Making records in the 21st century

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The art of making a living out of music production in the 21st century has changed beyond recognition compared with the situation thirty or forty years ago. AES workshops chaired by Nick Sansano and Jay LeBoeuf shed light on the business practices and technology that are behind the new generation of music production.

uring the 131st Convention, Nick Sansano of New York University chaired a panel consisting of recording engineers and producers who discussed the challenges of making records on a limited budget in the 21st century. Sansano's cochair was Jesse Lauter, a producer/engineer from the NYC area. Looking into the economics of the recording industry today and comparing them with the experiences of professionals back in the 1970s brought up some remarkable contrasts. Later in the

same convention, Jay LeBoeuf brought together three technology entrepreneurs who explained how cloud computing and mobile technology can power the next generation of music businesses.

STUDIO SET-UP COSTS

Dan Knobler and Jonathan Seale of Mason Jar Music started the ball rolling by talking about how they had "stretched the dollar" when building their studio. Quite a lot of the acoustic treatment had been done by themselves using information found on the Internet and through attending a few classes. Keeping costs low means doing as much as possible yourself, they said, including cutting carpets and making fiberglass panels. Besides the rent on their Brooklyn house, the budget for converting an unfinished basement into a working studio, including the equipment, had been in the region of \$50,000. You can do a lot with a studio costing that much, they suggested, but one of the most important keys to getting good results is to have outstanding musicians.

Industry veteran Tony Visconti's first studio, on the other hand, had set him back a small fortune in 1979. His 48-channel SSL mixing console (only the 9th E-series in the world) meant that he had owed the bank a million dollars, and he had bought the latest Neumann microphones, but he was charging clients at Dean Street Studios £2000 a day in the 1970s (and it was fully booked). Just this one example serves to show the economic gulf that exists between that time and now. Nowadays he does quite a lot of the mid-project work on editing, vocals, and guitar overdubs in a smaller room in New York, using an eight-core Mac running a lot of high-end plug-ins, which had involved an outlay of some \$6,000 and various high-quality front-end equipment such as preamps. He particularly favors plug-ins that emulate analog equipment. All his microphones are still the same as in



The New York convention workshop panel, led by Nick Sansano (top left, inset), discusses making records for "next to nothing," from left, Jonathan Seale, Dan Knobler, Jesse Lauter, Dan Romer, Jason Goldstein, Bob Power, and Tony Visconti.



Tony Visconti's studio in London had left him owing the bank a million dollars in 1979.

the old days though—Visconti hasn't bought a new microphone since the 1970s.

Dan Romer's first studio, at the age of 18, had started with a budget of only a few thousand dollars. This included Audio Technica 4033, AKG D112, and SM57 microphones, with a Mac G4 and ProTools 001. It has just grown from there, with him adding new bits of kit and software as the work has expanded, and now he uses a lot of high-end plug-ins (particularly the analog emulation types) on a ProTools HD system. In Dan's opinion, start-up costs for this sort of thing really aren't much of an issue any longer. It's possible to get going for something like \$1500. Much more important is the motivation and the wish to succeed.

Jason Goldstein has worked in many of the major studios and has a lot of highquality credits to his name. For him the financial scene has definitely changed, but if clients still want to work in high-end studios with big loudspeakers he's happy to oblige them. Often he does business for clients he hasn't met, perhaps from overseas, who send him files that he then works on. All of his engineering work now, though, is done "in the box" using software and plug-ins, no matter where he happens to be. If he goes to another studio he'll take a cloned hard drive with all his own operating system and plug-ins, so that he knows what he's dealing with.

BACK-END OR UP-FRONT MONEY?

The advances for projects are no longer what they were, so it's necessary to look for





Dan Knobler and Jon Seale of Mason Jar Music talked about putting together a music studio on a limited budget.



Jesse Lauter, cochair of the panel

"back-end" sources of revenue such as royalty streams and licensing deals. There seemed to be quite a strong view among the panel that concentrating primarily on grand financial plans was not at the top of their list of priorities. Loving the project and finding musicians that inspire are the most important thing if one is to succeed and find some reward in today's business. Jesse Lauter said that he had been involved with million dollar projects that had ground to a halt at the record company door, whereas some other records had been made "down and dirty" and had done really well.

Dan and Jon from Mason Jar Music, who consider themselves something of the "new boys on the block," are not currently too concerned with big up-front budgets for projects, as their main costs are only the rent on their building, and they have learned how to value their time so as not to work at a loss. Quite commonly, said others on the panel, one will be making records for people who are paying for themselves. If the work is interesting and the musicians are good, it's better to take these jobs rather then do nothing, even if the income is not as high as on some other projects. The major-label work may pay more but there can be big gaps in between such projects, so it's necessary to do TV commercials and other things to fill these gaps.

With major-label projects there is sometimes the possibility of getting a royalty as producer or engineer, so if the record is a success there could be some back-end money. Alternatively, if the project is independent, one can try to get a clause in the contract that pays a royalty as if the record had been signed by a major label, if the record becomes a success. Panelists felt, though, that this was hard to enforce, although they had tried this tactic for many years. Tony Visconti explained that the advances on album projects had been lower than imagined in the 1970s, perhaps £20,000 for something like a David Bowie

album project. The ensuing royalties, however, could be quite substantial. There is a complete reversal of that situation these days, with the income loading needing to be mainly at the front end. The advice to young engineers and producers from a seasoned pro was that although it's worth asking for a royalty, it is definitely not worth losing a job over a royalty fight. Because the chance of earning this type of back-end money is limited, it's important to ensure that a reasonable income is gained from money that is paid up front. Making profitable deals, it would seem, requires substantial imagination these days.

ADDITIONAL RESPONSIBILITY AND CREDIT

Producers on the panel talked about the additional responsibility for some of the bands or artists they were developing. For example, they might need to offer coaching for live gigs that are coming up, in order that the sound is not totally different from that on a record just mixed. The nurturing of independent talent seems to be about taking a holistic view of the "product," which may extend well beyond the studio. Sometimes this will be charged for but it may not be, and a judgment is needed about the long-term benefits of such an investment. It can be frustrating because the artist in many cases needs a proper manager, but may not yet have reached that stage, so the engineer/producer often fulfills something of the A&R (artists and repertoire) role in the early stages of an act's development. One way of dealing with it on a commercial basis is to have a contract with the artist through a production

Getting proper credit on a record is extremely important because building your brand as a producer/engineer is crucial. It can make a big difference when you are first starting out, because people need to know who created a good-sounding result and how to find them. Building the brand is



Jason Goldstein now works entirely "in the box," using software plug-ins and a cloned hard drive.



Dan Romer explained that studio start-up costs are not a major issue these days.

also more than just getting an individual credit—it needs to involve having a "corporate" name and a logo because this makes it easier to sell and remember.

TIME AND BUSINESS MANAGEMENT

Sansano was interested in how panelists manage their time when they don't have specific jobs on the go. The idea of "working or not working" was something of a mystery to those on the panel who are musicians and creative artists. The issue is more about whether one is working for money or not, they laughed. Jesse Lauter said that he always tries to ensure that he is doing something creative. Bob Power said he had been

working with music since he was a teenager, and he couldn't really imagine not being involved with some aspect of it.

The view was also expressed that the business aspects of the music industry are in many ways so "distasteful" that it is better to have a business manager to act as the interface to this side of things. That way everyone does what they are best at. Those just starting out, though, were envious of this position. While they would love to have a business manager to deal with contracts and the like, this is simply out of the question financially, and everything has to be done themselves. A set of template contracts drafted by a lawyer can act as a good basis for new business deals.

TAKING CARE OF ME

Maintaining a personal life and looking after oneself were regarded as major challenges. It doesn't necessarily sit well with the level of dedication to the art that seems to be needed to succeed, and there was a sense among panelists that living and breathing music for 24 hours a day is actually quite cool. However those who were older had in some cases managed to establish something of a balance between their personal relationships and their work. "Don't get married!" it was half joked, or better still "don't get divorced!" Like any professional job that requires a lot of skill and concentration for perhaps 12 hours a day, it takes its toll and makes it hard to build a life outside of work. No easy solutions were on offer here.

NEW YORK OR THE NEW WORLD?

"The cost of doing business in New York is very high, so why stay there?" it was asked. Being in the middle of such a river of "human traffic" was regarded as a great thing, especially such a wealth of creative talent. For some who had grown up in the area, they couldn't imagine living anywhere else, and others felt that if you wanted to be a record producer there was really no alternative to New York, LA, or Nashville. The networking benefits of being in the city featured high in the list of reasons for sticking around. Without networking it is almost impossible to get work, as the phone won't ring on its own, and everyone in the business within the city seems to be connected. It's important to attend gigs, for example, and to remain visible both in the USA and

The opportunities generated by overseas markets have turned out to be crucial to the success of recording businesses in recent years. This means that one shouldn't put all one's eggs in the domestic basket, as that would mean everyone would be chasing the same limited number of artists. Having a great "calling card" in the form of recording work that sounds amazing is really the best advertisement possible. A really striking website is also high up on the agenda for success, especially a website that models the creative professional represented there. Simplicity rather than lots of clever features was recommended.

The Internet makes work possible between continents. Tony Visconti gave examples of how he had produced or coached artists using Skype between New York and the UK and suggested that rather than spending a lot of money on flying people around and putting them up in hotels we should consider spending it on the production.

THE WAY IN

Recording schools were said to be quite useful for meeting and working with similarly minded people. Some schools also concentrate quite strongly on entrepreneurship, and this was regarded as vitally important on top of learning how to make recordings. The old route into the business of getting an internship in a studio and working your way up the hierarchy seems to have disappeared. Panelists suggested that it simply doesn't happen any longer, and it's probably better to start out by calling yourself a producer or an engineer from day one, once you have figured out how to make a good record. Then it's a matter of building the network with the right people and getting good mentoring from experienced professionals. Despite this prevailing view among the panel members, a voice spoke out to say that although it's a rare commodity today, getting a job in a big studio is still a valuable experience that will illuminate a wide range of different working methods and recording techniques. If it's offered, even though it may not lead to the old-style career, it's probably worth taking.

CLOUD COMPUTING AND THE MOBILE GENERATION

Cloud computing, mobile technology, and new marketing solutions are opening the doors to alternative ways of producing and selling music. Jay LeBoeuf of Imagine Research chaired a workshop in New York explaining how users of innovative iPad and iPhone applications, cloud-based audio sharing, and collaboration sites can turn virtually anyone into a music producer. The panel (Mark Ethier of iZotope, Michael



Jay LeBoeuf chaired the session on cloud computing for the mobile generation.

Gitig of Gobbler, and Henrik Lenberg of Sound-Cloud) explored the products, technology, and external factors enabling this revolution.

For those unfamiliar with the terminology, cloud-based computing allows

you to accessing software and storage as a service over the Internet rather than something you install on your computer or have on a local hard drive. By virtualizing the software and storage this way, it frees you up from having to worry about traditional concerns like processing power and hard disk space, since "behind the scenes" you could be drawing on the power of many computers. Instead, these applications are limited only by your Internet bandwidth.

This approach makes some people nervous because they don't have the resources directly under their control and there could be security implications, but it has certain advantages such as the ability to access material from anywhere connected to the Internet and the easy availability of often free storage and backup.

One of the advantages of cloud computing, suggested the panel, is that as networking resources improve in speed there is less need to be concerned about whether a certain amount of processing power is available on the local platform. This is particularly relevant in the case of mobile devices where resource-intensive processing can simply be passed on to cloud-based systems and the results returned to the local device, provided there is sufficient network bandwidth and speed to enable it.

Gobbler (www.gobbler.com) is one such cloud-based resource, designed specifically for backing up, transferring, and organizing audio projects. Unlike some other cloudbased services it offers many gigabytes of storage space, enough for typical media projects, as well as using a form of lossless compression for the transfer to speed it up. Backups to and from it can be paused and restarted from where they left off, so they can be done in bursts at different times rather than all at once. Importantly, it's compatible with all the major DAW (digital audio workstation) packages and project structures. iZotope (www.izotope.com) was created in an MIT dorm room about ten years ago. It makes technology that allows

users to play around with and remix music, as well as plug-ins and technology that powers other people's products. For example it has a suite of mobile audio tools for the iOS (iPhone operating system), including noise reduction tools, vocal effects, EQ, compression, dynamics processing, and reverb. SoundCloud (www.soundcloud.com) was created to allow users to share sounds that they have created, enabling collaborative work, visibility for creative efforts, and a user community providing comments on the uploaded material. Rather as YouTube does for video, so SoundCloud offers a cloud-based resource for audio.

WHERE'S IT ALL DONE?

The chairman wanted to know where these services are actually located and how it's done. "Are they just a bunch of drives in your bedroom?" he jokingly asked the panel members. Michael Gitig explained that Amazon had decided to monetize its massive servers distributed around the world, enabling new e-business services to be built. Specifically this initiative is known as Amazon EC2, for Elastic Compute Cloud, offering resizable computing capacity "in the cloud." (For more information, see

http://aws.amazon.com/ec2/.) This has enabled the creation of a lot of interesting web companies, such as Gobbler. Henrik Lenberg pointed out that although Sound-Cloud could have been built without these Amazon resources, they have made it a lot more straightforward and cost-effective than it might have been before. The business model adopted by Amazon allows services to pay only for the resources they consume, such as bandwidth and storage, which makes starting out much more cost effective than if a new business had to set up its own servers and network infrastructure.

SECURE OR NOT?

It had become clear to Michael Gitig, when setting up Gobbler, that the security concerns people have about cloud-based resources are, in fact, not very different to those they face with their own systems. There is an inherent nervousness among some that their intellectual property is "out there" and can be easily hacked or intercepted, but in reality the risks are the same or higher with locally stored content or material that one transmits or receives over the Internet. In fact the encryption on Amazon's servers is of military grade and is



only going to get better. While there is always a risk from hacking, Henrik Lenberg said, content is almost certainly safer on a cloud-based server than it is on your local machine, if your local machine is connected to the Internet.

In the music industry, for example, the risks of a song being "leaked" before its release were said to be more likely to be by way of a record company or studio employee than through "technical hacking." (In other words, criminal behavior within one's own organization seems more likely to be the reason for a leak than a random technical assault on a cloud-based server.)

Concerning the "cracking" of software, there are benefits to the "closed" environment of the iPhone, with the tight control that Apple has over the platform, and this makes piracy more unlikely than with other platforms. Lenberg suggested that piracy of mobile software might not in fact need to be the big concern that people assume, if the business model can be changed. Remarkably, music-industry software creators have been very slow to realize this, he noted. They could be trying to get money out of people who want to join a community, or get content or education on a regular basis, rather than trying to stop them from copying software.

DESKTOP OR MOBILE?

The advantages of having two large screens and a desktop computer is not going to go away in a hurry, it was proposed. However, desktop computers are still based around a text-based interface (the keyboard) and the mobile community is more oriented around graphical interfaces. Although it's possible to make music on a mobile device, the size of the interface makes it more difficult in many ways. There is no getting away from the rapidity with which mobile technology such as tablets and smartphones are taking over the market, but it does not seem imminent to be getting AES/EBU interfaces on an iPad, for example. Furthermore, it does not seem possible to transfer audio data between two apps on an iPhone in a legitimate way, or to connect audio from iOS apps easily to the cloud, which makes certain audio operations very difficult to implement. Despite these limitations there are some remarkable productions that have been put together using only basic software and an iPad. Some other platforms were said to make this type of interoperability and cloud connection rather more straightforward.

CHANGING CREATIVITY

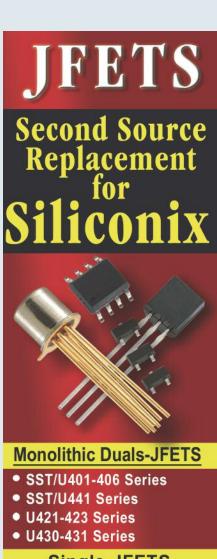
There's one example of the changing way in which people can get into music production that challenges many of our conceptions of "how it should be." Now available is an app that will simply take a tune that anyone with minimal musical or production talent might hum and turn it into a finished song. This can then be shared with a community immediately and made available to the world. Until now anyone with skill and a computer could create professional-sounding music, but it did indeed take skill and the user had to know a lot about music, arranging, engineering, production, and so forth. The difference now is that community-based individuals, perhaps armed with little more than a phone, can contribute bits that they have either stumbled across or knocked up without having much idea about the finished product, enabling someone else to add a vocal or a rap or some other element that will move the project one step further on.

So far, the music community has mainly been used to the idea of "static" works—that is songs or pieces that don't change. But collaborative systems are bringing about alternative scenarios that allow works to evolve over time, as different people modify or contribute to them. Panelists could envisage songs that might be just a little bit different every time you listen to them, for example. Well-known bands and independent artists are beginning to deliberately put together musical elements from which others can develop their own music, extending their brand in a novel way.

CONCLUSION

Radical changes are taking place to the business models and creative workflows that characterize today's music business. Striking differences exist between today's start-up costs and those of former years when it comes to entering the world of music production, and this world is no longer limited to a select few participants. Cloud-based computing has enabled storage and processing resources to be made available cheaply, and there is a rapid increase in the potential for mobile and collaborative working as a result of these technology developments. The challenges for the future include the effective enablement of collaborative working between individuals that may be separated in time and space.

Editor's note: The workshops discussed in this article (W5 and W8) are available to purchase as audio recordings from: http://softconference.com/aes/slist.asp?C=4579.



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