

January 5th, 2004, I will be leaving Hart InterCivic. Due primarily to unresolved ethical differences I have with our management's approach to customer support, I no longer see that I have any choice but to leave the company in order to underscore what I believe to be the critically serious and pervasive nature of the underlying problem we face. Based on the experiences I have had over the past several years and the lack of any real progress made, I am convinced that our upper management team has a complete lack of commitment to providing good customer support, and instead intends to rely heavily on luck and the patience of our customer base to scrape us through future elections without either negative press or profoundly serious election failures and violations of the laws, certifications, contracts, and promises we are held to.

As a professional technician I have been sickened and disgusted by our behavior, and our continued lack of focus on planning or execution of mid to long range support needs, both internal and external, makes me ashamed to be a Hart employee. Although I have tried suggestions, complaints, projects, group involvement, and research into the internal problems we have in providing support (as have all members of the Technical Services, Training, and Account Management teams) it's clear now that our problems continue to go unresolved primarily because they continue to fall upon deaf ears. I believe this lack of intent to provide good support is professionally unacceptable and unethical. My efforts to stem the tide have only enabled Hart management to ignore the consequences of their decisions, and I am unable to work hard enough or long enough to be sure that Hart will meet it's obligations. I am not the only person on the ESG team with serious concerns about our operations; however, I am the most expendable. I have taken great pride in working with the staff and immediate managers of the training and account management teams, and I hope that our upper management takes decisive action to reverse, undo, compensate, or otherwise correct Hart's internal problems before anyone else feels compelled to leave.

This is a grave charge and deserves some explanation. As I have expressed these complaints repeatedly to my manager already, I see no need to go into great detail, however I will note some of the worst case examples to support my contention that, regardless of the ultimate cause, the effect is to paint a picture of a management team with no vision of, or focus on, customer support.

1. Testing

I am leaving on the 5th, specifically, because I have been asked to install a nonexistent formal/vetted software configuration on an untested computer so that Harris County can use it in an election. As a technician I am appalled at the idea that we would install software without having even briefly beta tested it ("real world" testing). That includes testing on every type of computer we provide to customers to identify any potential hardware problems. This isn't the first time this has happened, but it's the first time I've been certain that we had no intention of fixing or testing the configuration prior to it's being used in a live election.

Our lack of any beta testing program or staff is itself a singular testimony to our management's lack of interest in providing good support, given that we are primarily a software company right now. Every company, organization, and individual developer I am aware of strives to provide some beta testing before declaring something to be an official release. Yet we do not. Is this because we lack the staff or other resources? That is certainly one reason the technical team has been unable to compensate for the nonexistent beta testing group, but not the real problem. The real problem, as exhibited by our incomplete alpha testing, is a lack of interest. First run/basic functionality testing as our Colorado staff currently does, known to the industry as alpha testing, is absolutely vital and yet even this testing is frequently incomplete according to our own test staff. But rather than asking for help, the Austin staff has repeatedly been lied to about even basic testing having been completed. We have been blocked from providing help or solutions by a management team that wants desperately to ignore the problem.

2. Fraud

The Ohio security review exposed a surprising willingness on the part of the management team, particularly our Colorado staff, to commit what seems to be outright fraud in order to avoid any inconveniences like proper preparation or communication with Austin staff. The review specifically addressed issues of procedures and planning, which only Steve Gonzalez or I could have answered with respect to certain support procedures, yet we were not asked. More critically, we discovered that the system configuration submitted to the auditing agencies for their testing was fraudulent. The configuration was specially adapted/created by Colorado staff without consulting us. Since I have maintained, and even dictated, our pc configuration and setup processes for more than a year, the pc as submitted to Ohio would have necessarily been setup by me or with my current instructions. It was not. The state thought they were testing our actual customer support procedures and configuration. This was untrue. Our management team wasn't committed enough to our own procedures to use them, nor have they suggested that our procedures be altered, as they have not been reviewed.

Quite some time ago, after repeated complaints about poor software setup program design and quality control, my offers to help having been ignored, I was testing one of our last releases of the 2.9 (system 2.1) Boss and Tally software setup programs. I discovered that the Boss 2.9.04, as installed at all customer sites, had a large number of false audit entries (very old entries from a test database). The error was a result of yet another sloppy build of the setup program. My advice, given that any news release of a vendor releasing election databases with fake or invalid audit entries would be potentially devastating to us and our customers, was to immediately fly to each customer site and replace the default Boss database, and quietly communicate to our customers that their elections had these invalid entries (since we had elections saved to cd and could not simply eliminate the problem prior to having an impact). This was not done, and customers today are still being given this "bad" software install, because Hart

isn't committed to providing a fixed version of the 2.1 software, regardless of how little effort is required (I have already created both a script to fix the database and a replacement). Most of that effort would involve honesty and a drive to provide the best customer experience, and as such seems to rule out Hart making that kind of decision at this time.

3. Communication

Hart's communication problems are not hard to find. While we have external issues with customers, the vast majority of our problems come from our horribly broken relationship with our development team. 99% of the questions I have asked of that team have been outright ignored. In several cases I have been told that developers have been threatened and forbidden from communicating with me. I know from direct experience that virtually all of our communication problems rise from the Colorado management staff and their deliberate attempts to restrict, obscure, ignore, and delay communication between the Austin and Colorado development staff, out of an apparent fear that we might do something customer centric. I know that on multiple occasions they have lied to us, on other occasions provided bad information for reasons that are unclear, and certainly failed to make even a small effort to communicate in a regular way with me to even attempt to establish communication channels. In my opinion, the Colorado senior management staff are effectively sabotaging Hart's ability to provide best in class support, much less function efficiently on a daily basis. Without information and the ability to communicate issues to the development staff, as we had with Karen Snow, the technical team's ability to function is effectively crippled and our customer interests are not being represented where it counts the most.

I should note three things here. First, the entire Account Management, Training, and Technical staff regarded Karen's position as vital. Failing to replace her immediately also reflects a management failure to properly prioritize this function. Second, the excuse most often given for our communication problems with Colorado is that they are busy. That is not the reason for communication problems, but that is why they and Austin staff are repeatedly wasting time redoing work and recreating software. What we are seeing are crucial failures of management to first be able to manage priorities and incorporate important communication into that work as a valued part of our relationship. If we are busy then communication is that much more important to maximize our resources, not less important. The work Travis Harrell does to insure that the Technical team and Account Managers are working closely together, even to the extent that it causes some delays, is a priceless example of how this should, and could, be managed to everyone's overall benefit. Thirdly, significant amounts of information I've requested had actually been released to customers and other outside agencies, so any arguments to the effect of enhancing secrecy ring hollow.

Any focus on customer support, in my mind, necessarily means that we provide our customers with bug reports that are likely to impact them. Engaging in campaigns to conceal important information or treating the need to keep our

customers informed lightly seems incompatible with the goal of good support. Our customers are our partners and should be made aware of serious issues as soon as possible, so that we can engage their resources to assist us if for no other, less selfish, reasons. Our practice has been, notably in the area of manual cvr adjustments, to ignore the issues as long as possible or respond when cornered.

It seems incomprehensible that I can add to our list of communication problems a deliberate program to conceal information from me as a technician, and yet that is exactly what I've seen. Several senior managers have repeatedly deliberately concealed important technical information from me, and on more than one occasion. This sort of approach does not engender trust nor does it promote my ability to best represent Hart and reach my full potential.

4. Lack of preparation

Basic management begins with planning, and certainly with respect to purchasing computers we don't exhibit any of it. Our monitors, line printers, scanners, and pc's in the lab and available for demo use have been falling apart and stocks are declining steadily. It seems obvious to me that the need to test additional configurations, hardware and software, on machines customers actually have, and to do such testing quickly necessarily involves maintaining an up to date computer lab. So far our lab is lacking virtually all of the pc resources we need to provide effective customer support, much less provide for demonstrations or do any sort of testing properly, and certainly not concurrently.

Lack of preparation isn't limited to simple poor planning of purchasing decisions, but extends to preparing for elections such as Philadelphia, and many demonstrations, where Hart suffers from last minute-itis in virtually every situation where anything outside the norm is required, such as special import or export processes. Coupled with the lack of a beta testing group, we have frequently walked into demonstrations and elections and been blindsided by problems that basic testing should have revealed.

Largely driven by a lack of adequate support staffing, our internal data management, ranging from sales/demo equipment inventory, election/demo database storage, software and all customer account data management is effectively nonexistent. Despite repeated complaints over a long time frame, we still are not staffing anywhere near levels needed to provide the internal support we need to provide good external support. Hart is also not investing even small amounts to create those tools which could enhance our efficiency or value. Under the circumstances fast computers, helpdesk software, and adequate advanced technical training should be required rather than wishful thinking.

Our lack of staff isn't a new problem. Missing a beta testing group is the most obvious issue, but the lack of adequate levels of technical support staff and resistance to hiring well in advance of having a problem is bizarre in the extreme. As technicians need to be well trained, I would also have hoped that our hiring decisions would take that into account, but there is no evidence of that so far. We needed to hire technicians months ago so they could gain invaluable experience in the November election cycle. Instead we threw that opportunity

away in favor of hiring staff when we were too busy to properly train them, and now have to prepare them to support two different software interfaces and a changing code base, across more varied state requirements than we've ever had. These problems didn't sneak up on us, they were ignored.

Finally, within days of the public release of the first Diebold incident I requested a Hart security summit to discuss and mobilize our responses to what I believed would be a series of security concerns raised about election vendors and DRE equipment. We never had such a summit, and continue to fail to plan in any organized or comprehensive way to address security concerns, even very basic issues such as password maintenance. With no compelling benefit to being ahead of the security curve with respect to our internal procedures and processes, Hart seems content to wait these media events out rather than promoting security for its own sake. Our efforts so far are the token responses of a stubborn donkey, with a lot of lip service and very little motion unless we are being dragged.

Obviously I've only identified a small handful of the more notable incidents here, and without great detail. If I seem to have dealt with any issue too lightly, it is for reasons of brevity, not concern, or evidence I had. Any company that sells itself as the good guy in its industry, any company that wins awards for ethics, any company that offers products for elections, products that cannot and should not fail within the limits of reasonable effort to prevent it, shouldn't simply tolerate any item on this list. To be tolerating all of them, and to continue to make decisions that are crippling the support staff and their ability to prepare for the future indicates to me a complete lack of interest in providing good support. Or perhaps it's a reflection of my own failure. In working with my team to prevent problems regardless of the challenge, we may have been so good that the upper management team became used to not paying attention or providing us with resources. Our requests and complaints carry little weight if we continue to be successful without additional investment. Eventually the car does run out of gas, no matter how long it seems you've been running on the E.

Unfortunately, since support is generally a loss in the books, this attitude isn't uncommon, even in companies that want to claim superior support as a market feature that distinguishes them. It's easy to lose that focus when there isn't any leadership driving it. For the sake of our customers, and especially our employees, I hope this letter has some positive impact in creating change. I think Hart should be setting higher standards for itself, and making at least an effort to reach them, so that I am the last person that has to leave for the sake of their conscience.