

## CHAPTER SEVEN

# Bringing the Music Industry into the Twenty-First Century

One Lawsuit at a Time

*Tom Tarka*

**WE HAD BEEN ON THE GROUND AT LAX FOR ABOUT TWO MINUTES WHEN A VOICE CAME ON THE** intercom and said, “Would passenger Thomas Tarka please see the attendant at the front of the plane....”

My ears perked up and my somewhat groggy mind came to attention, playing out all of the potential scenarios:

Another one of my grandparents had fallen deathly ill and I needed to call my parents immediately?

Smugglers had sequestered drugs in my bag and the International Terminal drug-sniffing dogs had already found them?

I shuffled with the rest of the coach passengers, already thrown for a loop by a simple sentence on the intercom and not able to do a thing about it other than to carry my overstuffed bag and wait for the eternity it always seems to take to get to the front of the plane after a long international flight.

And so it was that I returned to the United States after circling the globe...

Ten months prior I had been living in Boulder and working as a keyboard jockey in various forms, starting off as a software tester and eventually working my way up the food chain to webmaster at a smallish software company. I wasn't sold on Boulder, and a tip from some backpackers at a hostel in Hawaii about the relatively inexpensive nature of "Round the World" plane tickets had put the bug in my ear to save my money, dust off my passport, and check out the rest of the world.

Jobwise I was also ready for a change, in large part because I had spent the majority of my career thus far working mostly alone or as the sole tech person on projects. It was lonely, and I was jonesing for people to geek out with. Case in point: it was fun being the webmaster for the company I worked for, but the website was run by the marketing department and left me working with amazing but non-Unix/programming/techie types, and it was getting old. It probably didn't help that a few of my friends had moved to the Bay Area, and through their tales I had heard the siren song of the dot-com, with its hordes of geeks staying up all night coding, building "Cool Stuff"™ and maybe even getting rich in the process. I was ready to move on, and I was pretty sure working as a programmer at a dot-com was the next step. It didn't hurt that the economy was booming and looking for people with my skill set, and I was banking on the fact that I could get away for a few months and, in all likelihood, not have any major issues finding a job, either. And so it was that in September 1998 I had left my job as a webmaster, packed up the last of my belongings, and driven cross-country to New York City, hopping on a plane to London a scant 48 hours after leaving Colorado.

Ten months and 45 minutes later I was in the back seat of a station wagon being driven by two people I didn't know, lost somewhere in the middle of LA, staring about in wonderment at everything: eight-lane freeways, gridlock, Christian billboards confiding to me that my taking the Lord's name in vain was the reason that I was still stuck in traffic, the funny American cars of all shapes, waxed and gleaming, squat buildings and never-ending sprawl... LA—no, *America* washed over me for the first time in almost 10 months, bigger than anything I had seen in what seemed like a lifetime, or if not bigger, then just *different* in some ineffable way that mirrored an attitude which had become in so many ways foreign to me. I was home, but it wasn't my home anymore.

The driver of the car was a friend of Connie-Lynne, someone I had known online for maybe two years but had never met in person. She was also the person who had phoned the airline to leave me a message which read something along the lines of "Message for Tommy Tarka. Constance will not be able to pick you up at the airport but has sent someone who will meet you at the gate." So I was in a car headed for Pasadena, driven by someone I didn't know who was taking me to someone's house that I had never actually met who I was going to stay with for a couple of days until Mark arrived from Phoenix.

Mark, of course, was an old college (and traveling) buddy who had driven cross-country from Pennsylvania and was meeting up with me in LA after spending some time visiting family in Phoenix. He had just finished up his master's degree at Penn State and it was our intention to take a lackadaisical cross-country jaunt, exploring the United States until such a time when we found ourselves back on the Eastern seaboard, where it just so happened

that my remaining possessions (including my car) were ferreted away in various attics, storage sheds, and living rooms spread across three cities.

Connie-Lynne turned out to be as amazing and nice as I fully knew her to be after two years of chatting online, Mark and I managed to rendezvous, and three days later we were in San Diego visiting friends—JV and klh—who were from different places and times in our lives but who had independently ended up there. We had just finished throwing the disc around and had retired to klh’s UCSD campus apartment when I happened to mention:

“You know, I wouldn’t actually mind sticking around in San Diego for a couple of months, especially since JV’s wedding is only a few weeks away and the likelihood of me getting back here for it is pretty slim if I’m off gallivanting somewhere else in the country. I’d have to find some sort of job, though, so if you guys know of any frictional work for a sys admin or a Unix geek, please let me know.”

It’s one of those things that seem perfectly natural after backpacking for a while, floating from place to place on a schedule that is dictated more by weather patterns or where the next bus is heading as opposed to anything else more concrete. And so the words were spoken with every intention of actually doing just that: hanging around San Diego for six weeks until your good friend’s wedding, but with no expectation that anything would actually come of it. Besides, after 10 months of travel, I was pretty much broke and there was no way I could stick around San Diego for six weeks unless I could find some sort of job, preferably a lucrative geek-type job to bolster the coffers. The whole thing boiled down to finances.

...which is why I was surprised when I got the response, “Oh, really? Did you tell JV that? Our friend John is working for a start-up and I think they’re hiring. What do you do?”

Oh my.

And so the connection was made. Mark and I returned to LA, but three days later I was riding the Surfliner—the Amtrak train which follows the Pacific Coast down to San Diego—and hopping a cab to interview at MP3.Com, a company I knew absolutely nothing about. Adding to the sheer absurdity of this situation—from my seeing America with fresh eyes for the first time to the “ask the universe and ye shall receive” scenario of finding out about this job—I had managed to leave the bag containing pretty much my only set of nice pants and clean/presentable shirts in the trunk of someone’s car the night before. I showed up to the interview in the best clothes I had with me: shorts, a somewhat wrinkled, albeit two-button V-neck, collared shirt emblazoned with beer logos and commemorating a chapter of the Hash House Harriers club, with feet shod in, if I recall correctly, sandals. I was completely stressed out by the whole scenario, but the early hour of travel (meaning everything was closed), inability to easily reroute (as I was traveling on public transportation), and lack of time to spare between connections made it impossible to do much more than ride it out and put on my best face.

“Yeah, we were taking bets on how long you’d last,” Josh Beck, CTO, later recalling interviewing me that day.

MP3.Com was completely hopping that day. It was the day before the IPO and everyone was running around like mad men and women, cell phones glued to ears and fighting off a recent crash of some nature, brought on by the sudden onslaught of pre-IPO media blitz and resultant web traffic. At least half of my interviews took place on a park bench outside in the ever-perfect San Diego weather as engineers with obviously more important stuff to do took a deep breath before calmly trying to find out more about this crazy-looking guy fresh off a plane "...from where? Fiji?" and the probably-not-yet-of-legal-drinking-age CTO quizzed me on Perl modules (I knew the answers to his DBI questions but wasn't familiar with Carp at the time).

You'd think that after 10 months of globe-trotting my skills would have languished, but just the opposite was true. I spent quite a few of my days also geeking out: sitting in the Singapore library reading books on artificial intelligence, working temp programming or sys admin jobs to make some spare cash (or at least to get free coffee and Internet access in the case of the Internet Cafe that doubled as an open source software development shop, with most of the computer minders also working as developers on the side), and learning the ins and outs of DBI while working on a ride-sharing website of mine. I returned with a gap in my work history, but with reasonable programming chops in skills that, it turns out, were topical to what MP3.Com did. Somehow this makes me feel better about the days that I spent in Bondi, sitting out on the porch in the beautiful sunshine and hacking away on Perl code via a strung-together '386/16 (running FVWM on 12 or 16 megs of RAM and connecting in through a 33k modem) instead of frolicking on the beach. Somehow.

Four hours later there was an offer on the table and we were discussing salary and benefits. The fact that the IPO was the next day—and that the actual contract wouldn't be ready until then, not to mention the fact that I probably needed at least a week to recover all my stuff from the East Coast—meant that I was screwed on stock options: instead of locking in at an option price of a dollar or two per share, I'd end up at whatever the stock price was after going public (my option price ended up being somewhere in the \$50 to \$65 range); so much for getting rich quick. I was kind of pissed, but at the same time I knew that this was my bargaining chip for an actual salary, as opposed to the peanuts some folks managed to get by on—banking, of course, on their options vesting at a price that would make the small salary moot—and did my best to use the situation to my advantage. I came away with a salary lower than I wanted, but with a promise that I would be bumped up to something more acceptable in a few months. Good enough, especially with how much I wanted the job.

And so not even two weeks after returning to the country I had managed to land the job that I had dreamed of: working at a fast-paced, up-and-coming dot-com. I was disappointed that I wasn't going to be able to travel the States a bit and felt bad about leaving Mark in the lurch with regard to our plans of lazy exploration, yet it was an opportunity of a lifetime. There would be (and was) time for exploring later; for now, I had a job!

Fast-forward three months and MP3.Com has moved to a new location: two buildings overlooking the scenic 805 freeway. Of the two, only one is inhabited and even it is still under construction as offices are framed and erected in the empty spaces, a chain link

fence is put up to keep the musicologists from eating anyone, and the building is art-ified—one entire hallway is tagged with graffiti while another is textured with chunky dried caulk in a peanut-butter cookie crisscross painted gold. You get the picture: these buildings are becoming *ours*. The second building is under construction and before long will house the engineering department, which is already 50 or 60 people strong and probably 40% to 50% of the total company. For the time being, however, we're in cubicle purgatory.



*Building 1 of the MP3.Com complex, complete with recording studio, cafeteria, interior chain link fence, data center, and meeting hall (source: <http://www.flickr.com/photos/dmkanter/454976853/>)*

Tom: Do we have permission to use Figure 7-1? If so, do we need to have more of a credit than the above link? --Prod

It's early October and for the past three months I've been working closely with Sander van Zoest, a crazy Dutchman and one of the MP3.Com founders—his title is High Geek—and David Story, programmer extraordinaire. The two are as much alike as they are different: Sander is 23 with rocking blue hair, doesn't ever seem to sleep, and is someone you would perhaps run across at one of San Diego's Goth/industrial nights wearing almost see-through silver pants. He's striking both in the way that he speaks—waiting for you to finish and making sure you have nothing more to say before carefully giving you an insightful commentary on either why the system is designed in that particular way or how the particular architecture has evolved over its development cycle, resulting in its current incarnation, complete with various hints at what might make sense for the next version—and his demeanor, which is just slightly not American (and yet is, somehow).

David, on the other hand, is 39 years young with a twinkle in his eye that belies the fact that he'd probably be happier riding around on BMX bikes with his kids all day as opposed to living in the grown-up world. Yet not only is he a tireless worker who appears to view every project with a sort of ongoing curiosity, poking and prodding until he solves the puzzle, but he exudes a calm which seems impenetrable. He is fit, dressed in nice, pressed shorts and collared shirt, and drives his barely-street-legal motocross bike to work on most days.

Their demeanors, appearances, and work habits are yin to the other's yang, but both are complete professionals: taking the time to design elegant architectures, designing to published standards when they exist (or at least aware of the fact that they're skirting the standard and why), writing and submitting RFCs when it makes sense to, and generally taking the time to "Do Things Right," if for no other reason than that they'll be portable and easier to maintain later.

This seems to be one of the common threads among the MP3.Com engineers: they were, to a T, talented professionals who got things done, not afraid to roll up their sleeves and jump right in and come up with innovative solutions. I can't tell you how many people arrived at MP3.Com and had absolutely no direction their first day or five as things were just going too fast for everyone around them. What happened next, however, was amazing and unique: they jumped in and made work for themselves. It was not a matter of "What am I supposed to be doing?" but rather "What can I do??!" as you wanted to be a part of the living, breathing organism around you. Besides, that's why people came to MP3.Com: to *work*. They were jazzed at what the company was doing, at the team assembled around them, at the breakneck pace of just about everything: the energy was addictive. And this is exactly how I started working with David and Sander.

"Where do you think you will be when you are listening to your music 10 years from now?"—Michael Robertson, CEO of MP3.Com

"In prison."—Christopher Giles, software engineer and fiddle player

And so it was that one early October day, the three of us—David, Sander, and I—got pulled into a meeting room with our manager, John DeRose, and three other engineers: Christopher Giles, Josh Stevens, and Mike Oliphant.

"Now this is a top-secret project and what we are about to talk about cannot leave this room. OK? OK. You know that we have been talking to the music labels for some time, trying to work out a way to license their content. Unfortunately, we've been getting nowhere. Well, I was just in a meeting with Michael [Robertson], and he has a vision for how we can move forward, legally. He wants to build a site which allows people to leverage their existing music collection, meaning the CDs they already own, from our site..."—John DeRose, director of engineering

Say what??!

"How is that legal?" someone asked.

"Michael and the legal team are working on that and think that they have a legal solution..."

And so it began.

You see, up until this point in time, MP3.Com had been a website for the independent music artist. Any musician could create an "artist" page and upload his music, and *presto!* People could listen to and (if the musicians allowed it) download the music. All for free! Not only that, but you could also upload album art and sell CDs from our site, pulling in

40% or so of the price you chose to sell it at. These D.A.M. CDs were pressed on the fly using just-in-time manufacturing, so there was no cost to you and our costs were covered within our percentage of the sale price.\*

That's the overview—a site designed to allow artists to self-promote, remove the overhead of creating a music product, and eliminate the middleman (i.e., the record label) who was taking a huge cut of their sales—but it doesn't capture the buzz and excitement generated by the site. Nor does it capture what went into the daily operation of the company: a full staff of musicologists who in addition to their other duties tirelessly listened to track after track of uploaded music for copyright infringements (and trust me when I say that some of that music was not pretty), the marketing and sales teams who somehow found ways for us to slow down our burn rate, a legal department that did its best to keep us out of trouble (a difficult proposition at best), and last but not least, the engineering that went into keeping the site up every day.

And when I say "engineering," I mean it. Keeping a website that hosts 200,000 songs and 40,000 artists running is no small feat, and so MP3.Com—with \$400 million in the bank—invested in quality people and an engineering team which was half the size of the company.

What did all this mean? Well, three months after the IPO, the engineering team—everyone involved—had made substantial inroads in creating a very scalable infrastructure. Don't get me wrong, the frantic pace and energy hadn't slowed down, but things seemed to be...stable. And you'll note that I'm referring to the "engineering team" here as opposed to specific individuals, as I was discussing before. It sounds cheesy, but even though the engineering team had grown to be fairly huge (50 or 60 people), it really was a pretty cohesive unit; at least to the extent that none of the individual groups could have survived without the expertise of the other groups.

Heck, the whole company was pretty cohesive, with weekly companywide meetings dubbed the "Chairman's Chat" where our CEO, Michael Robertson, would address the entire company, introduce new people, and generally let us know what had been happening from a "big picture" perspective. It was one of those things where even if you didn't know everyone in the company, even if you didn't know everything that was going on, you still had some sense of what senior management was doing, and specifically, that they were doing *something*. You might not *agree* with what they were doing, but at least you knew that they were doing something. Don't get me wrong, these "chats" were at least partly pep talks and, later on, partly propaganda to keep people focused and drinking the Kool-Aid, but they worked. And just like a family, they helped us rally around each other, especially when things started taking a turn for the worse. But that wouldn't be for a while yet...

\* D.A.M. (Digital Automatic Music) CD-Rs were not audio CDs, but rather contained MP3 files. This meant that the CD could not be played on some traditional players, but more than 72 minutes of music could be placed on it.

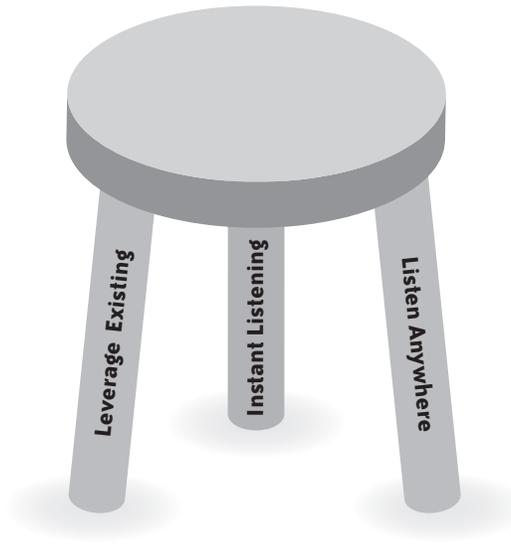
And listening to Michael (as he was generally referred to) was always interesting because he is a visionary. You might not always agree with his vision or his implementation, but he is able to think in terms of the bigger picture and think outside the box. This can be a mixed blessing at times, as he is very passionate about his ideas and he's not afraid to tell you when you're wrong. This always made it a bit scary to interact with him, as you never knew what you were going to get: was it going to be the rush of knowing your ideas were being heard by The Boss and that you might be given *carte blanche*? Or was it going to be the screaming, berating Michael, someone who there was no arguing with—at least not if you valued your job—who no amount of reason could reach, no matter how you chose your words, no matter what evidence you had to the contrary: his word was the final one.

This, of course, was the rush and what made Michael great: his passion; his clear vision; his ability to envision a product seemingly in its entirety and express it; or to take a nugget of an idea and explore it, riffing off one idea after another until it had become a product. And inherent in all of this were the confidence and certainty that took these ideas to fruition. It could be an emotional roller coaster, but there was no greater high than when you were bringing one of these ideas to life.

So when John DeRose began to tell the six of us about Michael's idea, on some level it wasn't terribly surprising: Michael had a vision for the direction the company would go in, a vision for a path to profitability, and John was asking us to assess it and determine whether we could pull it off. The idea itself was still fairly fresh and nebulous, like a concept you're talking through, but the gist of it was to roll out "...a service which has three legs. The first leg is that you should be able to leverage your existing music collection (you don't want to have to repurchase anything). The second leg is that if you buy new music, it should be immediately available for you to listen to, and the third leg is that you should be able to listen to your music wherever you are and on any device you want to listen to it from."

We were listening intently, trying to figure out where this was going, when John let us know exactly where: we were going to rip (i.e., copy a music file from a CD onto your hard drive) a whole slew of CDs, and if users could prove they owned that CD, we would allow them access to it via our site.

To explain the argument, dubious as it may or may not have been, as to why ripping tens of thousands of CDs seemed at all congruous with any sort of valid business model while all around the nation (and probably the world) the Recording Industry Association of America (RIAA) was fighting tooth and nail the notion that even creating an MP3 file, for *whatever* use, was illegal, one has to jump back to the ripe old year of 1976 when the first video recorder—the Betamax—was released by Sony. Long story short, Sony was sued for copyright infringement because the Betamax allowed you to record TV shows, movies, or whatever was on TV—something that had not been possible before and which was viewed as an infringement of the broadcaster's rights. Sony won the legal battle, and a concept called "time shifting" emerged from the court decision which states that a user can store copyrighted content to a more convenient medium for use at a later time. This is also known as the "Betamax Decision."



*MP3.Com's killer app: an online service that allows you to manage all of your music in one place, accessible from anywhere*

The corollary to “time shifting” is “space shifting,” and is the concept that you can make a copy of certain media you already “own”—CDs, DVDs, records—to another form of media such as copying a CD to a tape. This concept was successfully argued in a case brought against an MP3 player manufacturer—Diamond Multimedia Systems—by the RIAA, which unsuccessfully argued that copying music from a CD to an MP3 player was a violation of copyright law.



*A poster from MP3.Com that exemplifies the extensive propaganda campaign that was part of the RIAA's attempt at quashing music piracy*

Based on these precedents, someone (presumably our legal department) OKed the idea that we could rip a number of CDs and make them available to users who could prove that

they owned the content. We were merely allowing them to “space-shift” content that they already owned. There was some additional discussion, but as Josh Stevens puts it, “We all put on our Junior Lawyer hats and set about trying to design a system that would be secure and prevent anyone who didn’t own the content from getting access to that music.” You see, from our perspective, we thought that as long as we could keep the system secure, we wouldn’t get sued, whereas if the system wasn’t secure and they (the RIAA) determined that music could unlawfully be accessed, we were in trouble.

Mind you, there was still quite a bit of grumbling about possible lawsuits, even among the six of us. In fact, I may have been one of the only people who did believe the party line and just accepted that what we were being asked to do was legal. They said the lawyers had checked it, and, well, I’m no lawyer, so I went with it. Whoops! Yet, perhaps there were other factors involved, first and foremost being the unreality field that seemed to surround many of the projects we undertook at MP3.Com. I was mainly just happy to be working in this amazing environment with so many talented folks all around me.

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## THE PLAN

1. Rip 10,000 of the most popular CDs (based on historic sales).
  2. Build web interface for managing content.
  3. Create software so users can verify CDs they own (“Beam It”).
  4. Find retail partners to enable “instant listening.”
  5. Develop system to pay royalties directly to artists.
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And so we started designing a system that would allow users to manage and stream music, whether the artists were on MP3.Com or were from major labels (whose CD you physically owned). The system would be based upon our existing My.MP3.com website, which allowed you to do something similar with MP3.Com artists. My.MP3.com would get a facelift and we would need to add significant functionality to lock down the new content, but it was a good starting point. Meanwhile, we would be taking our first foray into software, offering a tool which My.MP3.com users could download and use to verify that they owned a particular CD.

The new website would be still be dubbed “My.MP3.com,” but the code name for the project was “Da Bomb”: a reference both to the atom bomb, as we expected this service to change the music industry forever (much like the atom bomb had changed warfare forever), and to the Parliament lyric from P-Funk for a music reference (and ‘cuz we’re cool, dig?).

Independent of this, but at about the same time as Da Bomb was taking off, I started working on a side project with another engineer, Brian Degenhardt, involving user and concurrency tracking. Long story short(er), MP3.Com had no way of checking if a user was currently playing a song or not. We passed around browser cookies, so we knew your MP3.Com ID, but the server farm had no idea if you were logged in to multiple computers concurrently or not; it just logged that you had requested a song at a certain time. This was one of those projects where no one asked us to do it—and actually, different people told me that it wasn't something we needed—but we just decided to do it anyway. I went around and polled the people I thought might be able to use this data, and then Brian and I spent a few late nights around a whiteboard determining the project requirements and scoping out how the pieces were going to work together. It was a blast: we were both pretty young, and this was—I'm pretty sure—our first "big" project that we started designing from scratch. There was a buzz: we were modifying how all of the music on our site was served to end users. By ourselves. Because we were *allowed* to. That's just cool.

Brian was just hilarious to work with, too. He was a complete goof, straight out of college, and had this positive-world outlook which manifested itself by him just talking excitedly about the geekiest of Apache internals to anyone who would listen, able to come up with the funniest—yet dead accurate—analogies which distilled what was actually going on down to a silly caricature involving "See, you've got this elephant, and it wants to pick up the peanut, but it can't because..." Yeah. A mile a minute and never stopping until he's figured out just why Apache isn't doing exactly the right thing that he wants it to do. I actually have no clue how we started working on the project together. Sander was probably up to his neck in other "High Geek" activities and either he directed me to talk to Brian, or somehow Brian and I just started talking to each other across the cubicle wall as we were both generally there pretty late. This was what working at MP3.Com was all about: being empowered to work on crazy stuff with cool people, figuring out how to solve a problem, and then just *doing* it, learning the ins and outs along the way.

## A Calculated Risk...

It's December, and Da Bomb is in full swing. The secret is out, too—at least within the company: a few weeks before, the executive VP of engineering, Delon Dotson, announced the project to the engineering staff, and Michael announced it to the rest of the company at a Chairman's Chat shortly thereafter. MP3.Com was now in full "music acquisition" mode, buying all the CDs it could get its hands on, including offering employees \$20 for each CD from their collection which they're willing to part with. The goal: acquire the 10,000 most popular CDs ever sold so that when My.MP3.com users buy a CD from a partnering vendor, or attempt to "Beam" (i.e., verify) a CD they have in their collection, there's a high chance that we'll have that music in our database. This is a tougher problem than expected because it turns out that for each CD there may be multiple versions. Our "Beam It" software is refined enough to detect this when you attempt to verify a CD from your collection, and if we don't have that particular version of that album, our software won't allow you to listen to it from our servers. This is good from a security standpoint—

you can't listen to music you don't own—but bad from an end-user perspective: "I can't believe they don't have 'Dark Side of the Moon!'" Meanwhile, there are at least eight different versions of "Dark Side of the Moon," and even though the music on each one is identical to the listener, the master tapes were slightly different: enough that the data didn't match when comparing the files.

It turns out that 10,000 CDs is not just a nice round number: unbeknownst to us, Robin Richards, the president of MP3.Com, has approved Da Bomb on the condition that only 10,000 CDs be initially loaded into the system. Why 10,000? Well, Robin has done the numbers, and with \$400 million in the bank and an expected maximum fine of \$10,000 to \$25,000 per copyright infringement, even if we do get sued and somehow lose, we'll still have money in the bank. It is a calculated risk, but one worth taking: if My.MP3.com takes off, MP3.Com has a huge lead on all of its competitors and will dominate the industry.

Meanwhile, the development teams are still going full steam ahead in intense development and QA cycles, and people are starting to get frazzled. Christopher Giles is the only engineer developing the new My.MP3.com—as he had been responsible for the pre-Bomb incarnation of the site—and the task has been daunting, including a complete redesign of the user interface, adding user handling and tracking, optimizing and reoptimizing the scripts so that they do not completely hose the database or take more than a second or two to load, etc. On top of this, it is apparent that Christopher—never one to be particularly laid back to begin with\*—is chafing under John's insistent, detail-oriented (is that code for "micromanaging"? I'm not sure...) management style. For his part, John is on a mission to keep everything and everybody on schedule, and he's not shy about confronting you when he's concerned that the schedule isn't going to hold.

Things finally come to a head when Christopher calls John an "autocrat," and a minute later they disappear into a conference room. Fifteen feet away I can hear the heated discussion from behind that closed door. Ten minutes later, they emerge and it's clear that Christopher is not happy: this isn't necessarily anything new, as he's a bit of a sourpuss to begin with (although a nice enough guy once you get to know him better and/or don't have to work with him), but this time he's even unhappier than usual. John does not look too out of sorts, but he's a tough one to read (Degenhardt says: "John DeRose is an enigma wrapped inside a mystery," and I don't think he's too far off). And honestly, in two years of working with John, I think this is the only time that I saw him lose his cool with someone. This isn't to say that he couldn't hold a hard line or be insistent about what he wanted (or that you were wrong), but the man has an amazing ability to avoid direct conflict with people, usually by spinning the topic of discussion up to a high enough level

\* Christopher had a penchant for not waiting more than 30 seconds—from the moment music had come out of your computer speakers at the lowest possible volume—to walk straight over to your cube and say in the most annoyed voice possible, "Could you turn that off? People are trying to work." Meanwhile, we're working at a music company and this sometimes requires us to have music on. I have heard that he was the sole reason we got offices, as opposed to cubes, when we moved into the engineering building.

of abstraction that there is no longer any disagreement. And this makes me wonder: what was it about Christopher Giles that made John lose his cool? Was it someone directly confronting him and his authority? Or was it something deeper, as I don't think I had ever seen John hound someone as hard as he did with Christopher.

One thing I have to consider is a point that a few people (including John) had mentioned to me about the MP3.Com hiring process. At the time when MP3.Com was hiring five or six engineers a week, the fundamental questions asked after a candidate had made the rounds were: "Can you work with this person?" and "Do you respect their intellect?" While in and of themselves these questions aren't any different from what you'd find in many workplaces, it seems like MP3.Com took them to heart a bit more than most. They were explicit and at the front of your consciousness during the entire interview, resulting in more than one amazing candidate being passed on just because they were "octagonal pegs" that weren't the right fit for MP3.Com.\* There were lots criteria which could make you a good fit, interest in open source tools and/or a willingness to learn them being a primary one, but it really came down to a personal assessment and the desire to not settle on anyone who was less than A level.

In many ways, Christopher did not fit into the culture at MP3.Com, and he seemed like a bit of a loner and an odd man out. This makes me curious if some of the interaction between him and John wasn't dictated by a lack of fundamental respect stemming from differing world views. This lack of respect came from both parties; I suspect that accounted for at least a portion of the friction. Needless to say, I think that episode marked the beginning of the end for Christopher, as he would leave for Microsoft a few short months later.

### **Gentlemen, Start Your Rippers...**

Ripping 10,000 CDs is a Herculean task in and of itself, but add the need to accurately enter all of the data from each album into a database—song names, year, artist names, etc.—and things start to get ridiculous. It comes out to around fifty CDs per person if everyone in our 200-person company contributed, but that assumes doing each CD only once and not having any data verification, which of course we wanted, so that put us up to over 100 CDs per person, if everyone contributes. But contribute they did. Michael announced during a Chairman's Chat one Friday that we needed everyone's help in getting this done, and lo and behold, I'm fairly certain that every employee took part: taking shifts to come down to the makeshift ripping area, using it as a break from their daily grind, and taking CDs back to their desk to work on them during downtime throughout the day. Even Michael took part in the process, although Robin Richards was out of town at the time and did not.

Over the next two weeks or so we slowly chewed through the CDs the company had purchased either from stores or from employees. It was a pretty tremendous sight to behold, and even more so it was a team-building process as you watched the office admin next to the VP of sales, the tiny on-staff masseuse, Linda, next to Paradise, one of the head musi-

\* *Octagonal pegs* is such a great term that I can't steal it: David Dudas is responsible for it.

cologists as well as a founding father of hip hop. People were getting excited, and, while there was still grumbling about the legality of our situation, we were starting to get back some of the cohesiveness which we had lost as we grew from 60 or 70 people six months prior to the almost 200 that we were at now.

There's only one thing that I'm not sure anyone understood at the time: we weren't ripping 10,000 CDs.

When Robin returned, he was in for a shock: 40,000+ CDs had been ripped onto a number of file servers, just waiting to be "unlocked" by users who owned those very CDs as soon as the My.MP3.com service went live. I'm actually not sure how or when this was discovered: did Robin get back and just see people ripping away, but assumed they were working on the 10,000 he had specified, realizing only when they had finished that the full 40,000 we had acquired had been ripped? Did the engineers realize that there was a hard limit of 10,000, or did they think 10,000 was merely the goal, and since people were still ripping, they might as well go through them all? Did Michael tell people to just rip them all, fully aware that there were more than 10,000 there?

I'm sure someone knows, but by that time it didn't matter: when My.MP3.com went live, roughly 40,000 CDs had been ripped, four times as many as had been specified, with a potential fine four times as high, and enough to put us out of business. Unless we wanted to delete all of those albums—and we'd probably have to just delete them all and start from scratch, losing weeks of productivity—the stakes of the game had just gotten a whole lot higher. But we were oblivious. We were changing the world and fighting against the evil corporate music industry. Da Bomb represented the future of music and the major labels were merely unwilling to cede control. It was up to us to bring music into the twenty-first century, and we were going to do it in a legal way: merely allowing users to space-shift content they "owned." So what did we do? We kept ripping.

## The Final Month

Meanwhile, back at the ranch, work on Da Bomb was starting to spill over into all areas of engineering. James Park was the point person on developing the user interface (UI) for the new My.MP3.com service. He was faced with the unenviable (but not altogether unusual) task of developing a UI spec for a service which didn't exist yet, and more specifically, whose performance was unknown. This last bit was key: this was the only area of our website which would be doing live database queries, and the current prototypes were slow. Having our new, premier, best-thing-since-sliced-bread-how-did-I-ever-live-without-this service (My.MP3.com) be equated with "slow" was not acceptable in the eyes of management, and it was up to James to figure out how to design a workable UI which didn't require too much data from the database, and therefore minimized the DB query times.\*

But an interesting thing happened here: James pulled in two of his cohorts from the design group—Brian Callahan and Nancy Bachman—and it soon became apparent that these folks were not invited to the party. It's not that they weren't technically competent

or adding value to the project—they did all of that—it’s just that they weren’t part of the “Cool Kids Club” (yet). Or so it was presumed from the dirty looks when James pulled them into meetings, or the lack of invitations to these meetings in the first place! It was a wholly bizarre phenomenon which seemed to manifest itself fairly frequently at MP3.Com: either you were a “chosen one,” in which case you could do no wrong, or you were one of the grunts who were put on whatever “this needs to get done, but it’s not particularly sexy” task. No glory, just keeping the site up and running smoothly.

This had ramifications into how management worked, too. If you were the current “go to” person or manager, the high-profile projects flowed to you, and as long as you completed the project, you got more and more visibility. In the engineering department, would-be managers were constantly jockeying for position to become the next director or vice president, and this visibility was key to your ascension.

Of course, being able to successfully complete these tasks was all about the team that you assembled. If you managed to get the top performers, or the team that had mad chemistry, or the guy with the amazing skills, then the work came to you. Sometimes it came because the person on your team had the skills that were the best fit for the job, and sometimes it was just because you had performed well on the previous task, but it worked.

So managers were constantly attempting to align themselves with the top performers so that they could succeed themselves. Any management reshuffle resulted in a “kids in the schoolyard” scenario where first it was my pick, then your pick, then my pick again, without the overt trauma of waiting to see when you would be picked, but still with the knowledge that you had gotten dumped for someone “better” when things were reshuffled.

It was a mixed bag, moralewise, for the actual engineers. It was incentive to keep performing—“If I keep kicking ass, I’ll keep getting the cool projects” or “If I work my ass off, maybe I’ll get to work on this other project”—but could be crushing after you put in long hours, only to be shat upon. “I just worked 80-hour weeks for months and now you’re going to reward me by putting me on the boring maintenance project? The hell with that...”\*

While this reshuffling wasn’t a constant thing, at least in engineering, it did seem to happen every four to 7.25 months, and one could never tell how it was going to turn out. A feeding frenzy would begin when a top manager would leave the company, or—more often—fall out of Michael’s favor, and all of a sudden there would be a flurry of activity: existing top management huddling in a conference room, people being pulled aside to be asked “Would you like to work for me?” or “What do you think about managing a team of

\* IIRC, there were also some technical issues related to getting our homegrown XML-templating system to play nicely with XML data which was generated on the fly from live database queries and which didn’t exist as a file on the filesystem, per se, but I may be misremembering.

\* There were other incentives for high-visibility projects, with options being given as rewards for particular *intense* projects, and they certainly helped morale, but in a slightly different way. MP3.Com also paid pretty reasonable wages to begin with, which should be taken into consideration.

engineers?” and general upheaval, which you might miss if you weren’t paying attention, but was there if you knew what to look for.

James probably rankled some egos by bringing people from “outside the fold” into the project—whether because they weren’t in the right manager’s group and therefore would be bringing prestige to someone else, or because of some never discussed elitism—but the three of them managed to get the job done. In fact, not only did they get it done, but the site was beautiful, and even more, sleek and slick from an end-user perspective. It just worked and was the way it should have been.

Over the course of the project, however, it became apparent that the most elegant way to solve a number of the problems at hand was to use JavaScript. I can see you sitting there wondering where I’m going with this. Well, let’s take a second to remember that the year is 1999, and while JavaScript is far from new, the implementation of JavaScript varies widely across the two or three major web browsers in existence.

And?

Well, the “And” is that we didn’t use JavaScript at all on our website because, well, because there was no way we could provide a uniform user experience: different browsers supported different things, people were still browsing with JavaScript turned off, and it was generally just a nightmare because you could never be sure what would and wouldn’t work. It was already hard enough to make sure pages looked the same across different browser/architecture combinations, and adding a semisupported scripting language was just not in the cards.

But desperate times call for desperate measures, and we were making the great leap forward with our very “geek-oriented” service, using JavaScript to provide the best possible service. Once again, the beauty and power of this environment were peeking through: James checked in with the director of web design on using JavaScript and then ran with it, moving the entire My.MP3.com site into a new and taboo realm.

The site was so beautiful, in fact, that said director of all things *visual* made the executive decision that we should redesign the entire website to match the branding of the impending My.MP3.com site...

*Curtain rises on the engineering department of MP3.Com, currently living in cubicle land. It is almost midnight on the Friday before Christmas. Both the web team and the QA department have been working for over 12 hours on the rebranded website, reporting bugs, tweaking templates, and generally trying to get the new design finished off. One web designer in particular, Brian Callahan, has probably not slept more than three hours a night for the past four days, often leaving at six in the morning as the director of his group is coming in to the office. But it’s not just that he’s bleary-eyed; he’s also having visions of his wife filing for divorce, especially since their Christmas party is in full swing at his apartment 10 miles away, and he’s still stuck here.*

Finally, he snaps: “Can anybody tell me why the *hell* this has to be done tonight?”

Blank stares...

Finally, Medha Parlikar, the lead QA engineer, walks up behind him, gives his shoulder a quick rub, and says, “Yeah, we’re all tired. It may be time to go home.”

*Curtain closes on Brian driving home, finally ready to celebrate...or fall over.*

## **I Am So Smart: S-M-R-T...S-M-A-R-T**

By the time everyone returned from the Christmas break, the company was, as Robin used to say, “firing on all cylinders.” Everyone was working crazy hours, especially our systems guys (who seemed to be building half a dozen new servers every day, never mind the normal tasks of installing new network appliances—the ones that didn’t fall off the truck when being delivered, that is—and managing terabytes of storage) and our crack QA team, who were charged with testing each new piece as it was completed and came online. I was still fighting with both Perl extensions and Apache modules at this point, which were functional but still had some lingering bugs on the data reporting side. To me, it was an exercise in banging my head against a wall repeatedly: I just wanted it to be done. In all honesty, I was kind of jealous of Degenhardt, too: even though we had spec’d out the concurrency service together, he was the one who got to implement it. It was actually probably better that way: he did a killer job and I had my hands full, but there was a little bit of longing as I struggled with Apache and Perl day after day.

We still touched base on it periodically, bouncing ideas off one another regarding how things should be implemented (or maybe it was just me asking him questions so that I could feel like I still knew what was going on!), and one of the cooler things he did—and this was typical BMD—was to use representative MP3 files for error conditions. As in, if you tripped the security sensor, you ended up being served an “error” MP3 in your playlist instead of the song you requested. Of course, they weren’t just any MP3s; they were five-second clips of Homer Simpson! Case in point: if you were trying to play more than one song at once, the servers would ding you and serve up a recording of Homer saying: “I am so smart: S-M-R-T ... S-M-A-R-T!” Brilliant! (Although that audio clip will forever be embedded in my brain as a result.)

The funniest part, however, was that when it came time to test the system, QA was beat up and tired enough that they just came to him and said, “We don’t understand. The server keeps playing the same song over and over again, and it’s just this guy speaking...”

D’oh!

Miscommunications aside, development was moving right along. Of course, there were minor blips, like the fact that we moved our servers to a *brand-spanking new* data center a week before the release, but this was all part of the excitement, right? Right...

Well, OK, there were still other minor difficulties. About a week before the scheduled January 11 release, Michael was given his first test drive of the system and he absolutely, positively lost his collective s\_\_t. “Who is responsible for this???” In a flash, the VP of engineering, the director of web design, and just about everyone involved in the decision-making process has been herded into Michael’s office. You can guess what the problem

was: *JavaScript!!!* This was the darker side of MP3.Com’s “take initiative” mentality: it was all fine and good until you did something wrong or got on Michael’s bad side. This was a shame, but the way it was: you went from working your ass off, following your muse, riding high and on your game, invulnerable, the chosen one, to ... nothing. And you were powerless to do anything.\*

Even with these issues and non-issues, however, the My.MP3.com service launched with very few issues. We went live just after midnight January 12, 2000, one day after we were supposed to release the site. The biggest issue we encountered was that only about half the servers were actually displaying the new content when we first pushed the site live, but before too long everything was going smooth as silk.

And the company? Well, the folks who were there at least, which was most of engineering, were ecstatic. There was beer and champagne, and people standing around in case they were needed, almost paralyzed in wonderment at what the future was about to bring.

## Engineering Department Smokes a Collective Cigarette

It’s hard to describe the attitude at MP3.Com after the release of My.MP3.com as anything but post-coital. The staff was in a daze—a good one, mind you—waiting to see what would happen next. We watched the news sites and waited for something, *anything*, to happen. We knew it couldn’t be too long before the RIAA or one of the majors did *something*, but beyond some initial and relatively minor posturing, everything seemed fairly quiet; almost too quiet. And so things started to get back to “normal,” or at least to “non-emergency” mode. It’s not that there was a lack of work to do: quite the opposite. Things were still humming: My.MP3.com was undergoing a full redesign, we were upgrading the rest of our music-serving infrastructure to utilize some of the functionality we had designed for Da Bomb, and generally we continued with the day-to-day tasks that had fallen by the wayside during development of Da Bomb.

It was a bit weird, actually, because all of the anticipation, all of the buildup and energy that had gone into releasing My.MP3.com, just sort of dissipated. There was no project that everyone was clamoring to work on, no “this thing that is going on is something bigger than me, something bigger than the tasks I work on daily” feeling which inspired people to work what amounted to a second job just so that they could be a part of it. This doesn’t mean that people weren’t working 60- or 70-hour weeks, but perhaps just that we weren’t working that many hours *together* as a greater organism, instead having gone back to our individual projects and small groups.

\* Quite the Catch-22 when you think of it: either you reach for the sun, Icarus-style, or you go nowhere. Yet there’s always the risk of flying too high. I was among those who didn’t reach: when my manager said to me, “We were thinking about you in a management position...” I essentially responded with a “Who, me?” Probably not the best answer if you’re looking to move up in the world.

But with things returning to normal, some of the management “jockeying for position” which had lain (somewhat) dormant awoke from its slumber. More importantly, this was the first time it affected me.

The first thing to happen was that the meeting I had been trying to schedule with my manager for the past two months (and which he had repeatedly missed, which was somewhat understandable given the fact that he was managing the biggest project the company had ever undertaken) finally came about. We went into the little side office, and...

“Tom, I’ve got some good news for ya, buddy, you’re getting a raise!”

(Conversation continues, discussing the amount and how this is going to work, with me patiently waiting to see what comes next.)

“John, I’m really happy to be getting a raise, but honestly, that’s not at the level I expected given what you had told me when I was hired on. You had specifically said that I could expect to be making between *X* and *Y* within three to five months: it’s now been six months and this raise doesn’t even bring me up to the minimum amount.”

“I’m sorry to hear that you’re disappointed. Did you get that in writing when we hired you?”

(Mentally slaps forehead.)

“No. No, I didn’t.”

“Well, I’m sorry Tom. There’s really nothing I can do about that then...”

I was annoyed: I felt like I had taken a salary of less than I was worth with the understanding that this would be rectified within a relatively short period of time once I had shown I could perform. Was I not performing? Or was I just getting screwed because this is how *every* company works: they hire you for as low as they can get you, and then give you incremental raises, but rarely a “step” raise.

I found out the answer to whether I was performing a couple of weeks later when I got word that I was being shifted from John’s group to work for Justine Correa in the infrastructure group. While this made sense based on the projects I was currently working on, it felt like a demotion. I had been traded for one or two programmers in Justine’s department, and in looking at the guys that John ended up with, I felt like I was getting shoved off to the minors. I was crushed and felt fairly worthless—or more specifically, like I was no longer one of the Blessed who got to work on the cool projects.\*

\* This transition was not without its upsides, though, including a new manager who went to bat to get me a retroactive raise. Yowza!

## Intermission: The Founding of a Panda Preserve

Two months after the rollout of the My.MP3.com service, it was finally time for the engineering department to move to its new building. For months now we had patiently waited as Randy Blumhagen, our facilities manager, worked his magic, and we were not disappointed. Walking into the building you were immediately confronted with a sweeping, curved stairway leading to the second floor (the first floor was still gutted and under construction at this point), black and blood-red carpet with sweeping flame designs awaiting as you crested into a 30 × 60-foot open space strewn with stylish furniture—gentle curves and overstated arms and backs—all designed to match a high-ceilinged, warehousey feel, bounded by a row of offices framed up on either side. To your right and left were groupings of chairs, couches, and tables—gathering places for “open room” meetings—with castle turret rounded walls and windows overlooking the 805 on one side and the identical “non-engineering” building on the other, parking lot filled with shiny cars.

All in all, the space was more a huge, high-industrial-ceilinged warehouse that happened to have a ring of offices on the outer, window-facing edge and what looked like a row of two or three shipping containers placed end to end—set about 4 feet from the outer ring of offices and with a half-length football field between them. There was another bank of offices, but they were dwarfed by the space, which was *huge*. And stylish: the offices were beautiful and yet modern, with designs that varied by row, some with fishbowl pop-out windows, others cave-like.

I ended up in the row of offices whose outer wall was translucent corrugated plastic, opaque enough so that you couldn't see through it but allowing some ambient light from the windows to seep in, and sharing an office with two other programmers: G.K. Parish-Philp and David Dudas, which, of course, is a story unto itself. You see, as the months in cubicle land went from one to the next, it seems that the occasional disquiet or minor complaints had been met with the reassurance that “once engineering moved into its own space, things would change” and the rules would be different. Everything from noise issues—whether talking or quiet music—to people not wearing shoes was met with this perfectly reasonable mantra that allowed everyone to (sometimes begrudgingly) get back to work, assured that before too long everything would be OK. I suspect that some of these even affected the way the space eventually turned out, as I'm not sure we would have ended up with offices had it not been for the squeaky wheel who was so easily disturbed, which is a testament to the appreciation that management had for the engineering staff. These good feelings continued as we were asked to pick office mates—whomever we wanted—and the like.

But by the time we were getting ready to move in, some of these promises seemed to fade away in people's minds: situations had changed, “issues” had been forgotten, and, well, any previous statements made no longer applied. One issue that came up was that of office mates. We had long been promised that we could share an office with whomever we liked, but now there were rumblings that managers wanted all of their reports sitting together. There didn't seem to be any logic behind this, other than it being a control issue

and the preference of a particular manager or two, but again, the overarching management style of “keep the engineers happy” shone through, with (I believe) John DeRose going to management and saying, “This is what these guys want. Let them sit together. It’s more important for the work environment to be good than for people to sit with their groups.” And so it was. And needless to say, the cross-pollination ended up being a good thing as well, because it meant that the different groups—applications development, systems, web development—all had a slightly better understanding of who was working on what, and how some of the different pieces came together.

### “You Realists Can Stay the Hell Out of Our Office!”

I can easily say that my fondest memories of MP3.Com stem from sharing an office with David and GK. For starters, we decided that rather than have someone sit with their back facing the window, all three of us would set up our desks adjacent to each other so that two of us were sitting perpendicular to the window—just look 90 degrees and you have a view—and the third facing toward the window, forming three sides of a square with the window as the fourth and our jungle arrangement of plants in the center. Next, we brought in musical instruments—GK brought a guitar, bass, and didgeridoo, Dave brought a guitar amp, and I brought my bass amp, and, well, we were wired, instruments hanging from hooks on the wall, just calling out to you anytime you had coder’s block and needed a few to get your neurons to fire around the problem instead of slamming your head against the wall.

A completely unintended consequence of this was due to the large number of amazing musicians who worked at MP3.Com. I can still remember the first time Rattlesnake Ray Matthews, currently a web designer, walked into our office and, without saying a word, walked past where GK and I were sitting, picked the guitar off the wall, plugged in, and let loose with this amazing blues lick for something like two minutes before unplugging, hanging up the guitar, and leaving. Un. F\_\_ing. Believable. I don’t think any of us had even known that he could play before that. This ended up happening probably about twice a month, and it was just a welcome relief and always brought a smile to our faces. (It turns out that Ray had been a session musician for a good long while, even touring as Madonna’s guitarist, I believe, and was now working a straight job to—among other things—put his kid through school.)

The dynamic in our office was one that fostered communication—or more specifically, discussion. GK was a philosophy major from Texas A&M turned software engineer, David was a vegan and a Buddhist who had grown up under interesting circumstances in Detroit, and I was, well, the consummate devil’s advocate, a jack-of-all-trades, and a person with an interesting take on life. Topics ranged from the nature of addiction to the best Beastie Boys album (*Paul’s Boutique* was groundbreaking, but *Check Your Head* was funkier and a better overall album with a deeper groove), dissertations on how the mind processed information to our ability to define our own destiny, and assertions from David and GK that “reality” was strictly a function of subjective perception (and therefore non-existent). There was a crazy energy about it all, and a bit of magic in the air with occurrences

like a plastic bag floating up in front of our office window, cued by our discussing the symbolism of the plastic bag in the recently released movie *American Beauty*.

It wasn't all "philosophical discussions on the true nature of the proletariat in American society," either. David and I would regularly check each other's Perl code, or at least provide a second set of eyes and an ear for a sounding board. More often than not, just this process of trying to *describe* a problem you were coming up against was enough to turn on the light bulb and allow you to solve the problem yourself, but the talking it through was an integral part of the process. The whole dynamic was one that fostered a healthy work environment, where 75% of the time you sat there working in silence—headphones on, or someone choosing the next album without being asked—and the rest of the time you felt OK asking for help should you get stuck ... but you waited until you *were* stuck.

I did feel bad for the folks who reported to GK, though. It seemed like once a week someone would come in and patiently wait for us to finish whatever bizarre tangent we were pursuing, sometimes sitting there for 10 minutes before we finished—or before they left because it really wasn't that important. The odd thing was that it was rare for anyone to jump in and contribute, which always just struck me as a bit weird.

Brian Callahan probably bore the brunt of our tangents, as he was frequently popping by the office for direction. When he finally left MP3.Com to seek his own fortunes, he posted a long missive of fond memories and other minutiae to the internal BBS. His tribute to our office was "I dare anyone who considers themselves a realist to drop by David and GK's office" (I had since moved elsewhere), to which David promptly responded:

"You realists can stay the hell out of our office."

'Nuff said.

## Not with a Bang, But with a Whimper...

Even before moving into the new offices, we had been sued for copyright infringement by the RIAA (on behalf of the major record labels), the Harry Fox Agency, which owned the publishing rights to a large portion of the songs in our "library," and a number of smaller record labels.\* This had happened January 21, 10 long days after we had gone live with My.MP3.com. While this wasn't entirely unexpected, it was slightly worrisome, especially the language in some of the reports: "...clear case of copyright infringement..." etc. Special "All Staff" meetings were called where we were told how this was normal and to be expected. We received updates and assurances in the weekly Chairman's Chat about how we were doing, who we were talking to, how we had enough money in the bank and were fine, but it was worrisome. Meanwhile, we hadn't stopped ripping CDs; instead, we were adding 1,500 new CDs to our database per day.

\* Songs have two types of copyrights: the publishing rights and the recording rights. Each has to be licensed separately depending on the use.

All said and done, though, I don't remember much open talk or concern about our demise. I'm not sure if this is because people had drunk the Kool-Aid and believed we would be OK—after all, it was in their best interest to believe this (who wants to be unhappy and all doom and gloom when it's your potential fortune at risk)—or if people just weren't talking about it. To be honest, there was a certain air of invincibility that we carried with us: we had a dream team of engineers assembled, had solved every challenge which faced us, had revenue streams ... it didn't seem like anything could affect us. We were changing the world. It was obvious to us that this was the next step for music, that the record labels were behind the times and would have to come around sooner or later to the fact that music was going to be distributed digitally, that DRM was dead in the water and always would be, and that here we were, providing them with a tailor-made service, complete with top-notch statistical reporting so that they knew *exactly* how many times a song was played, and by whom. The data mining opportunities were endless, the opportunities in general were endless, and really, it would just allow them to reach more consumers. In fact, we wanted to pay them money in licensing. We were already seeking to pay artists directly when their songs were played, just so that they would get the royalties that they deserved. How could this not work?

But as time went on, as more and more court dates came and passed, some of this optimism faded, too. People all over the company were leaving in dribs and drabs. They left for different reasons—some had reached dead ends because they had fallen from favor, not able to work on anything interesting but instead just passing the time (and becoming less productive as a result), others because they were bored at the direction the company was going: we had shifted into “make money, maintain/upgrade infrastructure” mode and away from the initial “change the world” mindset which had been so exciting in the beginning. Sure, My.MP3.com was an attempt at changing the world, but it was built, and mid-flight we were merely watching to see if it cleared the Earth's orbit or got sucked back down. It was our world-changing shot, and the rest of our resources were geared toward opportunities which would bring in revenue, and these were rarely world-changing.

Then we had our first layoff in engineering. There had been culls in other departments before, but we had never really been affected up until now; we had been somehow safe. I found out recently that the folks in the other building referred to the engineering building as the Panda Preserve: the place where the rare breed got all the appropriate care and feeding and was removed from all the dangers of the real world. No more. The glass had been shattered.

Mind you, some (all?) of the people who were laid off in the first round had ceased to perform for whatever reason—morale, burnout, or just being given fewer opportunities, resulting in a general decline in productivity. It was hard to go from “top of the world” to “we're giving you the grunt work because you pissed someone off,” just as it was difficult to keep up the hectic pace which a lot of people were putting in, especially when there was always someone who was willing to step up and take your place, either someone within the company or someone who was thrilled at the chance to work for MP3.Com. I think my dear friend and former cubical mate, James Park, left in that cull. He had never

been the same after the My.MP3.com release: for whatever reason, be it the JavaScript, his ignorance of the hierarchy and bringing people in to meetings, or possibly something as simple as merely dropping by a My.MP3.com release party but not staying for hours to hang out with the managers and engineers who made the site work, he somehow dropped to second-class-citizen status. He had never really been given a chance to prove himself again.

Personally, I was still enjoying the work at MP3.Com, but I was starting to entertain thoughts about my general career trajectory. I had entered MP3.Com a person who wanted to work with other geeks, who was searching for that camaraderie and circle of peers that would provide a rapport and, in the end, raise the level of the work I performed through collaboration and the bar set by those surrounding me. The one other thing I had been looking for was the ability to change the world. Three months before interviewing at MP3.Com, I had been discussing the future of music in the digital age with a fellow traveler from the Netherlands. Here I had the opportunity to affect that change.

But as the company moved on, as we stopped focusing on the My.MP3.com service—or at least, while it was in legal limbo—and as the motives of senior management started to come into question (whisperings of “cashing out” and “selling us out so they can become millionaires” being heard for the first time), I started reconsidering what I was here for.

For the first time, I started to feel like my path was actually in chemical engineering (which I held a degree in but had never pursued, as Boulder had been lacking in entry-level chemical engineering jobs). This gut feeling was strengthened by the fact that I felt slightly out of my depth “academically” with some of the people around me: I had taken computer science courses, but perhaps didn’t have the same level of in-depth theory that they did. I was able to do my job, but it served as a juxtaposition: I *did* have that knowledge in chemical engineering, why wasn’t I going that route and bringing all of my resources to bear? These thoughts, coupled with a feeling coming into this job that if the “being a programmer at a dot-com surrounded by amazing programmers isn’t my bag, then I’m probably done in the computer industry,” formed a kernel of a question in the back of my mind: nothing solid yet, but the crystal had been seeded.

Meanwhile, our legal battle was slowly sliding away. We had settled with two, then three of the major labels, but things weren’t looking good for the remaining ones. Blame was placed on the judge involved, optimistic rhetoric abounded in the weekly chats, but Robin seemed a bit wearier, and some people were tuning out. Or were they? It’s really hard to tell what the general mindset was, as people were still busy and there was still more than enough work to do. The big difference was that the buzz seemed to be gone. People didn’t seem to be clamoring to work on projects: they did their jobs. They were still working 60- to 80-hour weeks, but it was to keep up, not to break new ground.

The final shift in mindset for me occurred over the course of a quick-turnaround, four-week race-to-market project where we built our first subscription service. It was an adrenaline rush to work on (I’m a big fan of Get-It-Done, compressed-timeline projects), but miscommunication between the QA department and the infrastructure department (that

would be me) killed me. It seemed like two or three days a week I would fire off an email at 4:30 a.m. saying, “Here’s what I’ve done. Here’s what should work. Here’s what doesn’t work. I’m going home and going to bed. I’ll be in at 10:00 a.m.,” only to get a phone call three hours later from my manager saying that something didn’t work. There are two problems with this: (a) I was working my ass off to try to get this thing to work, and calling me at 8:00 a.m. is not going to solve the problem, and (b), as often as not, QA had not read my email and were complaining about something which I had stated *did not work*. Ugh.

I don’t blame my manager. I know that she was getting it from the VP, who was hearing it from the director of QA that our stuff didn’t work.\* The problem was that I was starting to have nightmares about my cell phone ringing and I felt like I was putting my heart and soul into this project and getting no respect for doing so. Not long after the project went live (according to schedule), I tuned out. Sure, I got a nice set of (not-quite-worthless) stock options for my hard work, but that couldn’t give me back my state of mind or make me feel like I would be respected for working hard. I was done.

I kept working at MP3.Com for another year, and after awhile, things got better: one of the VPs—Dan O’Neill—took me under his wing and worked with me to start performing again. It was a big deal that he took the time and energy, and it worked to a certain extent. I was getting work done and getting code written, but my heart still wasn’t in it. I was working 40–50 hours a week, and that’s really not up to snuff in that environment. A day after the planes hit the Twin Towers, I was gone.

## Epilogue

On April 28, 2000, a summary judgment found MP3.Com in violation of copyright infringement and ordered a full trial to begin in August. The “space-shifted” content in the My.MP3.com service was shut down shortly thereafter, and icons resembling a padlock started to appear next to song names on your personalized My.MP3.com page, connoting that this song was unavailable. MP3.Com managed to reach deals with four of the five major record labels agreeing to pay a settlement and gaining a license to serve their content, once each copyright was verified.†

\* In all honesty, Justine was a great manager in that she protected her staff and totally went to bat for us, which was awesome. She also didn’t take any guff and would come straight to you to ... make sure everything was going to get done right and to ensure that you had the correct “sense of urgency” that some of the engineers didn’t always appear to have. Ahem. Unfortunately, while I can understand this latter management style, I chafed at it a bit as I’m pretty sure it’s going to take me longer to accomplish a task with someone literally looking over my shoulder.

† This “copyright verification” process lingered for months as the labels—who were not in the digital age—dragged their feet in responding to requests for verifications. The Harry Fox Agency was no better, and at one point we sent them two or more pallets stacked to the brim with copyright request forms (they wanted individual paper requests for each album). How many man-hours got siphoned from MP3.Com I can only imagine, but I bet the look on the faces of the folks at HFA was priceless.

On August 28, 2000, MP3.Com went to trial with the one label it could not reach a settlement with, and promptly lost the case nine days later. Before damages were awarded, however, a settlement was reached, but the damage was done.

Over the next months, MP3.Com soldiered on, looking for new revenue streams, partners, and “groundbreaking” applications. They also continued to bring back the now-licensed content, and the padlock icons started to disappear from content you had verified, although sometimes only three or four of the 10 songs in an album would be unlocked (frustrating, to say the least). Six months after settling with the last label, MP3.Com was purchased by the label in question: Vivendi Universal.

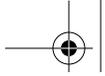
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## THE TIMELINE

1. January 12, 2000: Da Bomb drops.
2. January 21, 2000: RIAA sues MP3.Com.
3. April 28, 2000: MP3.Com loses summary judgment in copyright infringement suit, full trial to follow in August.
4. May 4, 2000: Major record label content in My.MP3.com service “locked” from use, but still appears in account.
5. June 9, 2000: MP3.Com settles out of court with Warner Music Group and BMG Entertainment, licensing its content for My.MP3.com.
6. July 28, 2000: MP3.Com settles out of court with EMI, licensing its content for My.MP3.com.
7. August 22, 2000: MP3.Com settles out of court with Sony Music Entertainment, licensing its content for My.MP3.com.
8. August 28, 2000: MP3.Com case goes to trial in *UMG v. MP3.Com*.
9. September 6, 2000: MP3.Com loses court case; Judge Rakoff orders MP3.Com to pay Universal Music Group damages.
10. October 18, 2000: MP3.Com reaches settlement with Harry Fox Agency, settling the publishing rights copyright infringement issue.
11. November 15, 2000: MP3.Com settles out of court with Universal Music Group, licensing its content for My.MP3.com.
12. December 21, 2000: MP3.Com enters into licensing deal with Warner Music.
13. May 21, 2001: Vivendi/Universal announces intent to acquire MP3.Com.

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In retrospect, continuing to rip CDs when we clearly didn’t have the money was sheer folly, but it was so very MP3.Com. You see, at some point early on, MP3 had become the bad boys—maybe only in our own minds—of a certain Internet space. We went toe to toe with the major record labels and didn’t back down: hell, we *countersued* after they sued us for copyright infringement!



In a way, this was all Michael. He defined MP3.Com and made it the company it was: a company that talented people flocked to because they wanted to be a part of it. This culture, once defined, both held the company together and sent it asunder.

Eight-plus years after Da Bomb was dropped, there are still headlines about music downloads and sharing. Some of the visions of the My.MP3.com service have come to fruition—Apple opened the iTunes Music store and started selling music—while some are now obsolete or yet to be realized. A surprising number of the areas are still topical, though...

## Afterword

There are thousands of things I can say about my time at MP3.Com, many more than I could ever fit into one chapter. I worked there for just over two tumultuous years and it was a ride I'll never forget.

One of the most amazing things, however, is the lasting nature of the friendships I built during those two years. I keep in touch with more people from MP3.Com than any other place that I've worked. And it's not just me. In talking to some of my old compatriots to verify dates and to hear their version of events, the most common comment I heard was the amazement at how much people hang out with each other and how strong the bonds are, even five or six years after many folks left. I'm not sure how much of this was accomplished upfront, by the hiring practices and making sure that only the "right" people got through the gates versus the experiences we shared, but whatever it was, it worked. Many of these same people are still working together today, although they all agree: it has never been the same as it was at MP3.Com.



