18.1 WHY WOULD YOU GO TO AN OFFICE EVERY DAY?

There are many reasons why a company, especially a startup, might start thinking about going virtual. Cost is an obvious one; office space in the various development hubs around the world is anything but cheap and carry risky binding terms that lock you in for several years, and come with a seemingly unending parade of paperwork for fittings, electricity,
broadband, power and water coolers. Conversely, the total infrastructure effort involved in starting a virtual development studio involves rolling out of bed and turning on your existing computer. If you for some reason lack the necessary software licenses, your vendor of choice will happily supply them for you in the five minutes it takes the teakettle to boil. After a life lived largely online, encountering the world of Brick and Mortar feels like going from fiber to a dial-up modem.

But more important than the setup cost is the daily cost to your staff and yourself. The hours each day spent jammed into a train or sitting bumper-to-bumper on a highway. The missed family dinners when crunch hits or missed graduations because an office culture has convinced you hours spent in the office hours equaled productivity.

The games industry historically suffers from a tremendous brain drain past 35; many of our best staff pack up and leave a job they love because the hours are not compatible with being a father or mother. I once hired an amazing engineer who told me he had never, in a year of unending crunch, seen his nine-month-old daughter in daylight. At some point he broke and quit without another job. Which I guess was their loss, and our gain; he quickly became one of our lead engineers and loved the work–life balance the virtual office afforded him.

There has been a big move throughout tech companies, especially among the most desirable employers, to reimagine the office as a playful experience complete with beanbags, foosball tables, offices named after whiskies and gourmet cafeterias onsite. None of that alleviates the fact that it is basically a pale copy of the home office. That Herman Miller Aeron chair won’t be as comfortable as your old, worn-in, gamer chair, no fancy canteen will ever match the meals you eat with your kids, and no Casual Friday will compete to an office environment where pants are optional.

18.1.1 Serve the Underserved

While, in theory, game development can happen anywhere, the bulk of development happens across approximately ten metropolitan areas, none of which are particularly cheap. When staffing up an office in Singapore, Tokyo or San Francisco, you are often dragging prospective employees into a situation with very high rents and general cost of living. If it is tempting, as an employer, to consider that it is not your problem, you should also remember that you’re pulling them into an extremely competitive environment where other studios can out-bid you for key talent.
Many of our staff have historically been in the local equivalent of fly-over country. Often, they have returned to their hometown to be close to family or to raise children. Cost of living is lower, and unlike development hubs like San Francisco, Seattle or London, housing prices are low enough that young professionals can afford to purchase their own home. In fact, the only thing missing are good job opportunities, which is what the virtual office aims to solve. There are of course downsides to this; rural infrastructure, especially internet access, can be spotty. If you are dealing with the developing world, you can extend that to the occasional blackout or flood, and in one memorable event, a volcanic eruption.

The lack of an office community can be a challenge. Fresh graduates, often single and expecting the office to provide the community they had in college, often struggle with the transition. Married staff, on the other hand, especially with children tend to thrive; they already have the social network they want, and the additional time with family is valued.

18.2 LONGITUDE AND LATITUDE

We once used to say the sun never set on Boomzap; with staff in Japan, Southeast Asia, Russia, Finland and the United States, there was always someone who had daylight. It was a terrible idea.

With a virtual office, distance by and large does not matter. Once you design processes for dealing with it, the difference between different cities and different countries is largely academic. But time zone matters, greatly. Whether it is scheduling meetings, asking for technical help or discussing game design, being able to bring everyone working on a project together is critical. For us, we have found one hour plus or minus works fine. Once it gets past four hours from the early to the later time zones, parts of the day will have points where people are unable to find someone when they need, and anything beyond that rapidly gets unfeasible.

18.2.1 How Do You Know That They Are Working

In an office environment, we often consider someone’s presence in a chair proof that they are busy working. A question that often gets asked is “how do I know that my staff are actually working in a virtual office”? To be “at work” in our case is to be online on Slack and responding to questions. There is no real way of knowing if the person is busy coding, or busy playing World of Warcraft, but as long as they are online and responsive, it does not really matter.
What does matter is that you track output, which is a very different thing than hours. You know roughly what a good programmer, artist or designer can perform in 40 hours of solid work. If the weekly output meets that, and people can easily communicate with the staff, it is less important that the work was done between 10 and 17. It is largely the same case for physical offices; between the internet and their phone, people have access to more distractions than a mere eight hours of sitting in a chair will exhaust. Track output, not hours.

One aid here is the Daily Report. Each staff writes a one paragraph “what I did today” at the end of each working day. Artists post work-in-progress art to the channel twice a day, and the programmers build a new version of the game each night, complete with the latest code and assets. The key is to have this in a format where you can easily track individual task lists over time; an underperforming staff will often list the same task repeatedly, or pad their daily reports with tiny tasks to make it seem like they are more productive than they actually are.

That kind of behavior is hardly limited to the virtual office, though; I once had a co-worker that would strive to be at the office first every day. He would sit down, turn on the lights and the computer, and send out some emails to prove that he was “in and working.” After which he would promptly head to a nearby cafe to have a two-hour breakfast, having proved his productivity for the day. Always track output: that is a lot harder to fake.

18.2.2 Yes, Mum… I’m At Work

Most people in a virtual office want to succeed and want to be productive. We are lucky enough to be working in an industry where most people genuinely love what they do. A greater impediment to productivity can be family. They can sometimes struggle to understand that someone sitting in their gaming chair, doing game-looking things on their gaming PC, is actually busy at work.

It is worth having a dedicated space to work, and a process that mentally makes it clear that you are “at work.” Treat it like work, avoid the thousands of distractions a well-stocked gaming den provides. Make it clear to the people around you that you are just as much at work as someone in a physical office, and your ability to walk the dog, babysit your nephew or pick up your remote cousins from the airport is subject to the same restrictions as anyone else with a fulltime job. Conversely, without those processes, it is really easy to fall into the trap of always being “at
work.” Between work, games, social media and the internet at large, many of us spend far too much time in front of a screen. Without having clear delineation between work and play, it is far too easy to stagger from your PC at midnight, feeling you’ve spent 14 hours working, even though most of that time was spent surfing the web or playing games.

Setting clear boundaries between your home office and the virtual office is one of the key challenges in the virtual office, and one that is often ignored by both staff and management.

18.2.3 The Heartbeat

It is a common misconception that a virtual office is one devoid of processes; the opposite is true. We internally refer to this as the Heartbeat of the studio; the things that happen daily, weekly, per review or per project to drive things forward.

Each day we expect staff to play the game; we do a daily build, encompassing all new assets and code that has changed. We often say that if something is not in the build, it does not exist. At the end of each day, each staff writes up their Daily Report, and the lead programmer tells the Build Server to create the daily build. Some teams also do daily “standup” meetings, to make sure everyone is aware of what the rest of the team is doing.

Each Virtual Studio will develop their own rhythm, but it is critical that something builds a cadence. Without it, it is really easy for teams to slide out of alignment, and for problems to fester unaddressed.

One problem that is rarely talked about when discussing the virtual office is mental health. The games industry, as a rule, is not great at dealing with these issues. Common problems, like stress, long hours, unhealthy eating and bad exercise habits are further exacerbated by isolation and lack of human contact. A strong heartbeat helps; the rhythm gives some structure to the days, having clear beginning and end rituals to the day help to separate work from life, and daily reports help managers spot problems early and have a sit down talk.

18.3 INSIDERS AND OUTSIDERS

Companies that have dabbled in the virtual office often start by having some outsourcers, or a satellite office somewhere. Often, they will later discard it as a failed experiment, with common reasons cited being lack of collaboration, bad communication and lack of performance.

A common trend in these cases of “going virtual” is that the core team remains a physical unit, with communication and processes designed
to facilitate that. Meetings are organized over lunch, ideas pitched over the watercooler, and communication often verbal and impermanent. In effect, that creates a first- and second-class employee; those at the physical office who have processes designed for them. And those in the virtual office, who find themselves out of the loop, unable to contribute and often blindsided. While it is possible to combine a physical and a virtual studio, it is significantly harder. It requires the physical office to become more organized in terms of communication, that things are documented and accessible online and that discussions happen in a forum where everyone can contribute. Failing that, a hybrid physical/virtual office will grow to resemble a smaller company with an attached insourcing unit, which is not good for morale or collaboration.

18.3.1 Throughput vs Permanence

When talking about communication it is useful to think of a graph over two axes: throughput and permanence. Throughput measures the speed and ease of distributing the information; permanence refers to the ease of accessing the information after the fact. (See Figure 18.1.)

On the far left (optimizing for information throughput), screen sharing video calls are a great way for a single person to distribute a lot of information to listeners quickly. We frequently use this for project reviews, design briefs and document overviews. It is inherently one-to-many; someone is sharing their screen—they are in the driver’s seat. Once that call is over, that information lives only in memories; anyone not in the call having no

FIGURE 18.1  Throughput vs performance.
way of accessing the information, and inside the week, it will be lost to memory.

As we work our way left to right; chat is inherently egalitarian. Anyone with access to the chat channel can contribute equally, and the data is accessible to people who might have missed a voice call and can be updated later as people think about the implications of the information discussed. While in theory, the Chat Logs last forever, in practice finding a conversation more than a week or two ago is hard. Chat systems do not have good systems for tracking key decision points and search is not an adequate replacement. To deal with that, information that has been nailed down gets upgraded to a document system.

Almost always the first pass at that will be some form of shared document; for us usually a Google Slide or Google Doc. They are simple to access, easy to share and inherently informal. One aspect of the graph is that as we progress left to right on the graph, communication becomes more formalized and writing it becomes less of an impulse action. For projects of any size you will quickly need some system to organize that. In recent years, we have used Basecamp, which works great from an asset centric pipeline, and Trello, which works well from a process tracking standpoint.

Finally, for documentation where we value permanence above all things, we use formalized document management systems, in our case, a company Wiki. This tracks company handbooks, code and tool documentation, build processes and other information that rarely changes and needs constant referencing. A trend is that we go from easy to write and informal language (the average under 30 is happier chatting than talking) to technical and formal writing, which largely is only written under duress. Permanence at the expense of throughput.

One of the key aspects of running a Virtual Studio is to understand when and how to use the various forms of communication. Too far to the left, and you will create a fluid but chaotic environment where people feel empowered but confused. Too far to the right, and you will stifle creativity and the exchange of ideas, leaving innovation to whoever is most dedicated to editing documents. Once a consensus has been found, designate someone to document it for posterity.

18.4 INFRASTRUCTURE IN THE VIRTUAL OFFICE

We will split the infrastructure requirements into things that help the company itself and things that help your workers be productive.
With no physical location you will be reliant on the cloud to a greater extent than a physical studio. It is probably best to accept, and embrace, that from day one. For dedicated applications (like Source Control and dedicated server executables) a hosted server remains an option, but most Virtual Studios will end up embracing the cloud. For us, that has meant embracing Google Docs and Gmail, using Dropbox extensively to distribute assets across often fragile networks and cloud-based communication platforms like Slack and Trello. We have also moved the build pipeline into the cloud using a dedicated server and a leased virtual OSX machine, which allows us to free up the programmer’s development machine during the daily build.

Sometimes, it is useful to help sponsor staff hardware. It is highly situational what will make a difference, but depending on what the pain-points are for your remote staff, it can be useful to reimburse or provide rebates to solve them. In our case, a lot of staff dealt with sporadic internet blackouts, so we helped reimburse a backup mobile broadband connection. We also found that many staff only used a single monitor, so we provided a rebate towards purchasing a second monitor. Finally, we provided rebates towards things like gym memberships and health insurance; unlike a physical office, it is hard to organize corporate memberships, but it is still worthwhile to encourage staff to get health insurance and exercise.

18.5 LESSONS LEARNED

Structure and communication are the two keys to a successful virtual office. Work hard to include everyone in the discussions and make sure you transition finalized information to a more permanent form. The virtual office requires more discipline than a physical office, and frequently works better with older developers who already have routines and a family around them. Distance does not matter, but time zones do; it is hard to collaborate across widely spaced working hours. Ultimately, the virtual office is about balancing the benefits to cost, talent pool and quality of life against the additional process and communication overheads involved.