a printer that connects to your computer very much like your standard desktop inkjet printer using very similar technology at the print side of it.

**Mark S:** Okay.

**Don C:** Controlled by some pretty cool software that generates a wide ink underbase, something that you would be use to put on a dark shirt, it does things like control your color matching as well as controlling how much ink is going down and controlling the intensity as well as giving you costing and just managing your jobs, sending your jobs out to the printer.

**Mark S:** So fundamentally its basically how if you order a custom T-shirt online, there is a really good chance if you're just ordering just one, two or three, four shirts with a design on it that it's been printed with a DTG printer Direct to Garment Printer.

**Don C:** Yeah, doing short run T-shirts of a custom sense basically is limited to some type of digital process, if it's a simple one or two color job it could be something like heat applied graphics, like the Colman and Company sell, cut and press system, that's great for one color maybe two color short run stuff, you start getting multiple colors together and it gets a little hectic and difficult to align, it could be done with transfers, ink jet or Laser transfers, but those are not something typically people are going to buy online when you can go down to your local office depot and buy some paper to throw in your laser or into your ink jet printer, so if you're buying it from a viable entity online. they most likely is down with a Direct to Garment process because it's simple and it's the most cost effective way to do short run high color custom type designs.

**Mark S:** I know like Zazzle and Cafe press and a lot of the companies that you actually hear radio commercials for now, when they print a shirt that you order, and then it's typically done with DTG

**Marc V:** and its almost like I guess from what Don is saying if you can print it on a piece of paper you can print it on a T-shirt.

**Mark S:** Whether or not it'll look good, depends on what you're printing but yeah you can definitely do it.

**Marc V:** Or Excel files...

**Mark S:** Or Excel files yeah.

**Don C:** We would joke about that, we actually did add a show I was at a... one of our early shows and so people weren't getting it, so we actually print out a spreadsheet on a T-shirt. Just to explain to people that YES it can be done, it's a printer and that'll be a really boring shirt, mind you.

**Mark S:** Hey you never know, you could be an accountant or something like that.

**Don C:** Which meaning it will still be a boring shirt, but no it absolutely it's a ink jet printer that will reproduce at the quality that you feed it and I'm big on these phrases that I repeat but too many people get into this industry and they think that the printer makes them an artist and as I said multiple times, buying a printer makes you no more of an artist than buying the racial ray knives off the food network makes you a chef.

**Mark S:** The example that I often use is just because that you have Microsoft word does not mean that you're an book author. It's a good analogy.

**Don C:** Right. the good news is that if you can produce good graphics for screen printing or embroidery or signage, you are sure in for Direct to Garment, it's a very much similar, just some subtle differences just like it is for each one of those but it is not anything that just is a whole new world thinking of somebody that hasn't screen printed they short cut a huge portion of what is required of designing within the screen we call, you can think outside the screen, you don't have to think in three colors of four colors or whatever your budget allows for screen setups and you can kind of go wild with your design thought because the printer can print it.

**Mark S:** So for our newbies out there who are listening to this kind of thing for the first time, screen printing is a completely different process, what's the difference between the two.

**Don C:** I mean screen printing is a different process, screen printing is a analog process as opposed to digital, its gonna be limited to a finite number of colors and to get those colors ready to be put on to the shirt, you have to go through a whole process of actually separating the artwork into the base colors and then you actually still do print using a printer you print out a film which is a positive of the art work.

**Mark S:** Like a transparency.

**Don C:** Kind of like a transparency, and then you'll expose a screen which the actual art is laid against, what happens is it's a photo sensitive material, so where the light comes through the screen hardens up, where the dark part of that film were, it doesn't hardens up, then you mount that on a press, you align the colors up, and we haven't printed the shirt yet guys...

**Mark S:** it's a big process.

**Don C:** that is why certainly short run is though you can't match, there is no way you can do a four color job, one color screen printing and expect to make money. It is not practical.

**Marc V:** I was gonna say Don had mentioned about that in some of our early shows I don't know if you would want to jump into the history of DTG yet.

**Mark S:** Yeah, let's do that, the last thing I want to say is... and it's a lood lead in because before DTG, the way you got a shirt printed was with screen printing. And that was pretty much it to get a good professional quality shirt.

**Don C:** or transfers and now transfers now, let's go back 10 years the genesis of Direct to Garment Printing goes back wow 20 years, alright? The practical side of it when it really became or started to be commercially viable happened in October 2004 the SGIA show and many outlets when two major companies introduced machines, one of them is the now defunct US screens and that one was US screen print institute, they let them change their name to incorporate digital into their name for they went under,

they came out with a machine called the fast T-jet, which was a modified printer from Japan that was used to print on all kinds of 3 dimensional objects, paper, paper blocks, pieces of wood, they actually printed on food with it, with food grade colors, I went to training there and they printed on hamburger buns that we were eating with food grade colors.

**Mark S:** I would pass on that.

**Don C:** Yeah, the second, the other company was Mama key, so that was the SGIA show October 2004 and shortly thereafter we as a company got involved with it actually in January as a distributor for them and the DTG group actually itself is the DTG brand we now sell actually kicked off in October of 2005 when president of ColDesi and I went journey to Singapore to Etna show which is an international textile show that was over in Singapore and we met up with the other companies that are now basically the DTG group and that's our short and from that point then you had about three or four company that were in the marketplace as the marketplace started to grow, White ink didn't hit the market place of November of 06 when you had screen introduced white ink. I'm sorry, November of 2005...

**Mark S:** Let's talk about. That before, so you got a couple of brands getting into the market they're all using the same technology and they're, what are kind of the differences in the direction that they are going.

**Don C:** I mean at that point you had the T-jet was the modified Epson printer with one of the first truly renegade but Epson endorsed developers that they had helped Epson with some things and they kind of and they were in the backyard of Epson corporate over in Nagano area of Japan. Mama key has been a developer of printers as a you know a number of years and they just basically modified technology to do Direct to Garment Printing.

**Mark S:** And they had a lot of large formats.

**Don C:** They had large formats and what they did was they had a very large size of Direct to Garment Printers that printed the average size, so that was one of the downfalls of the unit. But they just modified technology from there and in a very short lapse Brother jumped in and they were probably the first pure ground up goal machine but yeah they were CMYK only, only printed on light shirts and they stayed that way for a number of years.

**Marc V:** That's the key, the beginning of Direct to Garment Printing was you could only print on light colored T-shirts. or you could print on a dark colored shirts but it would just look bad. Why is that?

**Marc V:** What I was gonna say before we go into that, to kind of layman term it down for anybody who might not have picked it up, they would take an Epson printer and take it apart and put it in different parts so that a T-shirt could go into it. Right? Is that kind of a simple way to put it?

**Don C:** If you want to use a really cool word than it is they would repurpose the printer, so to think about your printer consists of two things, you have a print head that goes back and forth and you have a sheet of paper that goes through it. They basically would remove the components that made the paper go

through and either modify those to drive a bed that brought a shirt through the machine or interpret that information and use a different motor to drive that. That was the very basic effect that initial T-jet used the actual motor that was used to print feed for sheets of paper to drive a fairly large bed by putting a punch roller on it.

**Mark S:** Just because it is easy to say, doesn't mean it is easy to do, so you're gonna be able to effectively take apart the Epson printer that you buy at office Depot and open up a custom T-shirt business.

**Marc V:** These people were engineers...

**Mark S:** They are very sciency.

**Don C:** the name of the company that developed the fast T-jet was the company called Mastermind and they were well named, the old man who was the head engineer of the company was truly a mastermind and he was able to do what he was because he was able to provide information to Epson to use in their regular printer so they blessed his process of hacking their printers after that fact.

**Mark S:** So we're gonna spend a few more minutes to talk about coz I want to talk about white ink and why that's important before we get into more practical stuff about where the business is now and how you can make money. So what is the big firkin deal behind using white ink.

**Don C:** Can you say that on radio?

**Marc V:** Its a Podcast so we can say whatever we want, we are not going to though.

**Don C:** Because we will have to record over this again right? So what is the big deal about white ink?

White ink revolutionized the industry because it allows you to now address dark shirts. It was November 2005. US screen had been working with a ink manufacturer pushing them to develop white ink. I mean one of the upsides to US screens was Scott Fresener who was the CEO was kind of one of the Gurus of early high end screen printing doing a false or sudo process, he really understood how to get really the max out of screen printing out of a minimum, so he really push them he knew how important dark shirts were, so he pushed and ultimately an ink manufacturer developed a white ink for him and gave him a one year exclusive, meanwhile the industry matured under them as the fast T-jets was selling white ink that was marginally function-able and in their defense we all had to learn it, the whole industry had to learn it was the genesis of this. Underscoring that in to the DTG brands, some other brands came out with pretty solid printers still not printing with white ink, and then a year later when an exclusive came out everybody was at full stride on it, it was very specialized process at that point though.

**Mark S:** But the motivation is that if you walk through a mall right now. Just count the number of people wearing white graphic Tees and then count the number of people wearing black or dark grey graphics.

**Don C:** Or blue or orange...

**Marc V:** And I guess maybe Don what I would have to say is, remember when I first came in maybe one of the questions to think about some of them I say is, if I had a black piece of paper that I would give to my kid and they had a yellow crayon, they could just put the yellow over the black, so why doesn't that work with the t-shirt printer.

**Don C:** Because cryons don't work on T-shirts.

**Mark S:** Well they do (all laughing)

**Don C:** So if you probably hear smashing sounds in the background you gotta get semi technical for this to understand. There are two different types of lights receive – there is reflected light and then there is illuminated light basically and the way that your inkjet printer on your desktop works is you have four colors there, going completely against what you've learned in kindergarten which was blue yellow and red and you made your original colors from that. While in the digital printing world everything is made from cyan, magenta, yellow and black however the colors are not solid like the colors that you learned to mix in kindergarten they are translucent which means they actually allow light to pass through them and the way that you actually get to see the colors with the eyes is actually that the light comes down and hits the ink and gets through the ink and hits the substrate behind it, the first solid object that is opaque that the lights doesn't pass through that reflects back comes through those translucent inks and illuminates, that's how you get the color.

**Mark S:** That's why if you put a white T-shirt up against a dark colored wall you'll see and what you see is kind of a mix up of colors.

**Don C:** So certainly what you're getting is... let's take an example: I want to print on a yellow shirt, if I put black on a yellow shirt is perfectly fine, I am gonna see black, if it see blue I'm gonna mostly see blue, if I print a pale red to a medium red on a yellow shirt I'm gonna see orange because I have light that's coming through hitting the ink hitting the yellow substrate, reflecting the yellow light back and if you've ever had a flash light when you put one of those little discs on top of it and if you put two disks on top of it, like a red disk and a blue disc you're gonna have purple right ? Same concept is happening there, so in order to get true colors off center from white you have to put a white down so that you go from that same base of foundation color of white to get the colors you want.

**Marc V:** And I've heard Don say that like an answer similar to this before and I find that to be a fascinating concept behind it, like when I first learned that I was like that is kind of cool. What you're seeing on that shirt is part of what you're seeing but you don't think about it that way necessarily, but I thought it was a really cool answer.

**Don C:** To wrap your head around it, get some colored paper in your ink jet printer and print some designs on them and then print on white so you get the idea what happens, and there are some people with great designs creatively using colored shirts, lighter colored shirts without white ink but its understanding what's gonna happen to those colors and most people they don't want to think that much and they really shouldn't have to so that's white ink comes in. You put down a light colored shirt if you put a white foundation down you don't have to put as much I'll go to painting your room, if this room has

a dark purple wall as oppose to the hot pink that you have in here right now, we would have to put down a lot more white ink then we would if it was a light green for our paint to change colors.

**Mark S:** So, if I want to go into the custom T-shirt business there is no way I'm gonna get a printer that just prints on light shirts...

**Don C:** Oh I thought you were gonna change the paint the pink in your room.

**Mark S:** No I will be keeping the pink, so now I'm printing white shirts, what does that mean for the printer and what does that mean for the profitability.

**Don C:** Well certainly if you are the master salesman you are going to sell people on light colored shirts because it is easier it's faster (you use less ink, however you are ignoring the market. We actually did a informal survey in one of the trade shows, we went around and talked to all the major players in the T-shirt, forget about all that's doing machines and everything, the guys that sell T-shirts and asked them what percentage of the shirts they sold in a digital world would require white ink. The number was staggering! It was plus to 80%, okay? And so even if you bite on half of that you are walking 40% of the business and I guarantee the real number is 50% or more if you are not printing on dark shirts.

So, it's a necessary evil, the upsides are is as the industry has matured the process has matured, the inks have gotten better, the pre-treats have gotten better, and we've gotten better!

**Mark S:** He said necessary evil because in early days it was kind of a drama to use white ink because we really didn't have down pad.

**Don C:** Well, if you didn't take into account wind direction biometric pressure and moon phase it was almost impossible, right? it certainly was what we call the window of success on pre-treatment which is really one of the critical elements of if you can't pre-treat well and consistently you're not gonna get good results. In the early days you hit a point where you finally got good white ink but if you went 10% past that on your pre-treat you potentially would have bad wash ability.

**Mark S:** And by the way you want to explain what pre-treat is for those who are plain all along the way.

**Marc V:** The pre-treat is essentially a liquid treatment that you put on your garment ahead of time so when you put the white ink down it does not soak into the shirt and turn into the mixture of white and red making pink it stays as a solid white line.

**Mark S:** Primer, it's a prime.

**Don C:** Yeah, it is it's a primer, when you put it on a dark shirt you have a foundation, when you put it on a light colored shirt, when I put it on a dark shirt I need a foundation for those colors to sit upon, so the pre-treatment actually causes a chemical change in the white ink which makes the white ink disperse its liquid out and it stays in its solidi-sh type of form on the top of the shirt prior to curing so now receive

the colors. The magical word for it has been called, "it crashes the white ink", it basically makes the liquid fall out and leaves the solid which are the pigments and the things that bind the shirt on the top so you can print. You can actually watch your shirt to be printed with white ink and the first instance after the print head goes by its shimmering, you know as an insulator it's starting to become less shimmering by the time it ejects out of the printer you can physically touch it. It's kind of got like a clay dryness to it, it's not perfectly dry but it's soaking wet.

**Mark S:** Gotcha! so I want to go to the custom T-shirt business, I've decided that I have to have white ink because frankly I'm smart enough to get into the custom T-shirt business and the process is going to be that what I'm gonna do if I want to print on a dark shirt is I spray a shirt with Pre- treat (by the way we've got a lot of videos on this on the custom apparel startups FaceBook group and on our YouTube channel) You're gonna pre-treat the shirt and then you're gonna heat press it to make sure the pre-treat is on the shirt, you're gonna load it into the printer and then you're gonna print.

**Don C:** what do you need me here for now?

**Mark S:** I was just gonna say (everyone laughs)

**Don C:** I can get on my desk and write an invoice for you.

**Mark S:** I'm picturing people like listening to us while we are talking about the technology and all that stuff that's great because it's important for people to know where we are right now and I think that's kind of what's next- we started it off with a Jerry rigged kind of print process that doesn't print on white ink, then we started white ink that was kind of problematic and now we got it down path as long as you do your maintenance right on your DTG printer which is really important, now what would you say about the way things are as far as DTG printers what is the Technology like and the marketplace?

**Don C:** The marketplace has certainly matured in all aspects, not just hardware and not just software it's been an evolution of knowledge, I look back at manuals that I wrote and training manuals that I wrote 8-9, 10 years ago and I cringe at stuff that I put in writing that I told people to do, but that's where we were as an industry and that's all we knew and so we understand how to maintain the machines better, we understand the things that cause issues because it's the industry which is immature in just a fluid dynamics and understanding the actual of what printers do. So a lot that we would tell people to do excessive head cleaning. Excessive head cleaning actually disrupts the ink and now those things are gone but... I would say that we are at a point now where the average user who is attentive can use a machine and be pretty successful with it at an acceptable failure rate of garments and pick it up fairly quickly. You can't just put some guy off the street and turn him into a T-shirt guru NO but most people who come to us and come to our competitors in this industry looking to get into it are there for a reason. They have some graphics background, they have some back ground in the apparel industry or they understand this stuff to some level so, it is certainly achievable for the average person to pick up one of these machines and within 30-60 days they will be pretty proficient with it enough that they can start producing sell-able artwork on dark shirts and I've had a number of customers who were jumping at the moment that under oath they promised not to try to print dark shirt but in an hour or two they could print light shirts.

**Mark S:** Right!



**Don C:** So it is doable.

**Mark S:** For making money.

**Don C:** The key is be-realistic with your setup, I was in a demo earlier with a couple of guys who are gonna start a business today and they were talking about it and their start date is ready for thanksgiving to be making shirts. and I said you're gonna need to have a machine and a place by mid September, they don't have a lot of experience in the apparel side, they are tattoo guys, they have some graphics and the learning process just handling shirts and they obviously want to do some eyeball position. So give yourself time and you will find that you can succeed just because you start like walking- jogging and then running, too many people will want to jump into this at a full run and this is a recipe for failure and just like you were in a race and you are in a marathon and if you fell down a 100yds from start line and you skinned your knees all up and you're bleeding, you're not gonna finish the marathon but if you've taken off at the right speed go to pace up and by the time you hit the mid you've got it. That is what it is with this too; take your time, learn the process, screw up some shirts. Don't buy a machine while already waiting on orders for it.

**Marc V:** We already talked about it a little bit before and if we have embroiders listening which I am sure we do, it's not that much different, when you get that embroidery machine and if you don't know much about it, you're not digitizing right away and you're not learning how to sew on different garments right away and there is always a learning curve and that's why you are a professional and that's why you're making money to do it.

**Mark S:** and there are different processes involved you either have to be good at graphics to have someone that is; because you don't know Photoshop just because you buy a Direct to Garment Printer.

**Don C:** But I have the Racial Ray knife (Everyone laughing)

**Mark S:** You have to know the difference between or you'll have to learn the difference between what looks good on your computer screen and what looks good on a T-shirt. Coz that's gonna be frequently two different things and then you're and you're gonna go through that process of realizing well if I do this in the rip software which sits between your graphics and your printer then it looks better or it looks worse...

**Don C:** This print of shirt prints better than this brand of shirt, you're right the whole showman, if it was easy everybody would do it, Right? And that's one thing we tried to clarify. I'm not saying it's impossible but if this was as simple as you placing order with me and it arrives tomorrow and you click print on that lovely graphic you downloaded from the internet and then you got a perfect shirt spit out; guess what it wouldn't be worth doing because we are in a stage of Direct to Garment where this is still a large growth, great potential to make profit marketplace I would lead back to the sign industry where fifteen years ago if you were in digital printing you were making good money per square foot. Machines were very expensive and....

**Mark S:** We're talking about signs.

**Don C:** Signage, but I am just gonna elude that as a picture and you had great opportunities to do all kinds of things with the machine and 20\$ of square foot for output and there was two or three in a city like Tampa and things like that. It was great time; now if you don't have a digital sign printer you are not in the sign industry. We are still in that stage in Direct to Garment where it's not a have to have to the potential is much higher, the cost of output is acceptable and people are willing to pay for digital custom output and you're able to make good money, at some point its gonna be where you have to have it or you're not gonna make any money.

**Mark S:** Or you're not gonna make any money.

**Don C:** This is a good time, we are in the mature stage, the T-shirt industry is developing slower than the sign industry because the sign industry you have about a 95% control over your substrate coz you print to a vinal and then you apply the vinal to something but in the Direct to Garment industry you could go and get on Alpha Broders website, Samwon or any of those and order a 100 shirts and they could be from 27 different countries made out of 32 different blends of material and have different feel to the shirt, a different finish like a tighter weave and you're gonna get different results on all of them. So that's why it's been a little bit slower in developing but the upside to that is our fat middle happy part where you can make money at it its gonna be much larger than what it was in the sign industry.

**Mark S:** so let's talk about the good stuff. Let's talk about...

**Marc V:** I have a great thing that's good, what I like about where we are now on the industry.. is we are at this point where automation is starting to come alive and I believe where before when I first got into the industry it was still fairly new, they were only on the DTG digital brand, it was only on the second machine and Pre-Treating was only a manual process, now you can get a automated machine to pre-treat.

**Mark S:** So it's right every time.

**Don C:** And it's affordable.

**Marc V:** Yeah the equipment is affordable. I remember the speed that you could print was pretty slow with the price range being similar to today's price.

**Don C:** The original kiosks when they came out with white ink, I can remember my technicians coming back and my original service manager at the time screaming we wanted samples printed and a technician could turn over seven black shirts every two hours for samples. The average print time on the sample we would send out... I'm not even gonna say surf shark because one of the tech was starting to flopping around on the ground back there but it was a design that we printed took 17+ minutes and almost 18 minutes to print one shirt and with about six dollars worth of ink. That same design now we could print in the area of about four to five minutes and it would use somewhere in the area of 2-3 dollars worth the bank... that is half the cost and fur times faster.

**Marc V:** And those are pretty big designs that we print they are ready for samples as well, whenever anyone ask Don how long does it takes to print a shirt... That's another 3 minutes answer.

**Mark S:** How big is the graphic, how many colors and there are thousand different things.

**Marc V:** And the other things in regard to the automation is the maintenance on the machines is easier, it's a shorter instruction sheet to follow compared to the long halls of thing and also little thing like we used to buy, we used to tell people to go to the store and buy parchment paper and that's what you use between the heat press and the shirt to cure, and now we sell a silicon release paper that is cheaper, last longer and is the right size for your plating on your heat press and all these things are automated and easy to use and you can buy ink in lots of different sizes. So to me that's exciting you are getting into an industry that's mature but hasn't even reached

**Mark S:** its full potential.

**Marc V:** Yeah, like you mentioned -You have to have it.

**Don C:** The software is so much better, the rip software that we run now is just head and tails above the early stuff for dark shirts, not only it is easier to use, more intuitive, much more powerful and as the industry is matured the software developers have become much better at understanding how to properly under base the way that we handle color matching now it is much more mature, it used to be... they would use the same color matching processes as it was for paper and some would even do it on paper and now we actually take T-shirts cut them into pieces and then apply them to a board, the whole process with them is when we are printing them, printing our color schemes on to, they used to do profiling so you get a much better work flow and good consistent color, I'll go back, we used not be able to print red and we couldn't use some beautiful tones of orange in this industry and purple, it's the same thing. But the whole thought process for the software people has changed and they have started to understand this unique piece that we have where we are printing a soft color along with process colors on top of it and they are starting to understand that it's not like printing on paper, we need to profile better it too to get a better color match.

**Mark S:** Well describe for me what a successful Direct to Garment printing business looks like, I want to start a business I want to be in this custom DTG space what does it look like? am I gonna make a crap load of money using X,Y and...

**Don C:** Z... Okay, the first thing you should call me is with your check book number. This is not going to be a 3 minute answer, the reality is first off it depends on where you want to be with that, but the really successful businesses that are DTG specific are gonna be niche based.

**Mark S:** Give me an example of some actual customers that are doing really well with DTG.

**Don C:** By name?

**Mark S:** Sure!

**Don C:** Okay, one specific one that I think of is- Mark Blenecoff up in PA with Fat Tees, they have a mish mash, they do fulfillment for people who need fulfillment for Direct to Garment, they also do a niche marketplace they do a lot of mix martial arts and karate and things like that that they do, they have I think six or seven of our printers and so they do a great mix of business, they have pretty good web presence for the whole US marketplace and a really good local presence for mix martial arts and stuff like that, plus they do some of that online.

Another great example would be Girls-in-Nashville at the nesting project they are in a affluent suburb in Nashville and its like a place where all the pro-athletes and stuff live and they have started a niche market focusing mainly-initially on the mommies and the brides, they do a lot of rustic type of prints and a lot of stuff on off colors on like tans and yellows and things like that where they don't have to use a lot of white ink but they also do some attitude stuff, the perfect example for them is that if you are a FaceBook person you might have seen some shirts on FaceBook that say "I'm the oldest I make the rules"; "I am the middle I live by the rules"; "I'm the youngest the rules don't apply to me" that was their design and it somehow got picked on by a radio station and they posted it on their website, the people from nesting project found out and they jumped in pretty quickly and posted their Etsy site for it and they have done 80 or 90 thousand dollars in T-shirt print for that design this year, so they are in a niche market with mommies and brides but they also do some stuff that is parallel to that even though that would fit into a family with tight orientation but they are very creative on their social presence and they saw an opportunity through a link up there an in a perpetuated this across the internet and they are selling thousands of their shirts now.

**Mark S:** Two different profiles that are completely different but they are both great, I know Mark Bolenecoff, he was a steel worker surprisingly enough up in Erie PA and he left that to start his custom T-shirt business and the nesting project that is in a completely different market using the same equipment making just as much if not more money doing completely different thing.

**Don C:** the stuff they sell is custom and this is (and they're gonna shoot me for this ) but they sell em so people could see them on their website, tea towels, they had one of the girl's had found her grandmother's recipe for some kind of whatever .. Lemming Meringue Pie and everybody has these sitting around, the grandmother, the mother and somebody gave them something on a piece of blue lined paper running note card the recipe and its got something weird to it and it's your grandmother's handwriting, the beautiful flowery handwriting that's lost in our society today, well she scans this in, put it on a Tea towel and printed it out, it looked just like the original and then she identified Grandma's Lemming Meringue Pie at the bottom of it and she started showing it to people and they were selling for 15\$ apiece. I doubt the software registered the ink cost; it was that small the ink cost and including the Tea-towel but again taking a product and using it in a very simple way to touch on very special eyes, that is your grandmother's recipe and they went crazy with it on mother's day and things like that. Thinking outside the box like that is really where your opportunities are great and they do wood printing and we've shown that stuff, they print our wedding invitations on pieces of wood, they do coasters as favors at the wedding with the information they've printed on to.

Mike1 I know customers that print on empty coffee bean sacks and it's not just T-shirts.

Mike2 They print on stools, they print on canvas that they're gonna put into cars, they don't actually print on the stool, and they print on a fabric that's on the stool. I've seen all these different things come through, there is so many different things that come in that we talk about in T-shirt world but we have so many successful customers at Colman and Company when we sell the ink they talk to us they do these odd things and I'd say "I've never even thought of that!".

Mike1 The story of DTG is one that just keeps getting better and more profitable all the time, you've heard and listened to this whole podcast, there is a mcgrivish when it started and then it was a little and expensive and slow and now it's just to the point where I walk into the showroom now and you look at the fiber too and it's as close to a loaded print device (it's not) you know there is so much other things and stuff but it's so much closer to anything that's was even a generation ago, it's a great start to any business. So we've talked about the nesting project and talked about starting from scratch.

**Don C:** Uncomfortable silence.

Mike1 Uncomfortable silence, before we end up here today I do want to talk about, we sell a lot of these to a lot of Direct to Garment Printers and Screen Printers. Could you just address a little bit like why this may or may not be a good idea.

**Don C:** We have broken them it's been years, they've kind of realized that this is not going to like, the improvements have certainly helped right?

Mike1 Right

Mike2 Right

**Don C:** The small guys moving in and starting to chip away at the short run business for screen printers has helped and why is it a good idea and why is it not a good idea, 'Why is it not a good idea?' It's not a good idea if the screen printer once sit there complaining and compare cost of ink for what it costs to print a shirt on his 200,000\$ automatic press setup and everything that he's got he seemed to forget that there was 12 screen job that took him day to set up, he has 375,000\$ of labor into the setup and by the way, 275,000\$ worth of screens, but there is a 75\$ worth of bank on this shirt VS 13 cents on his shirt that he printed on his automatic press, that's when you don't want to buy when you can't get out of that mindset. When does a screen printer want to use it, there is a lot of instances, the first one which only screen printers can appreciate is the day after you reclaim the screens after the job that you did for that big customer and he calls back and "Oh, I need 13 more" and what do you do as a screen printer, just like any good Red Blooded American would do you take it in shortage and you reburn the screen and you print 13 shirts for the guy because he is a good customer and you don't want to lose him

**Mark S:** and you lose a huge amount of money on those 13 shirts.

**Don C:** and you lose time and you've also allowed the customer to take control of you. And Direct to Garment Printers is about not telling customers NO and it's also about not losing money on the job, it's

never good business to lose money. Never, alright? It maybe a prudent decision at times and it might seem to make sense but it's definitely not long term.

**Mark S:** So that same customer, the big customer they come in and order an extra 13 shirts and whatnot.

**Marc V:** on digital or? What's great about the digital is not only that customer we'll have to talk about all the scenarios about it and you'll have to say yes when you print out, but also when you need to deliver a sample or a short run or a run that's got some very varying data on that, the digital side of it just allows you to do that quickly and easily which is the most exciting thing for me; when we have a customer they've got basically five inks that they buy, CMYK-W and that's it. And they don't have gallons and tubs everywhere, they don't got a mess, they have to clean up and put back together every single time and these are all the little things that I think of when I've been to screen print shops and when there was a brief moment in time, we said what if we carry in screen printing and we looked Whoa! Look at this inventory!

**Mark S:** Virtually a threat

**Marc V:** And as we carry CMYK and W so I mean that is a fascinating thing about it, and to recreate that job, it literally is opening up the rip or Photoshop again and hitting print again.

**Don C:** I think a big thing to it is, we as an industry are learning how to educate screen printers, when I speak with a screen printers what I'll tell them obviously you paint the day after you reclaimed the screens, that's just like a good kick in the groin to get them down to their.... sure they're ready to listen.

**Mark S:** Yeah, and you have said that before... and they are like whoa!!

**Don C:** Now let's soften the blow, when you deliver that 360 piece order to the customer, hand them a digitally printed version a free shirt... the same shirt and go ahead and set the bar, Joe when you call me back and need to order shirts I'll give you some options, we can screen print them like we did here and I've saved your film, so it's only a 15\$ of color to set up, 6 color job and 90\$ for the screens and I'm gonna have to do a minimum of 72 shirts but ill give them to you in the same eight box I charged you with these shirts. OR here is a free one I wanted to give this to you, I can do it this way digitally, I'll do one at a time 14 bucks a piece for you.

**Mark S:** Right.

**Don C:** And now you've given him a free gift, you've let him make the decision long before the problem comes up.

**Mark S:** And you're gonna make 10 bucks a shirt atleast every time he reorders.

**Don C:** And for everybody it's a win-win-win situation.

**Marc V:** And you don't have to feel, if they've ordered shirts before and you're gonna have customers that have ordered shirts plenty of times before if they work for a school or a business, they know that – we didn't order one for Tammy, I know we can, now you've given them an option that listen this is all you have to do, you just email me and say I need a large and then you can do it, that's just really cool, that's huge.

**Don C:** The other side is adding on to sales, most screen printers are not sales people.

**Marc V:** Shock, it's a shock to me.

**Don C:** They are producers, they are manufacturers and they provide service as I guess you would say, so, how easy is it when you're delivering those shirts to have a golf towel printed up with the same logo on it, or some other creative item like that.

**Mark S:** It's almost physically impossible.

**Don C:** So, you hand him his golf towel that has his logo on it or you know that he just had a baby or he's turning 40 and you can print up a shirt Lordy, Lordy, Lordy look who's forty, something like that when you deliver it to him, you're setting the bar and you are showing him your creativity along with the ability with the range of stuff. And you can tell him "Hey, listen the next time you order shirts, if you want some for your kids or uncle baba, he's been to the barbecue place with you for a few times, I can take it and i can fit that graphic to this shirt"

**Mark S:** Yeah, talk about it a little bit more.

**Don C:** I call it the 8,10,12 principle and I got it because I used to do a lot of shirts for women organizations like the National Wild Turkey Federation Women in the Outdoors, would go to an event and have 150 women at it and women come in all shapes and sizes, and it never failed you would have the girls who wore the men's 2xl shirt standing next to a girl who weighed 87 pounds and wore an XS because we didn't have any children size shirts and we put it into a baggie extra small shirt, but if the graphic worked right on one shirt it was not going to work right on the other, the girl with the men's 2xl looked like she had a postage stamp on her chest and the girl with the extra small had the graphic wrapping around her arms.

**Mark S:** Right.

**Don C:** So, I started doing it when I would do events i would print shirts as Smalls, extra smalls and maybe even an medium in a eight inch graphics column and then for the larges and maybe the extra larges in the women sizes you go to a 10 inch graphic, and when you go to a men size shirt you use a 12 inch graphic. When you look at the shirt and the graphics on the people they fit, the body size and the proportions they fit, It didn't make anybody self conscious and it gave you..

**Mark S:** Which I was playing along that would be four separate screen printing jobs, it's a four color job and 16 screen and four separate setups and all you do with DTG is you grab the corner and move it.

**Marc V:** That's what the visualization I had in my head because if embroiders are thinking about getting into this too, they're gonna feel the pain of that if they need to do a side of the arm logo and they also need to do a big left chest logo or a jacket back, they can't always just grab that and drag it and make it big, the stitches are gonna come part and there is a lot of work to be involved, but if you wanted to print, as you mentioned the baby, that's like the nice perfect example, they just had a baby and they had a four month old at home and you're gonna print a tiny little company shirt. because you're gonna print a 100 shirt with a company logo, grab the corner shrink it down and put a little shirt on there and hit the end. You just made that shirt, you added 60 seconds more or less of work.

**Mark S:** And the gravy on top of that is if you make a graphic 25% smaller your ink cost goes down by 25%

**Don C:** actually mathematically that's not correct, it's probably more... but go ahead.

**Marc V:** We mentioned supplies earlier and it kind of tied back into me but this is to go with the ease of keeping you place stocked and also about the success because the supplies come into the both of them, for one if you only have to manage five colors of pre-treats then that's a nice easy thing to manage and those folks who are screen printers and embroiders generally they can manage that pretty well coz they are used to having to keep the entire color spectrum. But people who are newer to the industry but not used to doing that sometimes had issues managing that ink, so if you want to be successful know that for one be grateful that you'll just have to manage these five things and pay attention to them, our most successful customers call us up and they order most or all of their colors in one order, so we see em come in as CMYK and a bunch of whites or maybe some of them are heavy, they may have two black or leaders, something like that in there, it depends on what college is by them but they are printing a lot of, you know UCF black and gold so they're gonna have more yellow.

**Mark S:** No one outside Florida knows where is that, University of Central Florida.

**Don C:** The largest university in United States I believe in attendance.

**Marc V:** And bowl winners too.

**Don C:** It's amazing they have like 2 million students in there but they did win a bowl game, now everybody knows who they are, right?

**Marc V:** You know that's an example and so, the most successful one's though the point of the story is are ordering their ink together and they are ordering enough pre-treatment and the one's that typically talk about more of their struggles in their business are overnighting a small bottle of ink and they are ordering 40\$ worth of ink and they are spending 45\$ to ship it.



**Don C:** And by the way they are the ones that are complaining that they can't make any money.

**Mark S:** So mark and I did a great article on supply management, you should look for it on Colman and Company Blog, Blog dot Colman & Company dot com (blog.colman&company.com) And we're gonna make that because we're running out of time here, we'll do the last words here, so... Marc do you have anything to finish up with as far as your last words...

**Marc V:** The final words on this for me on Garment Printing are gonna be on the supply side it's just so awesome to manage and easy to manage and you've got so little things to take care of and there are liquids you can look at and you can visually see how much you need and sometimes it's a bit harder with thread and you can estimate how much ink you can use with the software, so you can turn around and you can get down to the measurement of the liters and say "I'm gonna need exactly this much ink, this is how much I have in stock and this is what I need to order." So the supply side is easy, the automation side of what we sell, cleaning solutions and flushing solutions to take care of the machines are all perfected and I don't want to say anything in the world is perfect, it's an absolute statement to make, but it's gotten to the point now where the reliability is extremely high, which is where you want to be and I still find it exciting when I see a design that was literally just made to go on with the shirt with it. I've sat at a computer myself and made something in Photoshop at 4:44 and the shirt is done and by five of clock I'm out the door... the whole thing, I opened the doors...

**Mark S:** That's okay, sure.

**Marc V:** That's just really exciting compared to most other processes out there, so it's just really cool to look and I don't know anybody even with embroidery, I don't know how many people are just mesmerized to just stand over that shirt and look at it come out, it's awesome.

**Mark S:** Okay Don!

**Don C:** I'm just, I'm almost speechless, just kidding, and I would redecorate one thing that Marc said, I've been kind of at this since its very very beginning and I still get mesmerized by it, it still sit there and look at it and I'm like wow.. we're actually doing this and Direct to Garment Printing you know, talk with your account manager be very real with him about what your expectations are because too many people get into this with the wrong expectations that maybe could make it right if they would went in with the right understanding and right expectations of where it fits, this is not a replacement to traditional screen printing in all instances, it is however much better at addressing a higher number quantities of shirts that most people expect, when you have- running right you are an efficient setup, everything is working right, so be realistic about any piece of equipment that you fit, don't buy the hype, right? have real questions and real answers, if somebody is when you are talking to somebody about your equipment and that includes if somebody is here, some newer people are not gonna have the full picture of how the apple application is. If somebody immediately just starts throwing numbers at you in ROI and things like that and they're gonna sound like that you're gonna make 128\$ an hour if you can do that eight hours a day five days a week you are gonna make 174,000\$ with this printer run and hide right ? but it is..

**Mark S:** Now I'll have to delete that article.

**Don C:** But on the other side it's a great tool, it is great for your creativity because you are no longer bounded by the finite colors and it's a awesome opportunity for somebody who really wants to quit working for the man he can start a business on their own, work in a passion area for them, if you love whatever...long bowling or shiatsus or whatever it is.. Right?

**Marc V:** We said no cursing.

**Don C:** That's right, you were talking about printing on schools, but if you literally if you have this passion area, you can go in and you can make money at it, you understand the people and it kind of gives you some freedom and that freedom might be a long term of moving away from a current job you're in, but it also maybe... and we see this a lot people who want to get into an early retirement but they want some income, why not do it in an area of passion, maybe your passion is model trains and you want to do shirts for guys who understand model trains stuff.

**Mark S:** And that's great because you can put a DTG printer in your house. You really can.

**Don C:** the Viper 2 can get right through the door..

**Marc V:** You mentioned the house I don't think we said it, there is not is heavy chemical cleaning...

**Mark S:** It sucks to have a screen printing operation in your garage in your house because of THAT!

**Don C:** a lot of places a lot of cities you are not allowed to have a screen printing operation within city limits because of

1. A) Waste water situations.
2. B) You have to vent out.

And there is some concerns about venting out those smells in fact when I was in county in Saint Petersburg here in Tampa, in city limits you are not allowed to run a commercial screen printing operation in a residential area based on zoning, so this is something that you can throw into an extra room or a bedroom and literally be up and running without anybody even knowing it.

**Mark S:** And it's quiet and safe. So let me do my last words because as a marketing guy, who knows nothing about Direct to Garment Printing and all other than what I learned in this room today.. my favorite thing about this whole business is that you get to say when somebody asks what do you do for a living "i print custom T-shirts" There is no one that you'll ever say that to that will not want you to print some kind of a custom T-shirt a 100% of people – What do you do ? "I print custom T-shirts" Cool! I've got this idea! so, literally every person that you meet, that you see or you watch on television is a potential customer for what you do... and there is no greater opportunity then having an almost unlimited market.

So that's why I'm enthusiastic about Direct to Garment Printers and I think that's it for this episode of custom apparels startups.

This has been Mark Stephenson from ColDesi.

**Marc V:** And I'm Marc Vila of Colman and Company.

**Don C:** I'm Don Copeland of ColDesi.

**Marc V:** I think we've had a good show, all the things that we talk about at the end..

**Mark S:** Which I forgot about...

**Marc V:** Yeah not problem, If you're not already a member on FaceBook 'The Custom Apparels Startups FaceBook Group' Its a growing community. Every single day it grows, if you haven't joined yet, you're missing out on

**Don C:** Are we to 1000 yet ?

**Mark S:** No, we are like at 998, its driving me crazy

**Don C:** Number 1000, Mark will buy you a coffee from star bucks. (Mark and Marc Laugh)

**Marc V:** And so we've got that CAS podcast dot com, you can contact us on there, we love questions, we love comments and so, that's a big thing to do, so what else ?

**Mark S:** Visit us at ColDesi dot com ([coldesi.com](http://coldesi.com)) and Colman and Company dot com ([colmanandcompany.com](http://colmanandcompany.com)), if you have any questions about anything that you heard today you can also get answers there, you can see the videos on the equipment, we've got a fantastic YouTube channel with more than 700 videos and atleast 25-30 good ones at YouTube the name is Coldesicolman if you want to search for the Youtube channel.

**Marc V:** Yeah and there is videos going on weekly.. more than weekly and sometimes daily; there are videos going up all the time, we've got multiple blogs we haven't really mentioned that, we've got a Colman and Company blog and we've got a ColDesi blog that mark and I both contribute to, so there is a lot of information and if you go to CAS podcast dot com, that's one place where you can go to and you can find links to all of that stuff.

**Don C:** Webinars too, we do a handful of webinars every month, so that gives you the opportunity to interact with us directly with us because we take live questions during these webinars, great opportunity when you get into that point where you really want to drill down and you are ready to make a step for your business because you get to hear the questions that other people ask which is huge, I've had several people say "I learned from the questions that you were answering that I didn't think to ask".

**Mark S:** As a matter of fact I wish that you were listening to this live because in an hour we have a live online demonstration on Viper2 Direct to Garment Printers.

**Marc V:** Well, good, thanks everyone for listening.

**Mark S:** Yeah, have a good night!