

## Interview with Michael Kammes – Director of Technology & Marketing at Key Code Media

Dave: Welcome to the Elegant Workflow Interview Series - A member of the Tech Podcast Network. Today we are chatting with Michael Kammes – Director of Technology & Marketing at Key Code Media. Michael, welcome to the Podcast.

Michael: Thank you so much for having me. Appreciate it.

Dave: So, I just like to start off with a little bit about your career history and what has led you to the position you have today?

Michael: Sure. Well, I was born and bred in Chicago, in Chicago suburbs. People from Chicago don't like it when I say Chicago so I have to clarify that with Chicago suburbs. I got my degree from Columbia college degree in film with concentration in post production audio. I have aspirations of being a sound editor and a sound mixer and hopefully a sound designer someday. So I toured around kind of Midwest doing independent films and during that time I also did a lot of AV rental which is kind of, you know, its kind of a bad cast on it but its probably one of the best things I ever did because it introduced me to this kind of base level technical concepts, you know. A lot of editors will know how to work in Avid or work in Final Cut or Premier, whatever their [analee du jour] is but may not know what VNC cable is or may not know the wave length of fiber cable. So being able to work at this kind of base level install place for AV rental was fantastic o I got my feet wet with that. And I also realized that I'm a bit of a perfectionist and working with independent films at that point especially at Midwest, you know, I deal with films that had dialogue shot near an [L track] on a windy day and the actors weren't available for ADRF to work so it may have been just my frustration with the ability to fix some of that, and there was kind of this finite ability with tech to find, you know, tab A goes to slot B so it just, the tech kind of made a lot more sense. So, over the years I started working for other audio-visual integrators or VARS as they're called, a value added reseller. I worked for 2 of the largest in Chicago both Roscor and Midwest media and through that I did desktop integration which was building of systems then morphed into training then morphed into more demos and engineering. When I finally hit my ceiling out here, out in Chicago, I decided to contact the leader out here in LA which is a company called Key Code Media. And I love telling the story, I sent them an email saying, 'hey this is what I know, would you like to hire me?' One paragraph email. I got a phone call back, actually an email back the next day saying, 'yeah, NAB is coming up. Let's talk after NAB.' And within a month, I had flown out to LA and met with Mike Cabin the president. He saw that I didn't have a third eye. He saw that I could, you know, formulate a sentence and I knew three quarters or 90% of the products and workflows that the company was suggesting and selling at that point. It actually was a very, very good fit so for the past five years, I've worked my up at Key Code Media from being a demo artist to a senior demo artist to now being the Director of Technology and now, Marketing.

Dave: Wow, that's quite a story. I love the email idea. I always say that people, however you can get in, get in. It's interesting how people kind of get to where they are in their careers and some of the little fun stories like that.

Michael: What I actually omitted is, the company before Key Code Media which was a company in Chicago called Midwest Media Group. I did the exact same thing. I sent them an email saying, 'Hey, I work for your competitor. Here's what I know. I'd love to talk.' It just seemed to be a very good fit. It's a very niche market and as long as you know, a couple key phrases, you know with the pain points are of that company and the industry. I think those of us in this realm

are very attuned to that so when we see these mentions, these phrases, these keywords, it kind of you know, a light bulb goes off and you realized it may not just be crap. Like I said, I really lucked out with those two.

Dave: Now that NAB is kind of in the record books, I kind of wanted to get your feel of some of the products that you saw there that were interesting. Obviously, you come a little bit more from the Avid view point and I know Avid announced a lot of things. I just wanted to see what you thought about each one like for example, Avid Sphere, what do you think that's going to do for the industry and what impresses you about that product or maybe, is there anything you think that they should be doing differently in that product line?

Michael: A lot of things about that. Before I address that specifically, one thing I do want to address is that I find it hysterical that at least internally, that the perception is 'oh you're an Avid guy' because of Key Code Media obviously has been a massive Avid support and a massive Avid fan for the last decade or so but I'm, to this day not a power Avid editor. I know the ins and outs and I know where to click but am I a craft editor inside Avid? No. I've been editing in Final Cut for the past 13 years – 13, 14 years now - and there are several tools that I use. I just happen to know the tack of Avid inside and out. I just want to get that out there because it seems whenever I'm doing interviews or working, you know, on blog posts and what not, there's the, oh you're an Avid guy. No. No. That kind of dove tails into the, when you talk to a farmer, they don't say I'm a John Year farmer, right. They say I'm a farmer. I'm a technologist, I'm an editor, you know, technology aside. So, anyway, back to the Avid portion. So, yes, obviously there was a Media Composer 7 kind of announcement. There was the symphony announcement that you know all that came around in AV but as far as the Sphere concept, it's fantastic. I think we've slowly been seeing the demise of the big brick and mortar of facilities for years as products have gotten commoditized and we've seen more boutiques and more freelancers and Sphere kind of plays into that. It allows people to edit remotely with media so you can be a predator or an editor remotely sitting at you know, coffee shops or sitting at home and having all that media tracked back at the mother ship. It allows this flexibility to be able to edit anywhere, create anywhere without having someone tied to an, you know, 8x8 room, square room with no sunlight.

Dave: And is there anything about Sphere you wished they had incorporated into the product or you think they'll be incorporating later?

Michael: I think most definitely going to be incorporated are going to be more editing features. I think any power editor who is going to sit down in front of a Sphere is going to be disappointed. People who are power editors are expecting to have, you know, all the tools that they are accustomed to. I mean, when Final Cut 10 came out, editors went bonkers because it didn't have everything that they felt they needed as a professional and I'm using air quotes now around the word professional. You'll see through the web interface in Sphere that it doesn't have everything. However, is it great for editors? Is it great for producers in the field? Without a doubt. I also, if there's any Avid people out there who remember working with Adrenaline. The DNA Line you may recall that you know, there were some latency right when you hit the JKL keys it may not have played at the speed that you wanted it to because you're quicker than the computer at that point. And I think when you're working with these proxies that are talk communicating across the country, across the world, there may be some latency and I think that's one of the things you just have to deal with so I think for right now the Sphere portion will be very ENG based, very news based so doing it out in the field just tops and tails get it out. A

predator's doing selects and string outs and then the editors would still have to be hard wired least for the foreseeable future to cut these things in a more robust editor.

Dave: What do you think of Media Composer 7 and a lot of the background functions like the transcoding and consolidation and the functions of, what are your thoughts on that?

Michael: I love it, I hope it's not too little too late you know, given the fact with the whole Final Cut tend to buckle there was this kind of window that I think Adobe and Avid had to kind of capitalize on the bad taste that everyone had from Final Cut 10. I'm hoping this isn't a little too late. I love it. The one thing that there's kind of a misconception out there is that the background functions, let's say transcoding, its transcoding it's not rendering. That's a big misconception if you're bringing media in, in the background, that's fantastic but if you're putting, you know, H.264 footage and AVC intra footage and putting all the timeline and saying well I wanted to render the background noise until edit, that's not happening. So that's something very important. Thus far, our clients, in a limited time Media Composer 7 has been out has been fantastic. I love the fact that we now have managed folders so the AMA workflows now have managed folders, you know, somewhat like we had with the God Almighty, Avid Media Files folder. We now have that kind of media management which is what Avid has been known for, for years. What does bum me out slightly and I can only, you know pontificate why this is not reality now is resolution independence. You know, we have the frame flex which allows you to do an HD frame extraction of your, you know, HD plus materials, so your 2K, your 4K, etc. I realized that from 99% of the people out there, they're doing HD deliverables and sometimes SD deliverables, I get that. However, I really don't want to be told that. I want to have the option to do an 8K and 4K master outside of Avid or from Avid and then have that on the shelf for a couple of years when I maybe, do you want to go back and do a 4K output? But to be told right now in Avid, yeah we're only going output HD - that kind of bums me out.

Dave: I think that's kind of true to Avid. I think they kind of tell you what you're going to get and it's not always as more driven as some of the other products. I was just pointed to, I really was hoping to see the resolution independence and the frame flex is great, yeah I wanted to put an image in there and zoom in and do it. I have some 4K footage and I want to do some blow ups, I think it's great for that but I think you're right. I think they're kind of paying themselves into a corner considering there's so much competition out there that can do resolution independence editing and most cases, either the same price less or you know, the case of like the smoke. I mean, imagine what that can do versus what Media Composer can do and it's a new interface for people to learn but it's very, very powerful.

Michael: I would imagine and again, everything I'm saying I should prophases. Anything I'm saying about Avid is all speculation. It's not you know, anything that I've had back door you know, back office meetings on. As you know DS was announced end of life yesterday was the official announcement so I would hope that the resolution independence feature that DS had would be rolled into Media Composer at some point. While I completely understand the, you know, Avid's almost told us what we need as opposed to giving us what we want, what doesn't strike me right about that is if that were the case, if that were completely the case and they were gearing us towards professionals and professionals are being told this is what you need, well then why are the prices continually dropping? Why is it being priced at more of a consumer level if it's still considered to be a professional product? Those things don't seem to jive to me. I think we've also seen that with the kind of consumer portion of the Avid family you know, whether it be the iPad development they had. They released version 1 and then [Jedison] it a year later, less than a year later and then some of the M audio which is kind of consumer, prosumer audio.

With those being [Jedison] as well, it sends a mixed message to me as opposed, as far as what direction they're going. Are they trying to cast a wide net? Because it seems like they tried and now they're going back to professional but they're still lowering the price. So, I'm not quite sure the message at least to me seems mixed.

Dave: I think there's a lot of cost pressure there in the professional realm so I think they're trying to address that. They're trying to say look, you have a reality show and you need a lot of base, we're just going to make our money on quantity rather than trying to make it on each product. And we'll see, hopefully it's a good idea. I know somebody who wants to buy a copy of Media Composer and have at home. I'm excited when the pricing came down because at this point I don't edit much anymore, somewhere like hobbyist user. But on the other hand as a professional person, on the other side of it, I want a strong Avid company. I want them out there doing the R&D they need to do. I want them fully supporting the products and that takes money. It's kind of a fine line and who knows we'll see what's going on with Final Cut. I know a lot of people declared it dead but it's not really dead and they are continuing to support it. They are continuing to come out with new features. And the other thing people don't always talk about is Adobe and Premier has come a long way and Adobe Anywhere is their version of Interplay Sphere so we'll see. There's definitely a lot of competition out there.

Michael: And I'm sure we can spend a lot of time today talking about Final Cut 10 and Premier. I mean that's been a hot topic conversation. Hopefully at some point we can dig in to that as well.

Dave: Yeah definitely. Well, back to Media Composer 7 again for a second – they announced lookup tables. I think a lot of people are like, that's nice but I think it's a major game changer for producers. What do you think?

Michael: I think it's a massive game changer. One thing that I have to remind myself everyday is that I think you and I are very fortunate that we work in this microcosm of hollywood, you know. We were put in this 30-mile radius where workflows and technology is a little bit different than it is than everywhere else. We work in Hollywood where they're shooting with cameras and they need the highest resolution possible because this is going to be, you know a feature film. They need to shoot within these formats that are completely blank in terms of color because they need to be able to tweak it later. If we look at other places around the country, they are happy to put a rex over a 9-filter because this is going to web. So I think you're in Hollywood, we need lookup tables probably more than most other people and I know I'm probably going to get flamed for that but all we have to do is look at the budgeted films in Hollywood compared to elsewhere and I think that probably gives you an indication that I'm not too far off base. When we talk about LUTs, it gives the producers the ability to have their dailies have a deproximate look or almost exact look than what the DP imagined. What we had before was, we had to have the DITs on set creating approximation of what it is whether it be a 3-way color corrector that approximated it or run it through some kind of transcoding tool which introduced the LUTs and then export it so that was always a hairy process. Also during basic editorial, if you got something that was shot log C and you have to have the editor do dailies on it and not just dailies but do editorial and everyone's looking at a wash-up picture, that doesn't inspire a lot of confidence. That doesn't give the DPs what they want, doesn't give the directors what they want and doesn't give the investors what they want. And they also doesn't allow you to do these kind of screeners or broadcast acceptable outputs without going to an online bay and having massive transcode time. To have this kind of instant gratification of these lookup tables is something that we've wanted for a long time and it's a fantastic edition.

Dave: Yeah I totally agree and I think it's something people don't think about right now when you need that type of color corrected dailies and you're shooting like you said, you're shooting log. You have to go back and have somebody do it. You either have a DIT do it, you go to a colorist, they do it, an AE does it but there's a lot of labor that's involved in that process versus just dropping a lot on it. It's going to be pretty close, obviously later it will be color corrected. Nothing shot on the set and not color corrected in some former fashion but at least it's not that milky look and no matter what you tell somebody looking at dailies, they want to see the director's and DP's vision.

Michael: There's the instant gratification has to be done and I don't think there's that much confidence as there used to be because there's so many ways to second guess technology or creativity by a quick Google search. I think being able to show, 'hey this is what I meant, this is what I wanted to see, see here it's done, don't fire me.' I think that's very important. I think if we also look at how many cameras actually shoot, you know log C or shoot these kinds of, I don't want to say agnostic formats but shoot these formats which give more latitude for color grading. Its only high end cameras so it does obviously affect only a small market in comparison but it's still a big feature at least other in Southern California.

Dave: I think it shows like you were saying earlier they are supporting the professional market. They're not gearing the product towards consumers. It's not as some people said about Final Cut Pro 10. A lot of people called it iMovie Pro when it first came out because they felt like so much have been stripped out of it. Having those stripped out features, they continue to add features and I think it's a great point to bring up about them as a company. They're really out there trying to – I think in some ways they tried to listen to the users. On the other hand, marketing really drives that company and they want to have features in there that sells product. Sometimes the sexy stuff is what sells versus little things like you and I might want that may not be so sexy. That's why I'm surprised about that they put the LUTs in because it's not a sexy feature but it is a very, very necessary feature.

Michael: Completely. Hopefully we both agree that one of the main selling points of Avid in general, excuse me, Media Composer and Symphony is metadata management, right. It can track things; it manages media like no one else. That's not sexy but it's something that any long form editor needs to have access to that. I think you're right in that respect. It may not be sexy but it's definitely something that's needed and it's something that is very powerful once you start using it.

Dave: And speaking of something that's not very sexy, closed captioning. I don't think a lot of people realize that it's mandated now for web videos as well as broadcast. If you take up broadcast master and you put it up on the web, you better have captioning or you're going to get fined. What do you think about what's going on with that, some of the technology and just where that area is going? It isn't sexy but it is another thing that's very necessary.

Michael: Captioning is a nightmare. Captioning has been overlooked and there's a lot of money to be made in that right now as you rantly pointed out. While the FCC does have, the FCC and the ADA have a ton of loopholes for education, etc, putting as you mentioned, video that was broadcast and then encoded and put in the web, for the most part again with exception, it has to have closed captioning and the cost and turnaround time of getting something captioned is very expensive. If you want to do a half hour show and sent it out of house to be captioned, it's going to be several hundred dollars and that's for a couple of day turnaround, let alone day off. Hiring someone to do live captioning on the air, astronomically expensive; so the ability to do

captioning in-house for any media is of paramount importance. Unfortunately, the ability for captioning to be retained through editorial is just archaic. If we look at Avid for example which you know we've already talked about being very professional and broadcast and post and film-oriented. It has a massively difficult time dealing with captions. I think the traditional workflow right now is if you want captions you have to capture base band. If you want to retain captions, you have to play out via base band. I think there is some limited support for XD DMX ports with captioning but that's it. If we're talking Final Cut 7, Final Cut 7 didn't really have a lot of it. You have to go through a 3<sup>rd</sup> party program like Mac Caption. In fact, I believe Avid sanctioned workflow is with CPC is with Mac caption so it took you getting a high end encoder like a FlipFactory or Telestream Vantage or Rhozet. You know these \$20,000 to \$30,000 starting encoding solutions to be able to introduce captioning and that didn't even address the creation of the captioning, that was just getting it from the caption house. A lot of workflows we've been coming up in very recently ever since creative cloud was announced in a month or so ago, Premier of all things, Premier actually has the ability of bringing in closed captioning and closed captions if its embedded in a QuickTime MOV correctly not an MPEG but an MOV wrapper with a non-MPEG essence or you can bring in an SCC file or an MCC file which is a Mac caption file as well as the traditional closed captioning file. And in Premier you can dump them both in the timeline. You have a text editor to change the text. You can change the font, the color, the timing, the place put on the screen. You have a 100% flexibility of altering that captioning within Premier and then you can export it either as a side card file or of the format supports it embedded. So, now we have this ability to take used closed captioning to the entire post process and that's something that hasn't been heard of before. When you tie that in with Mac caption which is a relatively inexpensive captioning solution, you now can hire a stay-at-home-mom who needs to make some extra cash on the side to caption the shows. Put that in Premier, get your broadcast master out the same day and you're saving thousands a year, excuse me, tens of thousands a year. It's just a fantastic money-saving tool and it's just not something that a lot of people are addressing because they're used to that fixed cost of sending it out, letting someone do it and then hit coming back and just be done with it.

Dave: I wasn't even aware of how far Premier has come in this area. I know one of their big pushes; Adobe's big push has been metadata and carry metadata throughout the process. You have Adobe story that they would prefer you would do your writing in and carry it all the way throughout and that's just fascinating to me because I still know a lot of folks in the broadcast realm who even though they have to deliver a file, they actually go, they get to caption this done by one of the large captioning companies. This comes in, they actually go back and they caption, they tape master just like it was done many, many years ago and then they take that and they encode off of that master because then they have the captioning. In often cases, they need to make a side card file. I mean it's just weird some of the workflows I've seen and kind of like you, I look at it and I go, why are you doing all these steps? Because there's things like Mac caption that can help you to do a lot of this. I think people just get confused, they see something that works and they're just like throw their hands up ago, okay great this is close enough, I don't want to deal with it.

Michael: Let me tell you about a client working with currently that he's doing things in traditional way, I don't want to single them out as doing something, you know wrong, but they get content, long form content whether it be half hour, hour, 90-minute shows and their job is to take that, cut it down and get it to VOD partners so we're talking Dish, Comcast, CMC, ATVN which is now Ubiquity, all these different distribution hubs. All these distribution hubs have their own specs whether it be MPEG-2, MPEG-4 but moreover they need to have the interstitials put in commercials or timing cut into chunks so they can put in their own ads. Imagine having your

closed caption master as you mentioned the only way of putting it onto tape and then capture it. What happens when you need to do a different cut down for six different deliverables? You have to re-time your captioning which unless you have a very expensive transcoder, you now have to send that same cut out of house six times. Imagine the cost associated with that just on a daily basis so you have the ability of cutting down your program and retaining captioning to six different iterations, you now have cut down the need for not only the employee labor but also the out-of-house labor. It's just a massive way of saving money and as boring as hell but it's something that if we look on to cut corners and be more efficient and have an elegant workflow, that's probably number one on my list.

Dave: That kind of leads us in to a little bit of a discussion about asset management because I think that's another big area that producers really need to look at and look at ways to take it off to master workflows and create some financial efficiencies. What do you think about asset management as far as its importance in the industry right now?

Michael: Well, like closed captioning, asset management is boring. I think it scares a lot of people off. I like using the word automation because good asset management isn't just going to give you a directory listing of all your files and you modification dates and who touched it last. It's a lot more than that. So, these glue tools as I like to call them, this asset management is of paramount importance because not only it can track your revisions, who's worked on the file, it also can do a lot of automations whether its copying files from one place to another, whether its deleting duplicates, whether its archiving or storing for you, whether it's taking all that rich chocolaty metadata and taking that and the media and pushing it to the VOD houses or your end deliverables. Doing this all with a check box is not only instantly gratifying but instantly cheaper because you're not doing this all manually and trying to track stuff from FileMaker Pro or your excel dock. I think it's of utmost importance that anyone looking to streamline their post processing or even production process look into asset management. Although again it's not sexy, it has instant cost savings once it's implemented correctly.

Dave: How can a VAR help producers and help post facilities and the production companies, how can a VAR come in and help them to achieve this kind of big a scale? Because really it's hard to know all these stuff and I imagine using a VAR, you're going to get a lot of it, it's like hiring a consultant but not only do you get the consulting, you have somebody who actually bring the equipment in and setup the equipment but consultants don't do that.

Michael: There are several different reasons to go with the VAR. If we go back to, you know, to the mid-90s, late-90s or 2000s when the VAR released the post realm, really started to gain foothold. At that point, we needed custom hardware for everything so a VAR's main job was, 'Well, we need to buy an Avid system, it costs \$100,000. You can go through us because we know how to build it and because Avid is selling through us.' So, in some respect you had to go through a VAR as I'm such we're sick of hearing it at this point, things have been commoditized the point where, 'well I can just go to Fry's or Best Buy and I can buy a computer and I can download a software, what do I need a VAR for?' There's a couple of different reasons why. First off is a lot of us creatives, even when I was strictly just a creative, we work in a vacuum. We work with who we work with. We have our set workflows or set technology that we've learned about. We don't get exposure to new products or new technologies. When you're working with a VAR or should I say when you're working with a good VAR, part of our mantra is to keep an eye out for new technologies because we don't want to rest our morals on, well we've sold Avid for 15 years so we're going to keep selling Avid. Well, no, we never would have discovered Final Cut; we never would have discovered Premier. Being able to keep open, some

open eyes to some of the newer technologies out there is very important. You just don't get exposure to that. In that same vein, we have the direct line to a good time because we're selling these products. We have very good relationships with the manufacturers. When something breaks, we know who to call. We're not just going to call a 1-800 support line and sit through the queue and hopefully we get help. We have set of lines; we have direct support from the systems and field engineers so that's fantastic. Again, if we go back 10, 15 years, workflows were a lot more baked. It didn't change as much as they are nowadays. You need to have a good workflow for 5-10-15 years, now it's changing every year. So, now that there are more companies that are creating these products and workflows are changing every year, we offer a lot of consulting which is where we go in, we audit the technology you have. We audit your workflow. We determine how many hours you're spending on transcoding, how many hours you're spending on exporting and roll that all up in an equation that we can determine what technology will make your workflow more efficient and save you money. We can go on with these open eyes and analyze what's going on with the industry and best practice of your competitor down the street and your other competitor across the country, and take all those information and formulate these workflows and recommendation on technology, they're going to help the business. There's also other, you know, minor things. If you hear about new technology, hey Black Magic Teranex, does the Teranex still work? Give us a call. We have them in stock and we'll loan you one. There's this partner relationship that's really great. I think also for VARs, and this is not directly towards any manufacturer but in general when you are talking to company XYZ as a manufacturer, their product is going to be the right product no matter what you need, right. They're going to craft, their pitch, their demo, their sales to you buying that product and I don't think that's the most and not every manufacturer does this but that's not the most honest – at least with the manufacturers, the 3 stars that I've worked with. We don't push that. We go in with an arsenal of solutions, an arsenal of technologies and we find the best one that fits. If it doesn't fit, we walk away friends. You give us a call next week, we have a drink and maybe you get something next year. We're not in the market to push a product if it's not going to be the most efficient and the most cost-effective and I think that's a very important feature to realize that a good VAR isn't in it for the transactional sale. We're in it for a long standing partner relationship. One of the, I won't name the company, partner that we've worked with for going on 10 years now started out as 2 people, you know, we rented out this kind of studio apartment and they were just editing. That's all they did. They cut music videos. They cut independent films. Now, they're probably one of the top five reality facilities in Southern California. When I go in and talk to them, I'm more guilds with stories about how Key Code Media helped them back in the day and how I used to call them on a Saturday and they were able to do XY and Z. Those are the kind of partnerships that are awesome because when you go in and talk to them, they're talking to you as a friend. They're talking to you as a partner as opposed to that kind of used car salesman that I'm putting up my defenses because you're trying to sell me the upgraded upholstery and I don't need it. I know that's kind of long and winded but there's a lot of different things that VARs can do that I think are often overlooked.

Dave: And the fact to have a partner that I can work with who has worked with a lot of other people and the same things that you should never do and you could tell me that saying, 'Hey you know Dave, you may never want to go down that road because here's where it can lead to.' And you're right, when you talk directly to the manufacturers they always say that they can do everything. One of the things I always like to say is let's do a gap analysis. Let's go through step-by-step. So you say you can do this, how are you going to do it? What's funny is you hit these points and they kind of try to change the subject when you know they can't do something versus when you go to a VAR and you say this is what I need to do, sometimes the VARs would say, we can do five things with this product, the other ten with this product and seven things with this product and we'll help you build it all together. You're right; you can have a much better

chance of having success. It allows you to, like you said, work in a partnership so I think there's a lot to be said about that. That's really kind of why I wanted to bring up the subject just to let the listeners understand a little bit more that it's not just about mark-ups. Sometimes people are like, if I go to a VAR, it's going to cost me more money, there's mark-up there. It's not about the fact that it may cost you more money sometimes, I'll be honest, it cost me less money because they get a better deal and they're passing that along to me because they are able to buy a much more bulk than I'm able to buy from a certain manufacturer. So, I think this is something for people to examine and not write off and say it's just another layer in the sales process and look at it as an unnecessary layer because I think there's a lot you can gain from it.

Michael: You know I'm not going to discourage anyone especially those people who are just starting out or those people who are living paycheck to paycheck. I'm not going to discourage anyone from going to an online reseller and paying for 5 point over cost. I completely get the, well I have to feed my family so I can't spend so much money on this, I get that. However, there also has to be that, well if I'm going to save money here, I have to be prepared to fix it or troubleshoot what's going on after the fact. And I think a lot of people are expecting that well if I buy something at 5 points over or I buy something from this online reseller, I expect to get 100% support. There has to be that realization that, you know, there's a kind of a scale there which power are you taking from. You can't have both. So, I think that's something that many people have to kind of understand that there is a price attached to that. And as I'm sure you've realize that Dave when you are buying from a VAR, it's usually, it's not more than less. I mean, if you want to be completely honest you go and buy something from Fry's or what not, you're paying MSRP, that's less. When you buy from a reseller, traditionally it's less, not always but traditionally it's less. So, this misconception that all you buy a VAR you're always paying more, it's not always the case. I think it should also be said when you're looking for a dentist or when you're looking for babysitters, you're obviously looking online whether its Yelp, whether it's some review place, it's important to realize that when you're looking for a VAR, you as you mentioned want to find that's not tied to manufacturers. I think there's you know several VARs in the Southern California area and many of them nationwide that a lot of them have a couple of manufacturers in their back pocket and that's what they push. I've been very fortunate in the fact that the last three resellers I worked with like I said their mantra is we're agnostic. We're not just going to push one solution. I think whenever someone is vetting a VAR that should be very important. Go to their facility, look around, see what they have, see if there's purple lab all over the place, see if there's an Apple logo everywhere. Make up your mind and determine if they're going to be fair and balanced so you're sure you're getting the best recommendation possible.

Dave: Social media, so that's the new big thing and obviously it has changed marketing quite a bit. You have movies that because of social media that have opened to huge box office the first weekend, TV shows that have gotten great sampling. How do you feel social media is affecting the production landscape because it's not even just about marketing, you now have these second screen apps that tie into Twitter, that tie into Facebook and there's a lot more opportunity for viewer engagement, so how do you feel that that's changing the production process and what are you seeing in that realm?

Michael: I think that's going to be a massive income maker. I think that's going to be a fantastic way to generate additional revenue streams for 60, 70 years now. It's been kind of, advertising's kind of been very spaghetti, right. You throw it against the wall see what sticks. It's been that three and a half minutes during that commercial breaks on TV. We hope that if we throw up a commercial about the new Mazda that someone there, someone while they're watching wants to buy a car, hey this maybe interesting. So, there isn't that buyer actual communication, its one

direction, hopefully it sticks. With this new social media paradigm now, with the ability to put Twitter feeds and Facebook feeds and Instagram during a live broadcast or during a syndication with you know, a Chyron and Shouter or any of these live tools, we now have this ability for direct engagement, this bidirectional communication. We now can get metrics on, hey we're broadcasting American Idol and in Columbus, Ohio, we saw an increase of 3,000% of people tweeting at 8 o'clock. Okay, that tells us that people in Columbus like watching American Idol and they like, they have a second screen app with them whether it's Twitter, Facebook, etc. It gives us these metrics and these metrics are what people use to sell against. So being able to get this is massively, massively important on the advertising scope of things. What it boils down to the creative and production realm is that we now have to generate media for all these different outlets. Just because we're showing, you know, Walking Dead the hour long show doesn't mean or it means we also have to create media for second screens when people are watching Script Sync on their iPad. They now are seeing behind the screen or behind the scenes footage. They're seeing how the makeup was done to make that Zombie look the way it looks. We now have to create content to those polls to keep people engaged to vote on things during that show. It also causes us to create these synergistic links between product and what's on the show. For looking at daytime television for example, without naming names there are several shows which are you know, informational but they're product based. If you look at the advertising opportunity for you know, the show to be talking about product XYZ and then while you're watching it on second screen being able to see where it is locally and buy it, you get massive amount of metrics on that. And I think that is going to be a massive business for anyone in the advertising realm as well as the creation realm. The only downside is that there is not a full proof way to make money off of it; there's no formula. If we look at what the most popular, one of the popular things on the web is to like something; the basic Facebook like, I like this. There's still does not exist a formula to accurately reflect how much money alike will bring you. And if that doesn't screen to you how in the beginning stages we are, I don't know what does.

Dave: Monetization of everything on the web at this point is very interesting how people are coming up with their formulas because in a lot of cases, you're actually probably losing money putting something up on the web especially if it's for free because the advertising rates are just not the same as broadcasting. But on the other hand the viewers and especially the millennial and the generation coming after them, they're demanding that it be available anytime, anywhere and on any device and it's not going to change. They want it the way they want it and it has to be addressed but you have to figure out how to make money so you could have the program that the people want to see. You know the Walking Dead can't be made for \$5. There's cost there and I think at some point probably there'll be some extreme cost pressure on a lot of producers. You can't make a three and a half million dollar an hour TV show and not have some way to monetize that. But on the other hand, once again I see a lot of stuff being done on YouTube for a lot less money that just has great acting and great stories and maybe you don't need the big production quality because you can do a lot with desktop tools.

Michael: Yeah, just to reiterate, I can't stress enough that this is a field that's going to take off. If you're ignoring it, you're going to be passed by. What I find kind of interesting and this requires some self reflection is that when I was in college I was cutting 16mm and I learned Avid back in the day. This social media construct wasn't available. It wasn't something that I grew up with, hey this is just normal. And for as you mentioned in the millennials and some of the younger generation, this is what they know and people who are making this content are not their age. So, to be able to associate with this paradigm shift and accept it as being viable at least for me is still difficult because I still you know, if after a hard day I'm watching TV, maybe I don't want to

pull up my iPad. I'm content just to watch TV and that's blasphemous in some sort. So to be able to buy into this and believe in it is I think a little bit more difficult for, I don't want to say the older generations but people who are not millennials.

Dave: Is there any specific products that you're seeing that are more off the shelf that helped out producers on the social media realm?

Michael: No. No one's really nailed it yet however there are a couple of products that I've been working with over the past couple of months and its, without sounding like a salesman, it's really invigorated me. It's one of those things that is just so cool. One of them for any of your listeners who are into broadcasters, Chyron. Chyron has been around for years. Chyron has a staple in the broadcast industry. Traditionally when you create graphics for Chyron, you're using Lyric. Lyric has always been the back end for your graphics creation, your full screen graphics to get your lower thirds, your bumpers, etc but they have a new component called Shout. Shout is a scraper. All Shout does is look for hash tags and certain phrases. It can look at certain Facebook posts from certain users. It can look at Instagram and it will present all of those and you select which ones you want to go to air. You hit go and it pops up as a lower third via IP or SDI. So, now while a live show is going on, imagine a live broadcast of American Idol or maybe CNN during the Presidential elections. Someone tweets to CNN – I love Obama. They then can instantly hit go to air, that now, that person is now on the air as a lower third with their tweet. And now there's that instant buy directional communication, that instant engagement. That's just basic. I mean, it's so awesome at simplicity and so the Shout component of Chyron is just phenomenal. As far as pricing, I think at \$25K-\$30K starting so it's not really consumer at this point. There are apps; you may have heard the name Lucas Wilson. He's been around the Hollywood area for quite a while. He was an Avid DS demo guy back in the day and then Cameron Paste as well as Seymour. He has a fantastic company called Revelance. Revelance has an application that allows you to link advertising and clicks the live video on the web, live or pre-recorded video on the web, without interrupting user experience. So, you're watching a video you can actually click on or tap the screen on something you like and after the show is over, it will show you where you can buy it locally. All of that is then tracked in the back end so you know how long people are watching, where they click, etc and being able to tie that into the already existing billing infrastructure of the studios and broadcast outlets in terms of web advertising is just phenomenal. Pricing on that is still up in the air but that kind of thing. There are also other tools like Never Know or just Never.Know or Live Fire. These are also scrapers which are looking on the web for certain keywords, blog posts users and then present them in an HTML page so now you can have your video streamed in HTML page or pre-recorded video and now you have these scrapers that you're saying, yes I want this, no I don't, putting that on the same page. So now the content that you're pulling from social media is relevant to the media that you're showing on the page. So there are a lot of other options out there, unfortunately there is still not a way to 100% determine the monetary income based on that but it shows that we are going in the right direction.

Dave: And it's much better in the old days for somebody Chyron operated with exhibit CNN, look at a Twitter feed and then re-type it. AT least now it's a lot more automated and I think you're right that's definitely going to make the workflows better and then once you have the automation, the monetization I think will come later. I think people will start seeing what works and what doesn't work. It's not going away that's for certain.

Michael: I think the key to this social media, and let's back up even further, the key to this advertising in this media is the advertising has to be appropriate in gear. Unfortunately to find

the information, to find the products and services that people want to or people may need, it requires, I don't want to say a little bit of investigation but, it requires there to be some kind of analysis of the people who are watching. I don't recall the company, it may have been Target, it may have been Wal-mart but to go on a tangent I believe at one point they were, when you bought a pregnancy test, they were tracking who bought that and in nine months, they will start sending advertisements for maternity clothes or for new born clothes. And there was a massive outcry, because well that's massively invasive, how dare you use my buying habits to market to me what I may want to buy. If you look at it from a black and white perspective, that's a genius right because obviously you have metrics on someone needed something that has a specific outcome after X amount of time. So from a black and white perspective, that's phenomenal. But with the outcry of the NSA and or regarding the NSA and these invasions of privacy, there's this kind of line right now of how far can you go to get targeted advertising without pissing off your client base. It's a very, very odd area right now and the trick is going to be, how invasive can I get to instantly target it.

Dave: I agree. It's a very interesting area. Somebody's going to figure it out and somebody's going to make a lot of money, that's for certain.

Michael: And I hope I'm working for a company that resells that at that time.

Dave: Exactly. SO to shift gears again, we talked a little bit earlier about Final Cut Pro 10 and Premier. Just in a nutshell, what do you think are going on with each product like what are the high points, the low points, obviously Final Cut Pro 10 wasn't quite accepted as well as Apple had hoped initially but I've seen a lot of updates coming out, people warming up to it. And Premier now with Adobe anywhere, and Adobe's metadata initiative or at least that's what I call it where they're really trying to tie in to the entire line of production and with creative cloud. It feels like they're trying to build a whole ecosystem like go into the Adobe ecosystem and never leave and we'll provide all these tools you need. I think that's another interesting area to take a look at.

Michael: If we look at like you mentioned Final Cut 10 and for those who have heard me speak on this before I use the same phrase which is don't confuse the product with the launch. When Apple killed Final Cut 7 into for Final Cut 10, that pissed off a lot of people. You know what, it kind of follows what Apple's done which is we're not going to embrace the old, were going to go in with the new but it wasn't ready. And I understand the concept as well, it was never ready right. Just like they say in editing right, it's never finished you just have to hit a deadline. I think that was probably what Final Cut 10 was, is that if we wait until we have everything, it will never get released. When they released it that angered a lot of people. I give Apple credit because I think they did address that not only with updates but they came out and said, you know we're working on these, we're actively working on it. They actually, Apple traditionally doesn't go into trade shows at least publicly. They have Mac World and WWDC, etc but they don't do trade shows but where did they show Final Cut 10 for the first time? They showed it unofficially at NAB. For them to kind of embrace the market and kind of adjust how they do things to appease or to make nice with the pro video realm I think shows a lot. Final Cut 10 was lacking a lot when it came out. I use it probably on a weekly basis because it's just faster than anything else out there. Finding to do tops and tails, finding to do some stuff that's somewhat automated, it makes it really easy in Final Cut 10 to do that. But am I doing massive long form projects? No. Traditionally the workflows I'm involved in are multi-editor, multi-step and although Final Cut 10 does have some X amount of ability, it's still isn't the best tool when you need to work with multiple editors with multiple applications that need to talk to one another. It's just not right there

but for a one person band I think it's a fantastic tool. You earlier pointed out with Premier that they're kind of trying to build this ecosystem, kind of what Final Cut 7 had with the whole studio philosophy. I think Adobe is really nailing that down but there's a couple interesting things about this if I can kind of delve into that a little bit and again this is my own perception and my perception is my reality whether it's what the rest of the industry is saying is that Premier has almost, excuse me, Creative Cloud has almost everything you need. It's got prelude. It's got story. It's got your editorial. It's got your finishing, I'm sorry, it's got the effects. What it doesn't have 100% is asset management. It's got bridge which you know I don't think anyone would consider it a full blown asset management and it doesn't have storage right, because if you need to use storage at this point, you're now looking at Amazon cloud, you're looking at anyone of these sort of providers and they're astronomically expensive. So Adobe is missing two portions right now. My gut tells me that, that's just now. My gut tells me in the near future, you know few years, online storage will be cheap enough and their asset management maybe better that now everything can be in the cloud, everything. You are uploading your footage to the cloud and you are using their tools in the cloud to edit. That's not quite there yet but I think all signs point to those two things needing to come into a business for Adobe. There hasn't been a lot of discussions on Adobe Anywhere mainly because it's been kind of shrouded in mystery so hopefully I can enlighten your listeners to the realities of it. Adobe Anywhere is a beast. When I say beast, I mean it's extraordinarily powerful but it's not something that is going to be at \$39.99 a month. Adobe Anywhere requires multiple hardware components. It requires minimum three servers. It requires a traffic cop those of you who have done Xsan are familiar with the metadata layer as well as the storage layer. With Adobe Anywhere, there's a traffic cop that administers who's reading to what, who's writing to what, who's got permissions. It's got three servers which have Tesla cards in them. Basically what they're doing on the fly is generating proxies and these proxies are what you're editing with. Unlike Final Cut server which you know, had the, you'll edit with the proxy but the proxy is still a separate file from the mezzanine file. Adobe Anywhere is always looking at the high res file and dynamically streaming out in proxy version to your edit system dependent on your connection speed. So that's a big difference, you're working with one set of media. Going with Adobe Anywhere and the hardware, you're looking at, and hopefully I won't get crucified for this, you're looking at probably 50,000 starting. That is with a bare bones system. That's three servers or four servers. Three which are they're rendered, for lack of better term, they're rendered notes as well as traffic cop. That's doesn't include any kind of asset management. That doesn't include any kind of storage. So if you're looking to implement Adobe Anywhere, you need storage that everything talks to. Now we're talking at a robust NAS or a SAN and that on the good days can be 20 grand minimum. We're now looking at asset management and there's only a handful of asset management systems out there that are even talking to Adobe right now. I think our friend Mark Gilbert from Siena. I know they're qualified. I think Square Box and CatDV are working on it. But now you're looking at custom integration because it's brand new so that's going to be either 10, 20 minimum. That doesn't include the Adobe Anywhere license which pales in comparison in terms of price as well as paying under the Creative Cloud architecture. To expect to get out of cloud for more than you know, for under 80, 90 grand and have a workflow that is going to work for them without being riddled with hiccups, I think it's a fallacy. When you're looking at Adobe Anywhere, yes it has the Adobe name on it. Yes, it has the fantastic features that cloud has but keep in mind you're not getting into it cheap.

Dave: But on the other hand, I mean you look at the Avid world and Kind of like to compare Adobe Anywhere to Avid's Interplay line and I think you're kind of in the same price range anyway so really to get this kind of power, granted Avid's been out longer with some of their equipments so maybe it's a little bit more stable or a little bit more tied in. But on the other hand what I see from Adobe that I really like is just their metadata interchange between these

programs so yeah the asset management could be better but the fact that I could be in Premier, I could click a button it will shoot it in the after effects with the information that I need, I think its huge. The fact you could decentralize your post production now. Your editor could be in Utah, your graphics person could be in Northern California and you could have an audio person on the East Coast and I think there could be some economies there even though the equipments might be a little bit expensive.

Michael: Well also when you're looking, there's a couple of trade-offs, I mean if you're looking into Interplay there's storage, you have the ISIS component. And ISIS alone, on its own is usually you know 40,000 to 50,000 starting so you're looking at that cost as being rolled into Interplay whereas you know that has to be tacked on, added and then may not be 100% supported by Adobe. There's all these third parties and I'm a big fan of the one-throw to choke philosophy right when something goes wrong, who you're going to call? When you're dealing with Adobe Anywhere obviously you have hardware that's made by somebody else. You have software that's made by Adobe. You have asset management that's made by someone else. You have storage made by somebody else and you know manufacturers often will point fingers; no it's not us it's them. So where's the trade off? I mean, I personally, granted I'm not paying for the side of my pocket but if I was running a budget I would want the most dialed in workflow possible. I'd want the most dialed in manufacturers possible and when you're dealing with something that just was announced, Adobe Anywhere just started shipping with a host of third party, I'm not saying don't go for it but I'm saying go on with realistic expectations that there is going to be some trial and error. As far as the metadata exchange, yeah I think that's phenomenal. I think that's what Final Cut Studio should have been. And anticipating that as I mentioned earlier, when we, the asset management and the cloud, yeah I should say if we get the asset management and the cloud, if we get the storage and the cloud, that that would only grow to the point where everything can be tracked back to one point and interchange easily.

Dave: And speaking of all these manufacturers, what do you think they should be doing better in the area of workflows?

Michael: Couple different things. I think it starts with support. I think when you are calling the manufacturer for support they should understand where their product fits in the workflow. There are some manufacturers you call and they you know, they do the basic cable support. You know, have you powercycled the modem? Is the green light on? I think there's a lot of manufacturers that do that. They're more about selling massive product and quantity as you mentioned, as opposed to the quality of that quantity and I'm not a fan of that. Nothing will turn me off more than an unresponsive manufacturer or an unsupportive manufacturer who is only concerned about selling another widget. Without pointing anyone out on that end, the flipside, there are companies like AJA where you call AJA, they know that hey, yeah if you're working on with an SR deck 5800 that if you're using this capture card, you have to tweak the settings and that's because down win, XYZ happens. They understand what comes before and after their products and they're willing to give support on that, for the most part that's free of charge. I think that's phenomenal. I wish more manufacturers adopted that and realize that you know cultivating these relationships and not being just transactional is phenomenal. I think in terms of, and this is a little bit outside the scope of the question, at NAB every year we all hear about new products and the joke is announce at NAB, ship at IBC. I've never been a fan of that. I've always been a fan of, if you're going to announce it, have it. AJA actually, I know I sound like an AJA fan boy, but AJA this year said, 'hey you know what, we fell into that. We announced things that we didn't ship. So this year, we're not announcing that isn't available tomorrow.' And I applaud you know, AJA for stepping up and doing that and saying, 'Here are our products. They're ready

to go, go out and buy them.' Other manufacturers that you know last year, took 8-9 months to ship or still are not shipping. I just think that's inexcusable for building consumer confidence. In terms of other things that manufacturers can do is be extensible. Avid for example still has issues with XML right. Everything in the post industry you know for editorial and finishing and effects all has some kind of XML I/O. Avid right now still is, well you know what, we'll deal with an AAF and we'll deal with an ALE and let's port you know an EDL because all of us are still using you know Grass Valley Gear but we would love to have some of this XML in and out and it still isn't there. And I still don't understand why you know, opening up a third party I/O and opening up to ANA and allowing all these third parties but are not allowing for robust XML. I'm not understanding why that hasn't been implemented. I would think if you're trying to cultivate partnerships with people and want to influence them to you know use your product in your workflow, make it extensible. Make it play on other people's sandboxes and don't have it on some remote island.

Dave: And what are some subponents or bunch of tools people could be using to help make some of their post processes run more smoothly? I know there's a lot of great little programs that we see articles about, you know, this app or that app for the iPad or some apps that you may want to run on the Mac to help you. What are some of the things that you think really stands out in that area?

Michael: Honestly, it's hard to have some net that are transcend the entire industry. I have a few things but they're more of common sense more than it being a zero and a one. For years I've used a web program called Basecamp. Basecamp is a way for multiple people, multiple departments to all talk and discuss a project or even product that allows you to send comments to different departments and track the status of items you've done. It's a good collaboration rather than opening Outlook and doing a search. If we look at Cambridge systems as a product called Imaging cloud which is kind of review and approve if you're familiar with wire drive, it's a private way of uploading content, having people review and approve it, enter in notes and having this kind of internal non-public way of reviewing footage, clips and media without worrying about it, you know being available in the general public. I mentioned earlier CATDV the kind of asset management or automation, I think once that's implemented correctly, it speeds up things immensely. It's a fantastic tool. We talked earlier about millenials and being able to or wanting this kind of multi-screen technology and having this short attention span. There has been a mass desertion of using the phone or talking to someone in person, I know I sound like an old man saying that, but the ability to call someone and talk to them about the media, about the project and not rely on black and white email and not rely on someone not checking their email because they're off doing who-knows-what, having the phone it sounds so elementary I think but pick up the phone. It's amazing how many things, I got a text message the other day that just said, I'm sorry it was an email that said urgent, time sensitive. And that blew my mind. If its time sensitive, pick the phone and call me. I know you have my number on speed dial so I don't understand that. Also, and anyone who's in sales would probably have heard this before, the whole Steven Cuddy, 7 Habits of Highly Efficient People. One of them, one of the first ones is being proactive. I think anytime you're in a clamorative situation, anticipating what can happen in other departments. What can happen 3 or 4 steps down the road? What could've happened 3 more steps prior to you? I think being proactive and anticipating those, I think is massively important. I think too often, as you mentioned earlier, we get locked into, I'm an Avid editor. I'm a Final Cut editor. I'm an after effects guy. Well to be successful, you're not just a keyboard jockey. You have to know what happened before you and what happens after you. While that's not a tool, you know in the physical sense, having that mindset of knowing that you have some sense of responsibility of the files that come to you and the files that you're

delivering and how they're used is paramount. And I think if you really want to get ahead in the industry aside from knowing someone, knowing what happens before and after and being able to react and work with that is paramount.

Dave: And I think that's a great point that you bring up there in the end because there's that no-my-job syndrome, you know, I'm the editor and the graphics came in wrong and you know what though, I just plugged them in even though the video levels are wrong. Wouldn't you want to tell somebody there's something wrong or it's misspelled and if it doesn't quite look right, Google it. Oh yeah, it's misspelled, I'm going to call the graphics person instead of just saying, well that's their job and they should have checked it. I mean even sometimes on that level, let alone the bigger picture like you said understanding the whole process of how the things get to you. That's a whole other story that I just loved with somebody's 'not my job', 'I did my job'. And even though everything was messed up, I just put it all together and I shipped it.

Michael: Yeah it's incredibly frustrating and I understand that when you're working in larger environments whether it be a studio system or whether it be a feature film is that everyone is trying to CYA. Everyone is trying to cover their ass. I completely get that. Everyone wants to look you know, stellar to the person they're reporting to, to say hey it's not me, it's them. I get that but there is a happy medium to say, you know I understand there is a problem. I encountered this problem but I think I have a way to remedy it instead of saying not my job washing your hands of it. I think that shows incredible initiative. I think that shows that you're willing to work with people and not just cover your ass. And I think that's very transparent when someone does that and that's the first red check mark in my book.

Dave: So just to kind of wrap everything up, what's your definition of an elegant workflow?

Michael: Whenever I devise a workflow, there are always multiple avenues to get to the same point. I like there to be redundancy. I like, that prevents bottlenecks, I think it gives redundancy as well as prevents redundancy. I think an elegant workflow gives the ability to have a backup but also prevents someone from doing the multiple, the same job twice. When we're talking about elegant workflows, coming to an end goal through multiple avenues depending on hiccups in the workflow, and at not being a massive strip pain, to me that's the most elegant workflow.