

PRODUCTION CASE STUDY

A game industry technique commonly used to improve future development is the game postmortem. Game Developer magazine publishes one in every issue. We have found that analysis of postmortems provides insight into game production. As an applicant to the Guildhall Production Track, we will evaluate your ability to analyze, draw lessons and communicate what can be learned from a specific postmortem.

Specific questions to be addressed

- What conclusions can you draw from one of the "What Went Wrong" entries?
- What could you do as a producer to prevent this happening on the next project?
- What should you start doing, keep doing, or stop doing?
- Describe new practices and process for the next project. This is perhaps the most important part of the essay, so be prepared to spend more time here.
- Review the project history, reflect on the lessons you have learned, and specify new guidelines to follow in the future.
- Finally develop an action plan that can be applied to the next project.

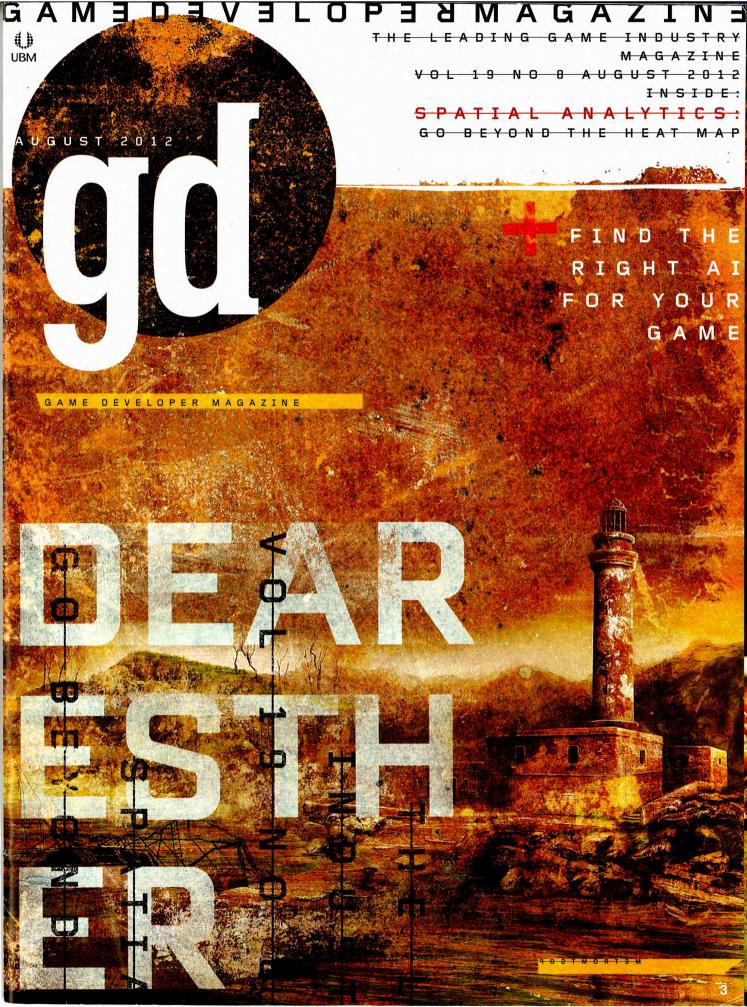
Required Case Study and Rubric

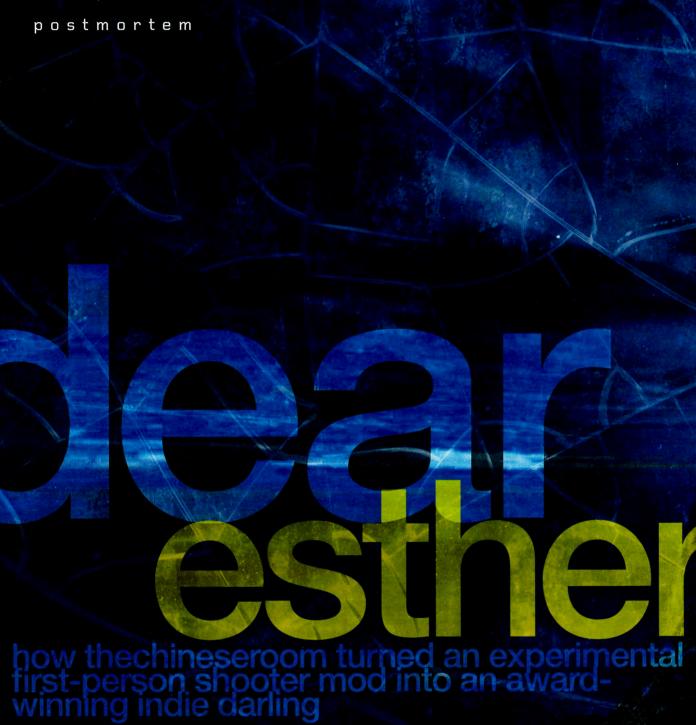
Please use the included case study article on pages 3-10 of this document to develop your response. The rubric on the following page will be used to assess all submitted essays.

PRODUCTION CASE STUDY

Essay Assessment Rubic

Criteria and Qualities	High	Medium	Low
Critical Reasoning	Communicates the student's ability to read, evaluate, and organize information effectively at a graduate level.	Communicates the student's ability to read, evaluate, and organize information effectively.	Indicates that the student's ability to read, evaluate, and organize information needs to be improved.
Connections	Make clear connections between topic and solutions.	Make somewhat clear connections between topic and solutions.	Does not make clear connections between topics and solutions.
Writing Mechanics	The paper is proofread and edited so that writing conventions (e.g., grammar, spelling, punctuation and capitalization) are accurate, fragments and run-ons are identified and corrected, and inappropriate informal language is eliminated.	Few (1-3) writing mechanics errors are made.	Several errors in writing mechanics are evident.
Conclusion: A synthesis of ideas	The author makes succinct and precise conclusions based on the review.	The author provides concluding remarks that show an analysis and synthesis of ideas occurred. Some of the conclusions, however, were not supported in the body of the report.	There is no indication the author tried to synthesize the information or make a conclusion based on the review.
Clarity of writing	Writing is crisp, clear, and succinct. The writer incorporates the active voice when appropriate and supports ideas with examples.	Writing is generally clear, but unnecessary words are occasionally used.	It is hard to know what the writer is trying to express. Writing is convoluted.





DEAR ESTHER started out in 2007 as a university research project exploring different ideas about story and gameplay in a first-person shooter. The central question was pretty simple: Could you strip everything resembling traditional FPS gameplay out of the traditional

first-person universe, leaving just a story and a world, and still build an engaging, rich experience?

The mod was something of a cult hit, and in 2009, in collaboration with Rob Briscoe from Littlelostpoly, we started developing a commercial remake that was released on February 14, 2012. It sold over 50,000 units in the first week, paying back the game's investor, Indie Fund, in just under six hours. To date, DEAR ESTHER has sold more than 125,000 copies—not bad for a project that started life in a bleak cupboard in an equally bleak university building!

DEAR ESTHER was simply an experiment that we never expected to do more with than generate some data for an academic study. We formed thechineseroom around the game, so we've been on a pretty steep learning curve in terms of both development and running a studio, but I think the fact that we came at DEAR ESTHER completely blinkered by idealism turned out to be crucial to the things we got right with the title.

what went r i g h t

1. STARTING FROM A MOD CAN BE A GOOD THING

We launched the original DEAR ESTHER onto ModDB in 2007. Jessica Curry made an amazing soundtrack, and Nigel Carrington's voice-over was brilliant, but I kept my expectations low; DEAR ESTHER was short, slow, and about as far away from most FPS mods as you could get. Around the same time, Tale of Tales had released THE PATH, and although I hadn't played it, I was aware of some of the friction it had caused, and was expecting at best a few hundred hits and maybe enough public response to justify the grant by yielding some data we could use.

I was completely wrong.

The mod racked up thousands of downloads in a matter of weeks, and got picked up by a couple of critics who just loved it. We owe both the critics and the community a lot, because without that support, there would never have been a remake. We knew when we went into the remake that there was already a fan base, that the concept worked, and we had some really dedicated people out there spreading the word. The mod ended up functioning like an open beta, which was really powerful for us.

Another benefit of having a mod out there for a couple of years was the community had

come up with some amazing interpretations of the story that I hadn't thought of when writing it. When we recorded new voice-overs for the remake, we added a few things to encourage those interpretations, in part to add to the story, but also to give a nod of thanks to the mod community. Those new cues we added have in turn yielded a completely different interpretation of the story. I love that the game has continued to evolve.

2. SOUND IS POWERFUL

DEAR ESTHER wouldn't be the game it is without its amazing soundtrack and voice acting. Composer Jessica Curry and I had worked together before on a few multimedia art projects going back to 2003, so I knew her work really well and how the tone of her music would contribute to the game. We imported previous music by Jessica into the engine early on, and listened to it a lot while we were writing the story and building the game, which I think was instrumental in setting the emotional tone. Music is an investment that can't fail to pay off—give your composer a lot of space and freedom and it will make all the difference.

The actual story was written very late in the development cycle; I'd estimate the world was 75% complete before I started writing. When Jessica and I were casting, we heard Nigel Carrington's voice, looked at each other, and

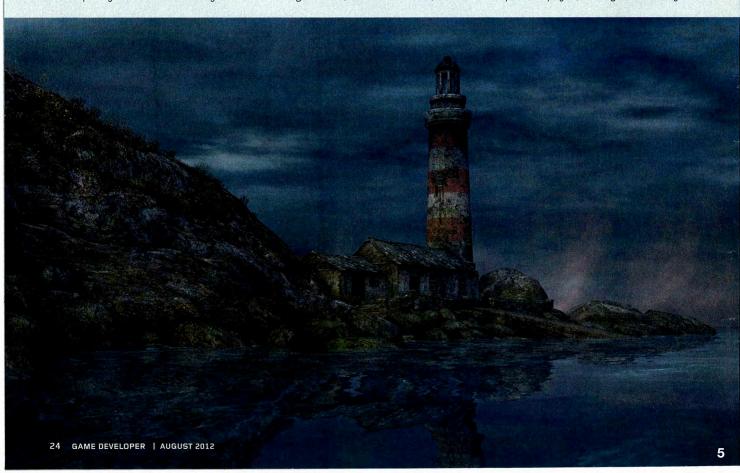
said, "That's him." It was an instant decision.

When we went into the studio, we did three takes of each cue. For the first, I would let Nigel find the emotional tone and intensity that he felt was natural to the words, then in the second and third takes I'd have Nigel push the intensity up and down a notch from there. We ended up using the first take on most of the cues. Get a good voice actor, and you can trust his instincts.

3. ART DIRECTION IS CRITICAL

The world's relative lack of detail in the original mod made the players pay more attention to the voice-overs. With the remake, we aimed for something deeper and subtler, using the environment as a means of steering not just the players' movements, but their emotional journey. Rob calls this "subliminal signposting," manipulating mood and interpretation through the world.

The remake of DEAR ESTHER brought the island to the center, making it a living space that followed the principles of ambiguity and abstraction in the narrative. We did this by using randomized objects that operated against the narrative as much as with it, and by focusing heavily on lighting and the actual shapes of the geometry to influence the players' mood. In the final level, for example, the shape of the distant mountain is a torso and head of a sleeping figure. It's subtle, and it's difficult to determine whether it has an explicit, identifiable impact on all players, but the game uses many





instances like this to suggest the island has a more complex relationship to the narrator than simply being a realistic space.

A key location in the game that makes this more explicit is the caves level. The caves were originally designed to provide a break in tone and space from the open levels in the beginning, though they also served as a device that let us move the time of day radically from afternoon to night. Once the player enters the caves, the game breaks away from reality in a very obvious way, synchronizing with the voice-over's shift in tone to something more fragmented and confused. Rob created areas in the caves that were highly suggestive and deeply unreal, such as a heart-shaped cave lit orange and pink, in order to evoke an emotional response from the player.

Later, a chimney stretches up toward the sky to create a sense of being deep underground, tying in with the old cliché of the light at the end of the tunnel—or the view toward light sometimes mentioned in near-death experiences. The chimney was clearly not just a natural feature; it represented something more psychological, possibly even spiritual. At the foot of the chimney is a clear pool, scattered with coins—a wishing well—which is followed by a crawl through a tight, claustrophobic tunnel covered with strange symbols and scrawled references to the Bible. Then the player drops into a dreamlike representation

of an underwater motorway. The overall effect is to constantly shift the player away from just seeing the environment as a backdrop, however beautiful, into something that tells its own version of the story. Rob's excellent art direction was able to maintain and communicate DEAR ESTHER'S story even without the voice-over.

4. INVESTING IN SPACE AND TIME AS DESIGN TOOLS

The thing that makes DEAR ESTHER work more than anything else is that the player has very little to actually do, which creates a space for the player to think and feel. If you set up powerful images and ideas, then the player will naturally want to consider them, so we made sure to leave opportunities for that to happen. When I said at GDC 2012 (See **References**) that overstimulation can kill atmosphere, what I meant was that if you expect your players to respond to the system all the time, you don't leave space for them to respond to the stuff in their own heads.

This isn't a new thing—SHADOW OF THE COLOSSUS relies heavily on those long periods of reflection—but I think DEAR ESTHER was different in that we were loading the player up with these symbols and ideas and making those reflective periods directly tied to trying to square away all the ambiguous and conflicting things they were

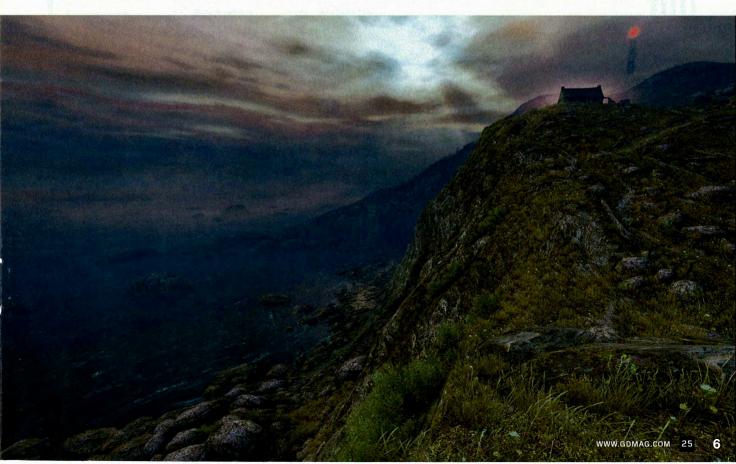
seeing and hearing. One of my favorite quotes is from the literary theorist Frank Kermode, who said, "Why does it take a more strenuous effort to believe that a narrative lacks coherence than to believe that somehow, if one could only find it, it doesn't?" That idea lies at the center of DEAR ESTHER, but it requires space and time to work.

Also, different emotions run at different speeds. Joy and anger are very fast emotions, they arrive quickly and can be felt in a short time-frame. Sadness or loss are much slower and easily disrupted. If you want a player to feel lonely or sad, you need to time and space for that to happen. In a game like S.T.A.L.K.E.R., the environment is desolate and empty, which gives players time to trudge around, submerged in their response to that emptiness.

As players, we're so used to stuff happening in games all the time that when nothing is happening we start feeling on edge. This is a cornerstone of horror games. So underpinning DEAR ESTHER is the tension of waiting for something to happen, and this desolation and isolation, and these weird images that just ache to be formed into proper understanding, and then lots and lots of time and space to be introspective about that mix.

5. TRUST YOUR PLAYERS

It always makes me smile when we get accused of being hipsters, or intellectual snobs, which



was always going to be a response from some gamers. Aside from the fact I'm a massive kill-junky who'd take PROTOTYPE over HEAVY RAIN any day of the week, I think what's going on with DEAR ESTHER is the opposite.

We trusted gamers to be adaptable, open to a slightly different experience, able to think and feel for themselves. They don't need their hands held, or things always spelled out. They are sophisticated, media-literate, smart people. It's okay for things not to make sense. Players will cope with that, and it's often a more rewarding experience. Like most things we do, this is inspired by games. I love the fact that after dealing with the biomass in D6 in METRO 2033, the nearest you get to an explanation is Miller saying, "If only you'd seen what lives down there!"

I think it's a strength of a narrative to not have to join all the dots. The best books throw away ideas left right and center that you never find out more about. It creates a sense of scale and mystery. That's not going to work for all games—lots of games rely on delivering explicit history and mythos, like MASS EFFECT or SKYRIM—but there's more space for the unknown in games. I think it's a really powerful device, but you have to trust the community.

The other analogy I often use is that you don't look at a Jackson Pollock painting and obsess over which order the paint was applied

in. It's an overall effect—you feel it, and that's enough. We trusted that players would get that. We believed that they would take the experience as it was and immerse themselves in it, and that belief paid off. That's the biggest lesson of all for me from making DEAR ESTHER.

what went wrong

1. UNIVERSITY COLLABORATION IS COMPLICATED

This needs a caveat: We began life as a University of Portsmouth research project, funded by the Arts & Humanities Research Council (U.K.), and they've both been good to us, but we had a few problems as well. Universities have pretty strict policies about everything from employment to IP, and we faced an uphill battle to gain their respect and trust. The last two are inevitable.

One of the things I love about the game industry is that it is product-driven. Everyone has an idea about a game, or an opinion about what makes a good game, and the problem is that academia exists to be critical about these things, which means it generates a lot of opinions and no product. This doesn't sit easily with the game industry, where you earn your stripes by making a game and having it assessed by the community and the market. Once we'd actually made something and put it out there, not as a

protected academic experiment, but a game to be played and assessed as any other, suddenly people started talking to us. I'd have built it sooner if I'd been less idealistic about academia's relationship with industry, and I'm much more careful now about respecting just how damn hard it is to make games.

On a practical level, we discovered that commercialization is a very hard thing for universities to pull off. There are standard clauses in distribution agreements, like who takes liability and to what value, that are almost impossible to square with a university's insurance protection. We were lucky to survive running into this one—the university was happy to release the IP, and we were lucky to find Indie Fund. But for about six weeks I thought the project was dead and I was out of a job. It was hellish, stressful, gutting.

If I'd known going in what we'd face, I'd have set things up a long way in advance. That's not to say that working with universities is impossible—they can be amazing partners—but you need to wrap your head around a very different way of working and set of priorities. They work on a timescale that can be extraordinarily slow, so you need lots of lead-in time. The decision-making process can be very distributed, which makes it hard to get financial agreements, NDAs, and other contracts signed compared to your average small business. Also, a university has a direct responsibility to its students, so they're constantly



searching for teaching and research opportunities. If you can figure out what kind of opportunities you can offer a university in advance, you can speak in the right language—learning, generating publicly available information, and so on. You are also dealing essentially with public money, which changes what you can do politically.

Finally, if your funding is running from a grant, like we were, then studio processes like staffing have to be done very openly; you have to make a case for why you'd want a specific individual (from knowing them, or reputation, or recommendation) without going through an open recruitment process. On top of that, you have a responsibility to get changes in the budget cleared, which can slow you down quite a bit.

Overall, they are slow. Really slow. As a small independent studio, one of your biggest advantages is how responsive and fast you are. Trying to operate as an indie in the context of a slow moving monolith like academia can be very frustrating. I'm not sure I'd do it again. There's got to be a better model, and we're going to keep looking for it.

2. DECIDING TO PORT TO A NEW ENGINE VERSION CAN BE A WORLD OF HURT

This is how the conversation started: "Hey, Rob, you know we ought to ask Valve if we can migrate from THE ORANGE BOX to the PORTAL 2 version of the Source Engine. That'd be straightforward, right?"

DEAR ESTHER was due out in early summer 2011, but it didn't come out until Spring 2012—because of the port.

If it's your own engine, fine. If you know an update is coming, great. If you research what changes are going to happen when you move to a new version, brilliant. Spur of the moment decisions without really casing out what is going on under the bonnet of a new version? I'd advise against it. We went in unprepared and a little naive and paid the price. That's not to say it wasn't worth it-we couldn't have done certain things with DEAR ESTHER without the migrate. It made the Mac port easier and has benefits for potential console ports further down the line, and gave us improved shaders, particles, and visuals (as well as being a more optimized, stable engine and toolset) but I wish we been a little more prepared for how complex it was going to be. All credit is due to Rob and our programmer, Jack Morgan, for making it work. But it was tricky.

3. VOICE-OVERS SOUND DIFFERENT IN THE STUDIO THAN IN THE GAME

This didn't impact on the final build, and is more about the mod version, but it's an interesting one: When we first made DEAR ESTHER, we brought in a local actor to record a script I'd written over a three-day period as a kind of stream-of-consciousness thing, and this was

really useful. What I hadn't figured was that what sounded great in the studio, as a radio play, was completely emotionally overcooked when we put it in the game. I've still got the original recordings, and as pure audio they work really well. In the game, they just felt slightly melodramatic.

I still don't know what it is exactly about this "amping-up" effect on voice-overs with games, but you see it all the time even in high-budget games, where a voice-over you think would probably work fine on its own ends up overblown. Emotional tones seem to get inflated in-engine, and when you are working with voice-overs it's really important to keep the drama nailed down tightly. Nigel is incredibly subdued in the final takes of DEAR ESTHER—I think there's only one or two instances where he even raises his voice—and despite that, it's a really emotional performance with quite a wide range to it.

I've just finished MASS EFFECT 3 and I noticed that BioWare did a similar thing with its voice-overs—quieter moments and a toned-down delivery often achieve the best emotional results. We had this problem again with the KORSAKOVIA mod we made in 2009—what sounded great in the studio didn't work in the game, and since recording sessions can be time-consuming to organize, you want to get it right first time. Now we always take a copy of the game into the studio with us and get a few rough cuts into the engine before we commit to a take.



4. THE GAME INDUSTRY WORKS IN U.S. DOLLARS

This is really short and only applies to non-American developers: If you are making a game for digital distribution on PC, your major source of income is going to be Steam. That means getting paid in dollars, which means you have to deal with exchange rates. Now imagine that your investors are U.S.-based, and you have to pay them back. That's going to be in dollars too. Not only are you then dealing with exchange rates in two directions, but the bank will apply different rates for conversions backward and forward, so if you don't have a bank account set up to deal with USD, you could lose a lot of money. We didn't have a dollar account set up by the time we had to pay back Indie Fund and it hurt us financially.

It's a bit gutting to see your hard-earned cash vanish into a banker's pocket (particularly at the moment). Get a dollar account attached reply to them on forums. Other distributors will want to talk to you and sign you up, so you have to go through contracts, manage all of that. Game sites you've never heard of want free copies to give away to their readers. Freelance journalists want review copies and you need to assess how serious they are. Your accountant wants to know how U.S. VAT works and you have no idea. You're trying to maintain a PR campaign without repeating yourself constantly, you're trying to manage incoming bugs, get community-driven localization dealt with, and look ahead to porting opportunities.

I was pretty naive about just how much time it would all take. We didn't exactly have much of an option in terms of managing our workload around the time DEAR ESTHER released, and we didn't have the cash in the bank to hire someone to help manage all that stuff when it hit, but if I had known how important all that post-release work was, I would have blocked out



DEAR ESTHER TALK AT GDC 2012

http://gdcvault.com/play/1015529/Dear-Esther-Making-an-Indie

(around the whole "is it a game?" question). This isn't something we were ever particularly interested in, and DEAR ESTHER absolutely is not any kind of critique of games, but there's no doubt it helped exposure. I wouldn't ever court controversy, but I can't deny it helped.

Second, I think that pushing the production values was massively important. Because of the gameplay, which tends to be very mechanicoriented in play and retro in feel, DEAR ESTHER doesn't sit easily within the indie sector. Beautiful visuals made the game attractive to a wider audience, and that level of quality was critical in captivating players while the slower burn of the emotional experience had a chance to hook them. I genuinely believe that without the emphasis on presentational quality, the game wouldn't have succeeded in the same way.

Third, there's an attention to detail in terms of the player experience that isn't just about a different, new, neat idea, but about the minuteby-minute play. Rob's focus on always having some form of reward at any given point in the game, the way that the soundtrack repeats motifs in different ways to constantly keep this kind of tide of emotions going, and perhaps most importantly, creating an emotional architecture for the player and then standing back, not overloading them with things to see, hear, do, just giving them time to think and feel. A game may rest on a great idea, but making that great idea ever-present and alwaysoptimized is the difference between a good game and a bad one.

For all its experimental beginnings, DEAR ESTHER grew out of a love for FPS games, and I've always said I see it as a logical extension of the design history of that genre. Underneath all of those things I still maintain there's a pretty simple reason why DEAR ESTHER worked and succeeded. It's a love letter to FPS games, shot through with our passion for the genre and what it can do. I think players see that, and I think it's another case study of how that combination of passion and hard work pays off—and lets us build the most exciting medium on the planet. (1)

DAN PINCHBECK is creative director of thechineseroom, which basically means he writes, designs and produces their games. He's got a PhD in first-person shooters, has just written a book about DOOM (due out Spring 2013) and is leading the studio on two new games. AMNESIA: A MACHINE FOR PIGS is the sequel to Frictional Games' 2010 cult horror (due 01 2013) and EVERYBODY'S GONE TO THE RAPTURE, an openworld purestory game (release date tbd). He is also a reader in Computer Games at the University of Portsmouth, UK.



to your business account, and if your bank doesn't have the facility to do this, switch. We only found out about this from Toxic Games when they hit it a couple of weeks before us (they were also distributing on Steam and supported by Indie Fund), but it was too late for us. Given that you make most of your money in the first couple of weeks, I wish all of us could have found out sooner.

5. POST-RELEASE ADMINISTRATION TAKES TIME

In other words: Don't dive headlong into two new games on top of releasing your first. (You could file this in the "Nice Problem to Have" category.) If your game is a surprise hit, people will want to talk to you. Fans are critically important to a small company; they are your ambassadors, and you have to respond to them, write back to them, and

more time in our development schedule for it.

Your highest point of exposure and currency as a studio is the time immediately after you release a game. We already had two games in the works, but next time around, I'll be ready to suspend everything for a week or two and clear the backlog faster.

what we learned from dear esther

First, like Capy Games's Nathan Vella said in his GDC 2012 talk, sometimes taking risks is less risky than not taking them. DEAR ESTHER stands out from the crowd—it looks and sounds like a triple-A title, but plays like nothing else from that sector. It's a difficult game to categorize, and this kicked off a lot of online discussions

2mil A369 sbury Doc We trusted gamers to be adaptable, open to a slightly different experience, able to think and feel for themselves. They don't need their hands held, or things always spelled out. They are sophisticated, media-literate, smart people. It's okay for things not to make sense. Players will cope with that, and it's often a more rewarding experience. Like most things we do, this is inspired by games. I love the fact that after dealing with the biomass in D6 in METRO 2033, the nearest you get to an explanation is Miller saying, 'If only you'd seen what lives down there!' II WWW.GDMAG.COM 29 10