

SKILL-BASED GAMIFICATION

By Eugene Sheely © 2016

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INTRODUCTION

“Albeit the jealous temper of mankind, ever more disposed to censure than to praise the work of others, has constantly made the pursuit of new methods and systems no less perilous than the search after unknown lands and seas; nevertheless, prompted by that desire which nature has implanted in me, fearlessly to undertake whatsoever I think offers a common benefit to all, I enter on a path which, being hitherto untrodden by any, though it involve me in trouble and fatigue, may yet win me thanks from those who judge my efforts in a friendly spirit. And although my feeble discernment, my slender experience of current affairs, and imperfect knowledge of ancient events, render these efforts of mine defective and of no great utility, they may at least open the way to some other, who, with better parts and sounder reasoning and judgment, shall carry out my design; whereby, if I gain no credit, at all events I ought to incur no blame.” - Niccolo Machiavelli, Discourses on Livy

The purpose of this little book is to serve as a practical guide for management with an emphasis on sales. Despite the title it is not a piece of propaganda for “gamification.” My ideas were developed in isolation from the “gamification communities” literature. I have some experience in design, sales and management, as you’ll soon find out my approaches are quite different. However, I am very familiar with the “gamification industry” and was heavily involved a few years ago.

Two Basic Types of Games

The book *Intuition Pumps And Other Tools for Thinking* by Daniel C. Dennett has a chapter titled “DADDY IS A DOCTOR.” In it Dennett is explaining that understanding of any topic comes in degrees. He gives a hypothetical example of a little girl proclaiming that her father is a doctor. The philosopher then asks if the child understand if her father is her biological father or her adoptive father. What specific branch of medicine does he practice if any? Is he a licensed practitioner or a quack? Etc. As the child grows older her understanding will grow also and she’ll be more specific in her explanation and understanding.

Let’s assume you’re an adult with some cardiovascular problems, you wouldn’t say “a doctor is a doctor and it’s all the same” and attempt to have an orthopedic clinic deal with your risk of heart attack? Hopefully you’re smart enough to understand the role of specialist. As a manager in a similar fashion you can’t simply say “a game is a game” and apply general ideas of game design into your management toolkit.

There’s two basic types of games I find useful to understand: Skill-based games in the real-world and time-based games in the virtual world.

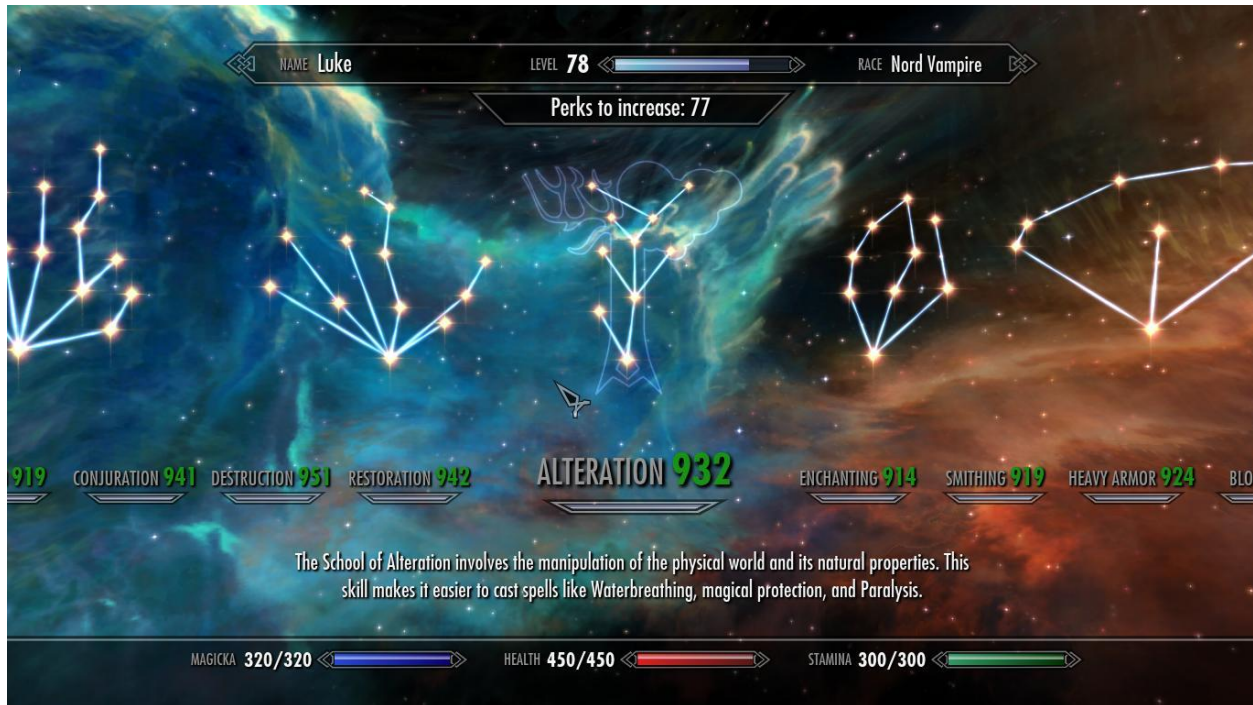
Skill-based games in the real world tend to be games such as sports and chess. The only way to improve performance in this games is to cause a physical change in our bodies and minds that will enhance our performance. This tends to arrive through intense pressure during training, dietary changes and deep analysis on our performance.

Time-based games in the virtual world are the classical video game. I borrowed the term “time-based” from a talk by video game designer Raph Koster. In time-based games the player unlocks abilities as time progresses. He gave the example of Farmville but I’ll use the classical role-playing video game to illustrate the point:

The player has a virtual hero he uses to slay goblins. The more goblins he kills the more experience points he gains. With these experience points the player becomes stronger and can kill the goblins easier. His “skills” increase, which are literally just numbers in an algorithm. Or he might unlock a magical sword that instantly makes his virtual character stronger.

In order to make his character stronger he needs to spend time increasing these artificial skill sets, he can’t just jump into the game and “be a natural” as an athlete could by trying a new sport for the very first time. The improvement in performance comes from the algorithms in the video game, and not necessarily in any physical change in the body or brain of the player.

To illustrate the point here’s an image from the video game Skyrim:



The top of the image has the “level” the character is. In the middle we have the diverse skills that are purely artificial fabrications such as “sneaking” and “lockpicking” that magically improve depending on the time spent in certain activities in the game. Below you have “Magika” (magical powers), “Health” (how many hits he can endure) and “Stamina” (how long the character can sprint without artificially tiring).

Raph Koster explains that in purely skill-based games you’ll have a small minority of people that will always dominate the game and a then a grand majority of “losers” who will always be defeated by this small elite. Video games therefore create what we’ll call “artificial power-ups” such as Skyrim did. The more you play, the more artificial power-ups the player gains and the illusion of progress is created. If it’s a player-vs-player (PVP) game where humans compete against humans instead of an Artificial Intelligence (AI) the players are preselected to compete against those in “their rank” as to prevent the elites always winning. The mediocre players play against other mediocre players and the elite players with other elite players evening out the wins and losses these players get.

To do otherwise Raph explains, would be to have a very short lasting video game. Since the elites would always win over the mediocre players, and always losing isn’t fun, the mediocre players would leave. The elite players are left with no other players to play against and also abandoned the game. That is the main difference between skill-based games in the real world and time-based games in the virtual world. We’ll get back to them and explain their application to management in a few more chapters below.

Green-Field Design vs. Brown-Field Design

In a similar way to our hypothetical example of the little girl saying “Daddy is a doctor” wouldn’t give us a lot of practical use if we’re attempting to find a specialist, you can’t simply use the word “design” as an all-encompassing general solution. Our understanding has to be more specific to have any practical use in management.

In software design there’s two terms: Green-Field Design vs. Brown-Field design.

- **Green-Field Design** means you’re starting a new software from scratch. There’s a “blank sheet” in front of you and you’re about to let your imagination run wild.
- **Brown-Field Design** refers to building upon a system that is already existing and operating. Let’s assume the IT of company X. These designers are obviously a lot more constrained than green-field designers. They can’t start from scratch and reinvent the whole thing, they have to build upon the work of previous designers and needs of the current users.

In the video game world, a programmer starting a brand new game would be a green-field designer. A designer working on a game-as-a-service (subscription games such as *World of Warcraft* or *EVE ONLINE*) is constrained to work in the context of that particular game. A business software programmer is even more constrained than a video game programmer since he’s limited by laws and regulations and focused on the value offered to the company’s day-to-day operations.

Why This Matters

These aren't terms discussed in the "gamification industry." When talking about applying "game mechanics" into management what they're really saying is "We're going to apply green-field design theory of time-based games into the virtual world into management." Or in simpler terms: "What do video game designers do to engage players when creating a new game from scratch."

There's no future in this approach. You have to understand that if you're applying any design concepts into existing management practices you're by default stuck in a brown-field design paradigm. I'm not going to spend too much time explaining these two different approaches, there's a lot of well-developed content already written on it and it should be terribly obvious already.

Video game designers aren't necessarily free from the "green-field vs brown-field design" constraints either, as I explained above. If you have the time and interest you can watch the Youtube video titled "Community and Communication in Games-As-Services" from the *Steamworks Development* channel. It's about a video game company applying brownfield design to keep players engaged over a period of years. A fascinating watch.

My second argument is that skill-based games in the real-world should be the main focus of study for management, while video games (time-based games in the virtual world) cast aside for the most part since their techniques for the most part simply aren't applicable in the real-world. This goes against everything the "gamification industry" has been pushing, but I hope you'll be enlightened by the end of this chapter and start thinking otherwise.

A computer programmer designing a video game has somewhat godlike powers in the context of creating his virtual world. He can focus on the difficulty in the player encounters: challenges that aren't too hard but not too easy. How he'll surprise the player, what artificial power-ups the player will have, exactly what problems the player will have to solve and the opponents he'll have to compete against. In this world the player is to feel powerful, as if he progressed and mastered this fictional world through artificial enhancements such as those in the game *Skyrim*. "Fun" can be generated to a point (depends on the individual), and through these artificial power-ups dopamine is triggered as new virtual achievements are completed (but only if the player cares about the game).

But in the real-world we don't have godlike powers as a computer programmer does in his virtual world.

Let's assume you're a sales manager for a team knocking door-to-door. Let's assume you have your new recruit, you drive up to the neighborhood he'll be selling in. You've arrived to the area he'll work in, now you kick him out of the car and drive off.

In this scenario, pause and think how would video game design theory help you? You lack the godlike powers of a computer programmer. You can't edit the weather for his comfort. You can't control how the neighborhood will treat him. You can't control how hard it's going to be to sell them. You can't give him any artificial power ups such a magical hat that increases his sales skills by 20% or promise him magical level up in his skills just by the mere time he's spent working for you. Your employee can't magically repeat the exact same scenario of selling the same customer again and again until he gets the sale like a video game would offer with an AI opponent. The list goes on...

If we contrast this to a brown-field design for skill-based games in the real world we stumble into an approach that's more similar to a sports coach. This isn't a new concept, and it's the only alternative we have if we're to apply "game concepts into non-game contexts." As a sports coach you want to increase your employees skill through training, give him a positive and competitive attitude and avoid him becoming discouraged by setbacks he'll inevitably have and have him keep pushing forward in order to gain new skills. No godlike powers for a sales manager just like there's no godlike powers for a sports coach.

Video game design theory for a computer programmer is irrelevant.

But let's assume your company has a video game designer that will create a "gamification platform" for your sales employees to compete in online. A simple app your employees can access from their phones. Their scores are based on the results of their sales (quantity and quality) and they can compete against members of their team or other teams across the country. Wouldn't this app be an example of green-field design from time-based games in the virtual world successfully applied to the nongame context of managing a sales team in the real-world?

No. It's still brownfield design since all "achievements" are by default constrained by the results the sales representatives achieve in their job (quantity and quality of sales). The "core game" is still a "skill-based game in the real world." What this software has done is simply add a "player-vs-player" aspect to the job, which might in fact demotivate the employees that are falling behind their "elite peers." The "game" itself is still their job, they haven't made it any more pleasurable in itself.

Maybe the app has created a sense of superiority in top reps by making their outperformance over mediocre reps public in the company. Maybe this increases sales for the top 20% of sales reps doing 80% of the sales (assuming the 80-20 rule is applicable in this situation). Maybe it lowers the morale of the average rep dragging the company's overall performance down. Maybe the sales reps stress skyrockets by trying to outperform themselves every week and as a result sales begin to go down after some weeks. Maybe it doesn't have any effect at all.

In business we're looking to hire employees depending on their skills, or develop new skills in them in order to solve problems in the real world. The main type of game we should be looking at as a tool to improve our management should therefore be the games based on skills where the player has to solve problems in the real world. The "pleasure revolution" the "gamification industry" as has been promised is a false prophecy.

Ask yourself some simple questions:

"Could these pleasure techniques from gamification consultants somehow be applied to make professional athletes experience during training be as pleasurable as that of a pimply teenager playing with his Xbox?"

Nope.

“If these pleasure techniques can’t be applied to make the careers of adults who literally play games for a living feel like a video game in an endless bliss of happiness and dopamine, can they somehow be achieved for the careers of adults who don’t play games for a living?”

Nope.

“I hated every minute of training, but I said, 'Don't quit. Suffer now and live the rest of your life as a champion.’”- Muhammad Ali

The training that professional athletes and chess Grandmasters go through is quite intense. Improvements in skill require pressure to cause a physical change, which is painful. Long hours of repetition of painful training, which can oftentimes be boring. If one studies what makes professional players in skill-based games engage in their training and increase their skills you have realize a very different map than that offered by the gamification industry. Perhaps we need a “pain revolution,” that is to say: “engagement through the painful process of training that creates champions.”

“Gamification” Isn't Sales 2.0

Once you understand these two types of games and design processes you come to realize that much of their claims are absurdly wrong. For example: they often like to say “gamification has been around for a long time. You can see gamification happening in sales for decades. We have just improved on this process. We're the 2.0 version of what's been happening in sales decades. We're the 2.0 version of sales.”

But is this true? Their techniques are a literal interpretation of Greenfield design for time-based games in the virtual world. This is most definitely NOT what sales reps have been doing. Would you say that video game design theory for computer programmers is the 2.0 version of what sports coaches have been doing for the past century? Neither is it for sales, they're brownfield designs for skill-based games in the real world. They might look similar but they're different species.

Biologists have a term for animals that belong to different species but look so similar that people confuse them as being the same: cryptic biodiversity.

Examples of these are:

- African/Asian elephants
- Turtle/Tortoise
- Alligators/Crocodiles
- Cheetahs/Leopards
- Frogs/Toads
- Seals/Sea Lions
- Alpacas/Llamas
- Salamanders/Lizards

Just because they look similar it doesn't mean that these animals are the same. In a similar way you can't just say “a game is a game” like a child would say “an animal is an animal.”

Turtles live in water, either the sea or rivers. A tortoise lives in the desert and can't swim. They may look alike, but you can't say looking alike means they're the same and leave a turtle in the middle of the desert and throw a tortoise into the ocean. But I'll take it a step further: video game designers have been criticizing the gurus of not even getting video game design right in the first place. If we stick to our analogy they're calling their dog a turtle, making an argument that it will survive under water because there's turtles in the ocean, and calling any biologist (game designer or manager) a “troll and basher.”

You have to realize that there's a conflict of interest with the “gamification” consultants: they're making a living from giving advice. In order to make a profit they're trying to expand their market as far as possible. So now you have individuals who have performed managerial alchemy: if an industry has something in their management that looks like a game they'll call it “gamification.” Since they're the “gamification expert” they'll then pitch you their value proposition. And so you have individuals that have become overnight masters of the universe that can claim universal expertise.

Those of use in positions of power have a responsibility to both our company and employees and not be carried away with overgeneralizations and get fooled by charlatans. We can't afford not understanding basic management and design concepts. We can't afford to have consultants with zero background in running a sales team or game design taken seriously because they tell us our job has "game elements" they understand.

You need to have a background in sales to be able to develop a managerial strategy for a sales team. And even with that background no two teams or industries are alike! The same applies to any other industry.

What they're saying is that they don't need a background in any industry. If there's something that looks like a game, it must be game, and they're the "gamification experts" and have the last word. Video game designers and management in that particular industry be damned.

Don't fall for their rhetorical tricks!

“Dopamine,” The False God

One of the core arguments from the “gamification industry” is to claim they're triggering dopamine in the brains of our employees by “gamifying” the job tasks which become addicting in a similar way a video games are addictive to children and some adults.

Not only am I not convinced that they can create the huge spikes of dopamine from video games in our employees, but the whole argument is bogus.

Let's make something very clear: There's no scientific study revealing that these techniques from the “gamification industry” have the massive dopamine releases in our employees or makes work any more pleasurable or addicting. They're making a logical conclusion and proclaiming it as a scientific fact. The argument goes as follows:

- 1) Studies show video games release massive amounts of dopamine in the brains of players consecutively throughout the gameplay
- 2) Gamification has stolen the secrets of video game design and applied them into non-game contexts
- 3) Therefore gamification is harnessing these dopamine effects from games in nongame contexts

Pay close attention to what they're doing here. If a video game is releasing massive amounts of dopamine every few seconds, this doesn't mean that their management techniques are doing the same in our employee's brains. They're trying to fool you with their rhetoric.

And let's not forget that the dopamine triggers from video games are coming from the artificial power-ups from the virtual world created with the godlike powers of a computer programmer.

What happens when you study the brains of professional skill-based players in the real-world? There's no massive consecutive dopamine release causing never ending pleasure as the studies reveal is happening in video games. And as I have argued above, skill-based games are our only option.

There are releases of dopamine in skill-based games, but they work differently and I'll explain them in more detail below in the section explaining The Winner Effect. But they tend to come when there's intense rivalry in a competition between players, and after the competition IF they've won. These effects comes from a phenomena called “The Winner Effect” which is already happening to our employees. If we go back to our example of our sales employee, they'll get a rush of dopamine after they've made a sale, but will lack this dopamine shot when he's training and doing the day-to-day work leading to that sale.

But that's precisely the promise of gamification: The boring day-to-day tasks will become addicting by creating massive dopamine releases throughout the day.

This isn't happening with the gamification techniques they're charging thousands of dollars to consult and train you in. It will never happen unless we start operating on the brains of our employees and inserting electrode implants in their reward center as it's successfully been done in animals, but in my humble opinion this would seem both impractical and highly unethical. Perhaps they'll steal the secrets

of neuroscientists next and offer to operate in our employees brains themselves if they stop making money from stealing the secrets of video game designers. Get the popcorn ready.

We can conclude with a high level of certainty that the brains of our employees aren't experiencing high levels of dopamine from their gamification techniques. But what about the whole concept of dopamine as a method of creating addiction in our employees brains?

There's some evidence that we can cause some addiction to a job through The Winner Effect and the development of certain mindsets (which I'll explain later). But the argument they're making in favor of dopamine is dangerously over-simplistic, rather creepy and plainly absurd.

If dopamine is the secret we're looking for, then there's several other ways to have our brains release dopamine.

Here's a short list of dopamine triggers:

- Facebook
- Food
- Marihuana
- Pornography
- Money
- Stories

The word "gamify" is rather absurd in my opinion. If the grand management secret of the 21st century is the release of dopamine in our employee's brains, we could also develop techniques that:

- Facebookfy
- Foodify
- Marihuanafy
- Pornofy
- Monefy
- Storify

At least for me "gamify" seems to be such an absurd term as I hope the list above is for you.

"Gamification gurus" claim it makes sense because our brains have been "rewired for play." But stop to think about how bizarre this is: the consultants give you a statistic showing you how many hours your employees have spent playing games. Then tells you your employees aren't engaging at work because their brains are "wired to play" but not to work. Therefore the solution is to turn work into play and like magic Generation Y is finally being productive at their jobs.

But have you ever stopped to consider that our species has been playing for its entirety? Mammals play in order to gain social and motor skills that will aid in their survival. So have past generations of humans, who have probably been playing for more hours than us contemporaries since our prehistoric rat-like ancestors millions of years ago, but somehow WE are wired to play and not work? If we have been playing throughout the whole of mankind's history there is nothing new in our employee's choice of entertainment by playing games and no new brains "rewired for play and not work." But then they'll tell you the secret is video games.

If you ask them what about video games makes my generation so different they'll tell you it has made our brains too complex for the real world, therefore we need to add layers of artificial complexity through gamification. But we should also remember that at the same time to simplify our employees current jobs based on a game design theory called *flow*. So I supposed we make the job task more complex by turning it into a game or competition while at the same time simplifying the task itself. And they'll remind you that if you find any contradictions in their arguments to simply stop thinking until it makes sense.

More complex brains? Bah! Some of these "gamers" couldn't even change the oil of my car. I am aware on the literature arguing our entertainment is making us smarter, as the book *Everything Bad For You Is Actually Good* by Steven Johnson explains, but the "gurus" are making overgeneralizations the same way the little girl over generalized by saying "Daddy is a doctor." What's probably likely happening is that some video game players have overstimulated the reward regions of their brains which has depleted their dopamine receptors and that's why they're bored in the real world, but more on that latter.

The idea that we can create consecutive dopamine triggers in our employees, and that this is the secret to productivity, which they've founded their consultancies on, happens to be is tremendously absurd.

The *belief* that secrets from video game designers are the secret for achieving "engagement" in management is a gross misjudgment.

There's two academics that I believe could hint to a more realistic approach that I call "Skill-based gamification" for lack of a better word. These are neuroendocrinologist and biologist Robert Sapolsky and philosopher Slavoj Žižek.

Sapolsky explains that human beings are biologically different to animals in one key aspect: how we're motivated. While an animal has to be controlled like a puppet through dopamine in order to be motivated (the "gamification" solution for our employees), humans can put off present pleasure in the hopes of a greater reward in the future. This explains students engaged in college, employees working in hopes of a raise, entrepreneurs building their business, athletes like Mike Tyson enduring the training they hated in order to live like a champion, etc.

These situations have highly engaged individuals that aren't having consecutive dopamine releases in their brains like a video game player or an animal.

Slavoj Žižek takes it a step further saying that perhaps we shouldn't even want to be rewarded with dopamine or happiness. He gives an example of a scientist laboring day in and day out in the search of a vaccine. The man dies having spent most of his life intensely laboring for the hope of betterment of mankind. This wasn't a "happy life" but the scientist was deeply engaged in his work. But perhaps it was a "satisfied life."

A life in search of "play and happiness" it's actually rather disgusting to me.

“What have you done? Thousands of years of building and rebuilding, creating and recreating so you can let it crumble to dust. A million years of sensitive men dying for their dreams... FOR WHAT? So you can swim and dance and play.” George in the 1960 film *The Time Machine*

I would much rather study people who are already highly engaged in their jobs and find out if there's something replicable from them than try to turn the whole world into an entertainment system. This seems to be a much more reasonable approach to management. I'm just not buying what the gamification industry is selling.

Note: One possibility of “dopamine triggers” on a consecutive basis on the job may arise through the interaction between massive emails or social apps like GroupMe or WhatsApp. These could be through funny pictures, messages related to the team or memes. These should be monitored since they can get out of hand, either by an employee sending something inappropriate, obnoxious or spamming the group and preventing them from doing their job. But comedy messages in the right situation could put the team in a good mood while their doing the job. But of course it doesn't apply everywhere. The “feedback systems” from video games promoted by gamification don't work.

Engagement Is About Management

“Is it a game?”

It’s a SERVICE. Not a game. It’s a WORLD. Not a game. It’s a COMMUNITY. Not a game. Anyone who says, “it’s just a game” is missing the point.” - Laws of Online World Design

One aspect of video games I believe to be transferable into the real-world is their community management practices. These techniques are developed in games-as-a-service. These video games tend to run throughout the years indefinitely if they’re successful and players may pay a monthly subscription fee to access it. These are games such as *EVE ONLINE* and *World of Warcraft*. These have been one of the few aspects in video games that I’ve been able to translate into the real-world.

Basically, what game designers are saying is that a big part of the engagement from the players comes through the social bonds created inside these video games. Any student of history will soon recognize this pattern throughout the ages. The *Esprit De Corps* in Napoleon Bonaparte writings is filled with rich examples.

Here’s the paradigm change I’m offering: Instead of saying “reality is broken” and wanting to create unrealistic changes to the real world that are doomed to fail such as it’s currently being marketed in the “gamification industry,” study community management and apply small changes to your current management style and adapt these ideas ONLY if your current situation allows it.

Some of these idea can become somewhat abstract. For example, another quote from the same publication in Raph Koster’s blog:

“Virtual social bonds evolve from the fictional towards real social bonds. If you have good community ties, they will be out-of-character ties, not in-character ties. In other words, friendships will migrate right out of your world into email, real-life gatherings, etc.”

Do your coworkers hang out outside work? Should you even care? Some coworkers should perhaps only have a professional relationship at the office, others become close friends. I believe this should emerge naturally. But there could be certain factors that contribute to solidarity inside the group.

I would suggest reading the blog post I’ve quoted twice so far in this chapter along with the book *The Guild Leader’s Handbook* by Scott F. Andrews. I’m not going to go into too much detail on this point, there’s plenty of resources for further reading.

A word of advice I will give is to abandon the idea of “personality types.” I’ll discredit these in more detail later. My suggestion would be to focus on emotional hooks developed in the community management of video games. Here’s an example of a list used by Raph Koster that I’ve found useful:

- **Guilt:** You feel guilty if you abandon the game (like not watering your virtual crops). This is linked to conscientiousness;
- **Love:** You love the community! The game is a hobby. You love what you've created in it and the friends you've made;
- **Obligation:** The feeling that you must support your friends in the game (for example in online games where a player's success depends on his/her team's overall performance);
- **Pride and anger:** Defeating a level or opponent in a game becomes personal. Raph explains that a big feature of games comes from the desire to rise in a social hierarchy. Pride and anger are very strong motivators in gameplay
- **Security:** Players can escape reality through the game. Raph gives the example of a mother wanting to stay away from screaming children for 10 minutes;
- **Curiosity:** The desire to know what happens next in the game.

I'll leave you with a few quotes from Scott F. Andrews book that will hopefully spark some interest and encourage it's reading. It's an interesting read since you learn that the constant management of the guild is a key factor in driving and maintaining engagement with the players. It relies on leadership skills and basic business theory to manage these virtual teams. Plus it gives you an insight on how to manage people with purely intrinsic rewards. Now, the book isn't cookie cutter solution, you must have the brain and experience to adapt any ideas to your situation, but it's definitely a fertile soil for new ideas and practices to grow from.

- *"Founding a guild is like starting a new company."*

The author gives many examples throughout the book that you have to apply basic salesmanship to make players believe in your guild. These include finding out the value your guild provides the players, compete with other guilds for members, apply marketing strategies, etc.

Managing the guild can be a lot like managing a sales team. You have people getting in stupid fights, some may get depressed, you might have to convince them to put an effort in their gameplay, etc. Basic management is required inside the game!

Reading the book makes you wonder why we have to discard current business practices in order to introduce a "gamification" version of them when guild leaders inside video games are applying the very same business techniques to drive up engagement for play that the "gamification gurus" say must be discarded for engagement in work.

- *"PvE is often predictable: You press the right button at the predetermined moment and you win. PvP is anything but predictable, requiring your team to be ready for just about anything."*

"PvE" means "player vs environment." Most video games become really predictable. Most of the dopamine triggers arise from how the programmer has designed this environment. Since we don't have godlike powers to change our environment most game design theory for computer programmers is irrelevant.

- *"PvE content is designed to make you feel like a hero, riding forth to slay the deadly foe that's been threatening to destroy the world. Given enough time and effort, you will eventually conquer the bad guys and become the hero."*

It's explaining how the video game is using artificial power ups to make the player feel good about himself. Some gamification literature claim that engagement will arise from recreating this feeling of heroism. Comic books also make readers feel like heroes, can we take the secrets of writers to reshape reality to the advantage of management? Of course not. Now that you understand that video game design is similar to writing a fictional story (it's mathematics with a layer of narrative) we can bury this hope of "gamification."

- *"With PvP, your opponents are other players who are as adaptable and highly skilled as you are. You are leading your soldiers into harm's way and, in all likelihood, many of them will die early and often. There are no final moments of triumph where the boss keels over and curses you with its last breath. Any objective you take, any ground you claim, or any town you burn to ashes is a temporary victory in a greater war. PvP content, by its very nature, must continue indefinitely in order to sustain itself over months and years of gameplay. **Some people can handle that, and some thrive on it, but for others, it can quickly grow demoralizing.**"*

Player vs player is the closest thing to a "skill-based game" but they tend to be a mixture with time-based games. For example: *EVE ONLINE* does require a high level of cunning and social organization to come on top from your opponents, but it also has artificial power ups that can take months to develop. These are artificial skills (algorithms) for specific activities such as mining or engineering. You can also buy perks to improve your ship, etc.

But another key point is the last sentence. Player vs player can be demoralizing. While PvE focuses on creating heroic feelings, PvP can have the opposite effect. Business is a PvP competition that is 100% skill based. So is any sales competition. We can't create PvE designs in our management in the real world so you must be aware of the inconveniences of PvP. This means that in some cases you will probably want to stay away from gamelike practices.

- *"Hardcore players are pushing themselves to play their best at all times, and they expect others to do the same. Meanwhile, the casual players don't think it's worth getting all worked up over a game that's supposed to be fun. **They don't have the motivation to perform at the same level as their hardcore peers because their priorities are elsewhere.** When the guild meets a challenge that it can't overcome, sooner or later a breach ensues. The hardcore players resent the casual players' lack of effort and blame them for the lack of progress. The casual players resent the hardcore players for what they perceive as an elitist attitude. To them, it's not worth getting angry just because they've run into a tough fight. There's no right or wrong in this conflict; it's just two philosophies at odds with each other."*

If you've ever played sports or manages a sales team you'll identify with the sentence above. Instead of having "16 gamified personality types" (which I find to be a complete scam) I simply separate my employees between "hardcore" and "casual." You can probably apply the 80/20 rule in this. I just use it as an analogy so don't take it too serious.

The basic idea is that you have some sales reps that have a very strong drive to win. Others (the majority) are working “just to make a living.” You can make the “casual worker” take the job more seriously by linking their performance to his or her priorities (which I'll explain later), but you'll probably have a small group that always takes the job more seriously and are your top performers. But as a general rule you want the entire team to be “hardcore worker's.” That is to say to carry the attitude of “hardcore players” from games into work.

Notice that the sentence says casual players play “just to have fun.” If you look at it from a management standpoint the goals in gamification to make work fun have been the attempts to create a company of “casual players.” This means that even if they succeed you'll have “casual workers” only motivated on what pleasures working would cause them. So even if “gamification gurus” succeed in their promise (which is doubtful) you still lose.

Read books on sports psychology. Read Mark Cuban's book *The Sport of Business*. You want “hardcore workers” who want to win at any cost.

Just like fights will arise inside video games between hardcore and casual players you'll also have these in any sales management competition if someone isn't pulling their weight. Nothing is without its inconveniences.

"They [hardcore players] want to be rewarded for their skill and effort with bigger and better rewards — status symbols that announce their prowess to others. If the average player can attain these rewards, they argue, it renders them meaningless."

I would suggest reading works by anthropologists describing “ranked societies.” These are societies where status is in flux, and is dependent on the performance in an important activity to the group. For example:

In the Iliad by Homer the heroes talk endlessly about how much wealth they've accumulated. Who deserves the spoils of war after the sacking of a city (Achilles and Agamemnon's reason for fighting). In the context of a “ranked society” which Homeric Hellenes were a part of. You can't separate wealth from skill. Works like this:

- Skill in battle and in command bring status
- To be gain wealth you need to be good at battle and command
- Therefore if you're wealthy you must have these skills, if you're not, you must by default lack them.

And so projecting wealth was a form of announcing your skills which brought you status. But being wealthy also mean they had the responsibility to act in heroic ways lest they would be ashamed of having what they didn't deserve.

PvP games are “ranked societies.” So are sales teams. Sales reps want status symbols to reflect their performance. Sometimes it can be a shirt or a hat that only those who won a competition got (this can work really well or be irrelevant depending on the company). But ultimately the best “status symbol” is money. Giving away virtual rewards without financial compensation won't engage them.

“Gamification gurus” speak endlessly about the need for intrinsic rewards and how money should be avoided. Don't listen to them. They got this idea off a book called *Drive*. You can Google how many applications Goldman Sachs had this year to find out how much people value money. You still need to have proper management but you need to link your employees effort with REAL WORLD BENEFITS.

There is a phenomenon in gamification I call “The Tragedy of The Forehead Sticker,”

When you were in kindergarten and had a gold sticker placed in your head you probably felt special and were rather happy. If a manager were to put a gold sticker in your forehead today as a reward for your effort you'll think he's a condescending bastard and probably be furious. If he gave you a nice bonus for making the company money? You'll probably be smiling ear to ear.

Most of the rewards gamification is advocating in the attempts to generate intrinsic motivations are condescending. Give your employees a real world benefit. They're not children.

I hope this spikes your curiosity for reading the book. It's an interesting read on how to manage for purely intrinsic reasons. A lot of it isn't applicable in the real world but it will certainly be very thought provoking and change the way you're managing your team for the better.

From this we can also draw the conclusion that perhaps the “engagement crisis” that the consultants talk about may arise from a failure in management or leadership. It's possible that there's no “gamification” solution needed at all. In engagement arises by how the guild leader manages the guilds inside video games, and these management techniques in the virtual world parallel to those in business management in the real world, could it be that “engaging” a team in the real world is simply a matter of leadership and management also?

I think so. Any “gamification solution” I've applied in management or seen applied didn't “engage” employees who didn't want to work, but gave an excuse for those who wanted to work to work harder. So there wasn't an “engagement crisis” in the first place. Any of these game-like solutions rely in good management to be successful. Don't ever forget that.

Deliberate Practice

There are many false claims used by the gamification community to justify charging exorbitant amounts of money for consultancy fees and “gamification certificates.” One of the popular arguments goes as follows:

“It takes 10,000 hours to make a world class expert. We have calculated that Millennials have spent on average 10,000 hours playing video games by the time they reach their 21st birthday. Therefore Millennials are world class experts at playing video games. We then conclude that by making the world more like a videogame we will tap into a hidden potential in Millennial employees we are currently neglecting by ignoring gamification practices.”

I find this to be an absurd argument without merit. Its origins probably came as an honest mistake and have been propagated as a meme without analyzing its origins. It’s one of the sacred cows the “gamifications gurus” don’t want me talking about, since if this this argument of theirs fails to be true the credibility in their consultancy is at risk of falling like a house of cards. The reality is that one of this key selling point of theirs is a logical fallacy based on a false premise I’ll soon discredit. Their sales pitch goes as follows:

1. Millennials brains are different than previous generations
2. This difference comes from playing video games
3. Since they’ve spent 10,000 playing video games they’ve been “deliberately practicing how to play video games”
4. This means Millennials are world-class experts at playing video games
5. Which means that there’s an immense productivity potential for companies who can adapt their business practices to fit these new video game shaped brains
6. Gamification is the solution to this phenomena, therefore the justification for paying gamification consultants

I believe these meme to have begun with the book *Reality is Broken* by Jane McGonigal and has been used by others ever since. The book doesn’t go into much detail describing *deliberate practice* and simply references to Malcolm Gladwell and the “10,000 hour rule.” If this has been a failure in the author or a miss interpretation from readers I’ll let you decide. But There are many books that go into detail on what *deliberate practice* is, and it’s not a hard concept to understand, so as to why this fallacy is so widespread is rather boggling to me.

Let’s define our terms.

“Deliberate practice” and the “10,000 hours rule” were coined by K. Anders Ericsson based on his studies on elite players in skill-based games in the real world such as athletes and chess players. He came to the conclusion that *deliberately practicing* for 10,000 hours creates world-class experts. This doesn’t mean that people practicing for 10,000 hours were *deliberately practicing* (as gamification community concludes) but that *deliberately practicing* for 10,000 hours leads to expertise. Don’t put the cart before the horse. Mediocre players also practiced for 10,000 hours, it’s *how* elite players practiced that made the difference.

One of my favorite descriptions of *deliberate practice* comes from the book *Talent Is Overrated* by Geoffrey Colvin. He explains the key fundamentals of deliberate practice is as follows:

- It must be designed specifically to improve performance
- It can be repeated a lot
- Feedback on results is continuously available
- It is highly demanding
- **It isn't much fun, or at least is "not inherently enjoyable."**

Last point is key. Makes one raise an eyebrow doesn't it? Another sales pitch for gamification is that fun comes from the concept developed by Mihaly Csikszentmihalyi called "Flow." In a nutshell *flow* is a pleasurable feeling someone gets by doing a task that is not too hard, but not too easy. Video games are experts in this, and gamification claims to have stolen this secret from video games and applied it to the workforce. The result: we can recreate the fun from video games to our workforce.

Makes one wonder, can *flow* and *deliberate practice* coexist in a pleasure revolution where we *deliberately practice* our way to world-class expertise in 10,000 hours of happiness and fun through the magic of *flow*? So far that's what we're told by "gamification experts."

Let's ask the man who coined the term *deliberate practice*:

*"It is clear that skilled individuals can sometimes experience highly enjoyable states ("flow" as described by Mihaly Csikszentmihalyi, 1990) during their performance. **These states are, however, incompatible with deliberate practice**, in which individuals engage in a (typically planned) training activity aimed at reaching a level just beyond the currently attainable level of performance by engaging in full concentration, analysis after feedback, and repetitions with refinement."* K. Anders Ericsson, Capturing the Naturally Occurring Superior Performance of Experts in the Laboratory Toward a Science of Expert and Exceptional Performance

Let me explain *deliberate practice* in a bit more detail in case I haven't popped your bubble and sent you swirling back into reality yet. *Deliberate practice* is the training an athlete does in order to improve their performance, it's not playing the game itself. It's pushing themselves to the very core of their limits in a very specific repeatable activity, not finding a happy place between too easy and too difficult in a *flow* state. It's adding pressure, which is painful, in order to cause a physical change in their bodies and minds in order to improve their skills in real-world performance.

Let's use the example of a basketball player. He'll practice one shot for hours. He'll perform interval running in order to condition himself for hours. He'll practice dribbling for hours. He'll practice single dunk moves for hours. He'll play quick moves as defense or offense with his team mates for hours. He'll watch recordings of himself and of professional basketball players for hours. All the while pushing himself to his very limit (which is painful) and repeat these moves countless times (which is boring).

He's motivated not by immediate releases of dopamine such as gamification claims, but by the hopes of dopamine in the future as explained earlier. It's the hope of a future reward that keeps him engaged through the painful and boring process of gaining skills in the real-world.

"I hated every minute of training, but I said, 'Don't quit. Suffer now and live the rest of your life as a champion.'" - Muhammad Ali

Deliberate practice stimulates particular neurological patterns aimed for performing the activity they're practicing for. These electrical stimulations spark the development of white matter in the brain called myelin. The myelin sheath wraps itself around these specific neurological patterns being used, and by doing so it protects these neurological patterns from disintegrating over misuse or exposure to neurological toxins while speeding up the communication between the neurological patterns. This phenomena occurs when:

- You're pushing yourself to your very limit
- You've just made a mistake
- You have feedback informing you about this mistake
- And you take immediate action to correct it

Practice this way for 10,000 hours and the structural differences in your brain and body would have created a world-class performer according to Eriksson's research.

"The revolution is built on three simple facts.

(1) Every human movement, thought, or feeling is a precisely timed electric signal traveling through a chain of neurons—a circuit of nerve fibers.

(2) Myelin is the insulation that wraps these nerve fibers and increases signal strength, speed, and accuracy.

(3) The more we fire a particular circuit, the more myelin optimizes that circuit, and the stronger, faster, and more fluent our movements and thoughts become."

— Daniel Coyle, *The Talent Code*

"So there's the picture in a nutshell: each time we deeply practice a nine-iron swing or a guitar chord or a chess opening, we are slowly installing broadband in our circuitry. We are firing a signal that those tiny green tentacles sense; they react by reaching toward the nerve fibers. They grasp, they squish, and they make another wrap, thickening the sheath. They build a little more insulation along the wire, which adds a bit more bandwidth and precision to the skill circuit, which translates into an infinitesimal bit more skill and speed.

Struggle is not optional—it's neurologically required: in order to get your skill circuit to fire optimally, you must by definition fire the circuit suboptimally; you must make mistakes and pay attention to those mistakes; you must slowly teach your circuit. You must also keep firing that circuit—i.e., practicing—in order to keep myelin functioning properly. After all, myelin is living tissue.

*To sum up: it's time to rewrite the maxim that practice makes perfect. The truth is, practice makes myelin, and myelin makes perfect. **And myelin operates by a few fundamental principles.**"*

— Daniel Coyle, *The Talent Code*

Is this starting to make sense?

- Video game players aren't deliberately practicing
- which means they've not gained any "world-class expertise in solving games"
- which means there's no hidden potential for companies to tap into from video gamers through the expensive consultancy fees of "gamification gurus"

This isn't even running into the problems we discussed in chapter three where we concluded that the lack of godlike powers to change reality renders us incapable of developing "artificial power-ups" for our employees hoping to flood their brains with dopamine the way virtual worlds do. When I hear "reality is broken" I can only shrug and say "so what, we can't program ourselves into a Huxlyan dystopia so why bother with imaginary worlds?"

Why bother? The "gamification guru" may ask, but one can but only see what they charge for the false promises of gamification and get our answer.

Besides, placing our hopes in *Flow* as a “gamification trick” is a moronic claim. Pay attention as to how video games create *flow*: they make a game easier or harder by giving the video game character a magical sword that makes it easier to kill goblins or increases the “health points” in goblins to make them harder to kill. These are tricks a programmer can use in a virtual world. I can neither give my sales representative a magical “persuasion hat” or increase the level of interest in my employees potential customers by pressing a button before they’re off to work.

Is this really too hard to understand? It’s as if they’ve never actually worked as a manager or developed the slightest shred of critical thinking skills. This may work in video games, ok, and why is that relevant to managers in the real world if we can’t replicate it I ask.

What we have here is another case of the “gamification guru” shouting “daddy is a doctor.” They don’t understand the concepts they’re using. They've reduced these concepts into the level of their own mediocrity or deliberately distorted them in order to sell consultancy fees.

To conclude:

- Video gamers don't have a magical skill companies can tap in because they were never deliberately practicing to begin with.
- Even if they had been deliberately practicing in a game this knowledge is rarely transferable to other areas (playing gold isn't going to help you do a financial analysis if you can't even read a balance sheet).
- Since deliberate practice is mandatory to gain expertise, and deliberate practice is painful and boring, the “pleasure revolution” of gamification is a quest to glorify mediocrity you're better off ignoring.

Explicit and Tacit Knowledge

Another dishonest trick used by the gamification community to puff up their credibility is the argument that people are learning through play, therefore the “gamification of everything” is a powerful tool for learning. It might be true that people are learning when they’re playing a video game, but this is yet another example of their own versions of “Daddy is a doctor” thought experiment we introduced this book with.

Technically people spending time in Facebook are learning, but who in their right mind would make an argument that spending hours a day in Facebook isn’t a waste of time, much less say it has a long term educational benefits that are providing practical knowledge for the real-world? But somehow video games are a magical exception...

There are two types of knowledge, and they build upon each other. Those two ways are:

Tacit knowledge – difficult to articulate; usually defined as “know-how” or “street-smarts”. It can be transmitted through stories, through social interactions in a group, and through personal experience.

Explicit knowledge – codified in language and discourse. It is the facts and figures that can be transmitted by books and dialogue.

An example of tacit knowledge can be seen with a child learning how to hit a nail with a hammer for the first time. You can codify the process to hit the nail with the hammer and explain it to the child as explicit knowledge. But the child only develops the actual skill to do it by taking action, and through trial and error, discovering how to hold the hammer and hit the nail properly.

These two types of knowledge coevolve in our brains in order to gain expertise.

“While tacit knowledge can be possessed by itself, explicit knowledge must rely on being tacitly understood and applied. Hence all knowledge is either tacit or rooted in tacit knowledge. A wholly explicit knowledge is unthinkable.” –Michael Polanyi

“No one can draw more out of things, books included, than he already knows. A man has no ears for that to which experience has given him no access.” Friedrich Nietzsche, Ecce Homo

These two types of knowledge are stored in different brain regions. Declarative memory stores explicit knowledge, while implicit memory stores tacit knowledge.

One way to gain tacit knowledge is through a process called implicit learning. This is when we learn without realizing we’re learning. Think about how a person picks up an accent or habit after moving into a new geographical region. He or she didn’t deliberately try to change, this learning occurred subconsciously. Much of the learning from games happens through implicit learning.

- *A New Culture of Learning* by John Seely Brown is entirely dedicated on how we can harness implicit learning as an educational tool through practical use of new technologies and educational practices.
- *On the Origin of Stories: Evolution, Cognition, and Fiction* by Brian Boyd gives you an anthropological perspective as to the evolutionary benefits of implicit learning through the anthropological definition of play (games, art and stories).

· *The Heart of Judgment: Practical Wisdom, Neuroscience, and Narrative* by Leslie Paul Thiele is filled with studies on implicit learning, and explains how it affects our judgment and decision making, which has practical consequences for the real-world.

But you don't necessarily have to read the books to grasp this concept. A quick article titled "MINDFULNESS: IS THERE A DOWN SIDE?" Offers the following quote:

"Explicit and implicit learning do not happen at the same time; using one method of learning seems to be at the expense of the other." Chelsea Stillman, a PhD candidate in psychology at Georgetown

A basic explanation based on my understanding of the learning process is as follows: Implicit learning through the anthropological definition of play (games, art and stories) supercharges the creation of new neurological patterns in the brain. These patterns can be improved through deliberate practice by the development of thicker myelin sheets. This knowledge is tacit so far, we can't articulate it. Explicit knowledge helps as an aid to these tacit neurological patterns (aka "memory chunks") aiding in our decision making by combining the declarative and implicit areas of our brains (conscious and unconscious).

A couple of quick references to this can be provided through the book *Top Brain, Bottom Brain: Surprising Insights into How You Think* by Stephen Kosslyn and G. Wayne Miller and the research paper titled "The Role of Deliberate Practice in Chess Expertise" and "Templates of Chess Memory: A Mechanism for Recalling Several Boards," "The Role of Practice in Chess: A Longitudinal Study"

The research paper gives you an example as to how these two types of knowledge interact in order to develop elite chess players in the context of deliberate practice and the 10,000 hour rule. It claims that a chess player has to begin his journey to become a Grandmaster through practice and instructions and actually play the game (tacit knowledge). After about three years, there has to be a shift towards explicit knowledge by reading chess books. After three years there's a direct correlation between the number of chess books chess players read and their performance. Those who didn't dedicate themselves to reading, and kept playing chess, plateaued after those three years and remained mediocre players. Chess book readers saw an exponential growth in their ranking every consecutive year after that (you can research the relation between memory chunks and chess expertise to understand why there's an exponential growth in skills).

Chess expertise therefore relies heavily in solitary study and reading books. In fact, in cognitively complex skill-based games in the real-world, reading is the MOST important factor when deliberately practicing for 10,000 hours in order to become an elite performer.

"Taking into account the activities measured in the questionnaire, we can conclude that reading (as inferred by the number of books), an individual activity, is the most important predictor of chess skill. On the other hand, coaching and log speed games, two group activities, were also significant predictors of chess skill, although their importance was moderated by age." The Role of Practice in Chess: A Longitudinal Study pg. 19

Some "gamification gurus" have actually claimed that a decline in long forms of reading isn't something to worry about since video games will replace learning. They also claim that video games are a superior way of learning since it's "active" while books and lectures are "passive."

*“A little learning is a dangerous thing;
drink deep, or taste not the Pierian spring:
there shallow draughts intoxicate the brain,
and drinking largely sobers us again.”* Alexander Pope, *An Essay on Criticism*

Can you now begin to see the absurdity of the gamification community? These “experts” claimed to have unlocked the secrets of the universe by studying virtual worlds, that “reality is broken” and with a magic wand they’ll fix it. They’re like the little girl in our thought experiment where her understanding of the world stops at “Daddy is a doctor” while claiming to be the world’s experts on “gamification” (whatever the hell that word means to them).

Key points:

- Traditional education is still the best form to access the declarative memory in our brains and infuse it with explicit knowledge
- Explicit knowledge is a mandatory factor to become an elite performer in cognitively complex tasks
- Explicit knowledge relies on tacit knowledge

So now we can dive into the applications of this to corporate training. Hopefully you now understand the absurdity of the “gamification guru” when he says he’ll “gamify lectures.”

The way you make someone study is by making them understand it's going to help them in something they're interested in. If the lectures or reading material don't address some interest, you won't engage them.

- The reason a chess player reads chess books is because it improves their performance
- The reason online gamers read game community wikis and forums is because it improves their performance
- The reason a sales rep, entrepreneur or investor reads business books or online articles is because it improves their performance

There is a platform where they're operating in. Winning is in their interest. Knowledge becomes a resource. The more they know, the better they perform in a field of their interest.

Besides, turning lectures and books into games conflicts with the memory pathways, and are therefore an oxymoron. Keep that in mind for future chapters.

“Explicit and implicit learning do not happen at the same time; using one method of learning seems to be at the expense of the other.” Chelsea Stillman, a PhD candidate in psychology at Georgetown

The Only Sustainable Competitive Advantage

“The ability to learn faster than your competitors may be the only sustainable competitive advantage.” – Arie de Geus

A reasonable argument started years ago in management literature that was simple: “The world is changing at an incredible fast pace, and the companies that learn the fastest are at an advantage.” Due to this key fact I believe consultancy practices such as those from *Cognitive Edge* and *ReD Associates* are so valuable. Three key components stick out:

1. You must know how to do research and understand the situation you’re in
2. How to organize the data you have
3. How to use the knowledge inside your employees heads

Another key aspect is that learning can be a source of engagement. As Raph Koster put it “fun is just another word for learning.” But once again we must not overgeneralize this concept. This doesn’t mean that if your employees are having fun when they’re learning or that they’ll have fun by learning (as explained through *deliberate practice* above, it isn’t fun).

The following quotes are from a blog post from Raph Koster titled “Why We Like a Given Game”

“Our brain works by attempting to assemble heuristics, habits, and schemata [Schema (psychology)] to be applied towards fresh and novel situations as we encounter them. We cluster together knowledge into groups we call “chunks” in order to better manage them with our relatively limited bandwidth. In other words, we function through pattern recognition.”

If you are familiar with Knowledge Management you’ll recognize that one key aspect is managing the heuristics, habits and schematas of the employees in the corporation. If a game designer is saying these are the causes of “fun” and we have available a whole field dedicated exclusively on managing these in our employees, why not apply Knowledge Management into our general management? This is one reason I believe there is no need for a “gamification industry.” Any insights from games would simply be small tweaks into the existing body of knowledge in KM.

“This same chain of logic argues that if you want to expand your skill set, your pattern library, your heuristics, your chunks — basically, if you want to maximize your potential — you should go play the games you don’t find fun. It will be hard work until you get a handle on them, but odds are good you have been avoiding these games because they are more work. And this carries through to life in general. You may think that you’re good at math and bad at poetry, and therefore avoid poetry as early as you can in life. But someday you may encounter a situation where the poetry is useful. Don’t avoid the things you find hard. Work on them.”

Currently the whole argument of the “gamification gurus” arise in the belief that you can find a person's “personality type” or “key motivation” and design something that would be fun from the start since you’re pandering to this fixed personality trait. If you understand basics in cognitive science you’ll be

aware of the absurdity of that claim, and here's Raph Koster to back up my view. Remember that gamification doesn't have much if any credibility amongst game designers.

Key paradigm shift: In order for an activity to be fun you must have a basic skill set for that specific activity, and developing that skill set through deliberate practice isn't going to be fun.

The "pleasure revolution" promised by gamification is just not going to happen. It's literally a biological impossibility. The fact is that time-based games don't work in real-world situations that require performance in skill-based problems.

Instead as a manager you must instill in your employees different mindsets that in my case were borrowed mainly from sports psychology books. Keep this in context though: if I'm managing a team of only young men who are knocking doors (a physically, emotionally and mentally demanding job) I'll push this "sports mentality" a lot harder than if I'm managing a group selling in a call center where I have women and older employees who don't care for this type of talk.

My general approach:

Basically you frame the job as being one of the hardest things they'll ever do. There's probably going to be many times they're going to want to cry, we've "all been there" and share how we overcame it. Knocking doors isn't for wimps. The mere fact that they took the job shows they have guts. Our teams identify themselves as hard workers, who keep a positive attitude and are out of their comfort zone looking to win. The skill sets you gain from this job will be used on any field you'll enter in the future (many of them are students) so try your hardest to learn it in order to make money while you work with us and carry those skills for the rest of your life as you enter your career outside sales.

This is a very different approach as to what the gamification industry is advocating.

I focus on the two variables I can control in my employees: Their skillset and their mindset. This is exactly what sport caches do in skill-based games in the real world.

The approach brought forward by the gamification industry claims we can create a world of pleasure and happiness by pandering to our employees personality types. If the employee is unmotivated and doesn't want to work, this is the employer's fault. By paying the gamification consultant we'll trick the employee back into working through positive psychology mixed with game design terminologies. I find the gamification approach ridiculous. It's basically begging the employee to work by putting some "fluffy feeling in their tummy." It practically puts you in a position where you're begging for them to do what they're paid to do: "please employee, do your job, I heard you like video games and having fun, aren't we fun enough for you?"

I've been criticized for saying this before but I won't back off:

- a. If you have an employee that doesn't want to work FIRE HIM. There's plenty of people who want a job and aren't afraid of work.
- b. You can't make someone who doesn't want to work begin working through "gamification."
- c. "Gamification" (and by that I mean my style of skill-based gamification) ONLY works on employees who ALREADY WANT TO WORK.

In short the “engagement crisis” they keep trying to sell us on isn’t going to be solved. I’ll even take this a step further: “gamers” are the WORST employees.

Now, don’t misunderstand what I’m saying. By “gamer” I mean a particular type of addiction. If I say alcoholics are a problem this doesn’t mean I’m calling everyone who drinks an alcoholic. When knocking doors you take people outside their home state to spend months in another state working full time six days a week. This means you’re literally living with your employees and managers. Your coworkers are literally the only people you’re spending time with (unless you’ve found a date). So you get a very good idea of what people’s habits are.

Now, most sales reps will play simple games in their phones such as “Clash of Clans.” These are “casual games” someone plays for a few minutes. By “gamer” I mean the video game addict who will bring with him his TV and Xbox and spend all his free time playing it in his apartment. These are the type of people “gamification gurus” tell us their techniques will work on by either:

1. Making them finally willing to work. That whole “gamers brains are too complex due to video games, making the real-world too simple for this amazing generation, which explains why they’re bored” argument.
2. Or that whole “gamers brains are hardwired to solve problems in game contexts because by age 21 they’ve spent 10,000 hours developing amazing skills so if we turn work into a game-like activity (gamification) you’ll see amazing results in productivity” lie.

These “gamers” are the worst employees. They tend to easily get frustrated and literally cry. Instead of reading a sales book, practicing their pitch or asking for advice they simply hide by playing their video games. They’re negative and always complain. They hardly have any social skills. They don’t want to work. THEY DO NOT CARE ABOUT SALES COMPETITIONS and are utterly depressed their entire time and are the first to go back home defeated.

The arguments in books such as *Reality is Broken* are absurd. Playing video games aren’t developing any real-world skills in these young men. They’re pathetic and miserable.

Let’s go back to Raph Koster’s argument that fun comes from playing games where you are exercising “skill sets, neurological pattern libraries, heuristics and memory chunks” that you already possess. What are the skills being used from games inside the real-world? The gamification community tends to use broad abstractions when describing these skills such as “never giving up” and “searching for an epic win.” But these aren’t any skill sets, and they’re definitely not character traits our beloved gamer employees poses.

I want you to imagine two 20 year old men. They both had very similar lives until they turned 16 years of age. Man A got a job as a waiter, and has spent at least 20 hours a week working a real job ever since. Man B gets money from his parents, and has spent the same amount of time playing video games in his room. One spent four years working a real job, another playing video games.

Let’s assume you hire both men at the same time as sales representatives. Which man is going to have the “skill sets, neurological pattern libraries, heuristics and memory chunks” more likely to aid him as a sales representative? Man A who has been talking to people in the real -world, attempting to be

competent and likable in order to gain a bigger tip, or the one pretending to be an elf in his computer and being rewarded with artificial power up to make him feel special?

Who do you think is going to actually enjoy his job?

I really hope you start seeing the absurdity in the gamification community.

But now for some practical application to all this.

Forget about any personality type or motivation garbage you've learned from the gurus. Your employee is going to be working for three main reasons:

1. They need to make a living
2. They want to gain experience
3. They're bored and need something to do (applies to older employees who have retired or are done raising their kids)

Obviously these reasons can be mixed. The reason they want experience is to make more money for example. You need to find their main motivation for working. If it's money, find out why they want it. School? Family? Nice car? Need cash for business they're starting? Just making a living? What kind of experience they're looking to get? Are they looking to become a manager for the company? Are they graduating in a few years as a lawyer?

Now, like a good salesman, you will make the employee believe that working their ass off for the company will provide them with what they want. This isn't some abstract metaphysical argument for "finding happiness or fun" but must be well grounded on the earth. Find a REAL benefit.

After this is done you make him aware that to achieve this goal of his, he's going to have to work harder than he's ever worked before. A key aspect here is that they have to see that management is working harder than they are, and are competent in their job. You have to be able to project status. If you don't understand this read the Stanford article "The Peril of Power Without Status."

You also have to care about the employee, and make sure you train him properly, and be very clear of what you expect from him. Once he starts with any negativity or he's slacking off you make it clear that that's not how the team, which he is a part of, behaves or thinks and pull him back into positivity and hard work.

That's the basic model I use. Now, the actual manifestation of how you manage will change drastically from team to team and industry to industry. The whole idea that there's a "best practice" to be found, and this is to be replicated like a cookie cutter approach, as has been pushed by gamification, is absolute nonsense.

I expect you to be smarter than believing such nonsense. Two key points to remember:

1. You must adapt to the necessities of the particular situation you're in
2. Every solution has its inconvenience.

For example, if you create a competition where everyman is for himself, you might cause conflict since friends are now competitors and how they perform in sales is a status symbol in the group. If you divide a competition in groups you might have the top sales reps teach their secrets to newer reps, or you could have them become hostile if new reps aren't "pulling their weight." If you make competitions based purely on skill you might discourage the less skilled sales reps, if you give out prizes at random as in a raffle you could make the skilled reps angry since the company is rewarding the prize to an unskilled rep who they're outperforming.

You can only know what's going to work in your team by managing it, there's always peculiarities, there's no solution without its inconvenience.

My management styles has been heavily influenced by Dave Snowden from *Cognitive Edge*. I would suggest you study his work. If you understand the theory behind KM, you'll be able to adapt it to your management

But notice the key difference between what I'm suggesting vs the gamification community:

Their focus is to understand "video game design" (unsuccessfully according to many game designers). By understanding what computer programmers do to create an illusion of empowerment in a virtual world they're going to then "fix" our "broken reality."

What I mean by understanding theory is the study of what actually works in the real-world. This aided by researchers studying the real-world. Having a foundation on how the real world works, we can then find compromises with the game world. Theory grounded in managing reality wins against theory grounded in designing virtual reality.

You can study how programmers create fantasy all your life, it doesn't mean you can apply it to management.

But getting back on topic. Once you've sold your employee on the "why," as in "why he's going to bust his ass for you," you must develop the "how."

The how is going to vary from team to team. The individual is going to tend to conform to the group's culture, and a lot of the culture is determined by the managers and top sales reps. These are the "high status" individuals the new sales reps are trying to imitate.

For example, one very successful team I helped managed was formed by very polite individuals who would never curse, worked out constantly, ate healthy, and read books and listened to audiobooks in the car (sales focused). This lifestyle "trickled down" to the new sales reps, and created a culture of "self-improvement." They all became polite, worked out, ate healthy and read books. The conversations between the reps in their free time were about the books they read. They were very focused on improving their sales skills, and thus engaged.

Another group I worked with (who was one of the best in the company) was the entire opposite. They were extremely vulgar, management was out of shape, no one worked out, they constantly ate fast food and didn't dare read a single book. When they got back to the apt after work they tended to watch a comedy series and joke around. There was a very humorous aspect to them, while the first team took

their job very seriously. They were literally having a great time, hanging out with their friends, eating pizza and Taco Bell every other day and constantly joking around.

This second team would learn through the intense social interactions between them. Instead of reading a book by themselves, they would constantly be sharing stories. Their competitions (“gamification”) were also different. They divided experience reps with new reps, offered large cash prizes to the winners (in the hundreds, which is peanuts considering we were making between \$1,000 to \$6,000 a week) and had the experience reps train the new reps on the hour long car rides to the area they would be knocking on.

The second team did so well in my opinion because they were really fun to be around, and once they hit the doors, they had a fun attitude with the potential clients. Now, it wasn’t always like this, this group also was the most dramatic and confrontational group I’ve ever been in. It was the largest team (25-40 members depending on what week you’re in) I worked with knocking doors, and you had members that absolutely despise each other, constant trash talking. Oddly enough those differences disappear after they returned to Utah and they tended to be very good friends outside work.

I’ll give you an example of how I would learned with this team.

People can be really rude in the doors and simply slam it in your face after they scream an insult or threaten to murder you for trespassing. This tended bother me, I would get really angry at them, which would put me in a bad mood, which isn’t beneficial for selling. After hearing stories in this group where they literally laughed out loud at how these people had acted and insulted them, this never bothered me again. It was an outlook that I learned.

Another sales rep might tell the story of how some guy shouted at him from his porch “Hey you! Come here! I don’t know what you’re selling but you seem to be in a good mood and I want to hear about it.” and sold him.

Along with hundreds of these stories my style got polished. These weren’t “planned trainings” but just stories aimed at producing a laugh, which were at the same time very instructional.

If you study Dave Snowden's work you’ll understand why this works. I believe this example is sufficient to make my point. You must understand the *why* and the *how* your employees learn in the job. KM is more valuable than reading game design theory for decades.

Complexity Science

*“Game developers and players have critiqued gamification on the grounds that it gets games wrong, **mistaking incidental properties like points and levels for primary features like interactions with behavioral complexity.** That may be true, but truth doesn’t matter for bullshitters. Indeed, the very point of gamification is to make the sale as easy as possible.” -Ian Bogost, *Gamification Is Bullshit**

One of things I always found rather odd about “gamification gurus” is their constant use of the phrase “gamify systems” and yet when you ask them the simple question “is there a difference between gamifying an open and closed system?” they’re baffled. The men aren’t even aware that there’s a difference! (If you're new to systems thinking I would suggest reading HBR article “The Ambidextrous Organization” in order to catch up).

My argument was a very simple and reasonable one: New developments in management are taking into account the type of system being operated in and adapting their management style according to it. For example: Close systems in manufacturing apply *Six Sigma* while open systems in software startups may use *The Lean Startup* method.

In short, the Ontology we find ourselves in (the system) must be accommodated by a proper Epistemology for managing that particular Ontology. A very sensible thing to say.

appreciated. The activity itself is rewarding on its own.

∨ White hat and black hat core drives

^ Criticism

Eugene Sheely criticizes the Octalysis gamification framework of finding players motivations as not understanding the “social psychology or systems science and are making a mess of things, ultimately eroding the credibility of gamification as a whole”.^[7] Others have indicated that the concept’s complexity may limit its usefulness.^[4]

∨ Application

∨ See also

... References

One of my favorite Ted Talks is titled “TEDxColumbus - Ann Pendleton-Jullian - 10/20/09” It’s not very well known. Ann has worked with systems and network theory before. In this talk she explains how games are *complex adaptive systems* and how she used games to teach complex adaptive systems (in the context of architecture) to her students. Point being it can only take a 20 minute video to have a very well thought out presentation as to why games are complex systems, why society is a complex system and come to the conclusion that “gamification” would also be operating in complex systems.

From that a simple conclusion can be arrive at: if you are going to “gamify a system” you very well should study the nature of systems.

Alas, I was received with intense hostility for this. It would have destroyed their entire business model relying on cookie cutter best practice solutions and opened a pandora's box of potential competitors who understands how to manage in complex systems.

Why we need to understand Complexity for “gamification” isn’t that hard to understand seeing that you have people already linking complex systems inside a game context. Ann Pendleton-Jullian, Christian Madsjerg in his book *A Moment of Clarity*, Dave Snowden with his “Children's Party” metaphor, the case study of Constance Steinkeuhler who applied *sensemaking* to get teenagers to start reading, Eric Ries in his book *The Lean Startup*, and the game designers in general working in games-as-a-service and community management. In fact video game design literature is filled with examples linking game design design to complex adaptive systems...

Complexity theory isn't new to game design, but if the “gamification guru” can't profit from it, it's not “gamification.”

In 2013 I wrote a 50 page piece called “Systems Base Gamification: Complexity” and have attempted to explain very simple philosophical concepts such as Social Atomism, Communitarianism and Reductionism, but only a handful of people got it. I’m not going to bother going into too much detail. Honestly it’s like trying to teach algebra to a horse when talking to most gamification advocates. A complete waste of time. Since I’m not looking to convince the “gamification fanboys” who I know for a fact can’t even read a Wikipedia article much less a book I won’t spend time on it again. I’ll explain the very basics of complexity to you instead, those with the head to understand its value will do further research on their own.

If you’ve worked in finance you’ve probably heard of the *Theory of Reflexivity* from George Soros. Business in general has made popular *The Lean Startup* from Eric Ries. Perhaps you’ve read *Currency Wars* or *The Death of Money* by Jim Rickards, etc. When I’ve referred to these authors I’m attempting to enter into a shared experience in business that has relation to Complexity.

A complex adaptive system is one where the agents are constrained by the system, but these agents also change the system. These types of systems were originally studied in animals working in groups, such as ants or a flock of birds. In humans there’s an added blanked of complexity that arises from our intellect (we aren’t ants obeying chemical messages mindlessly without a degree of free will), some have differentiated this distinction in humans as “Cognitive Complexity.”

There are many variations on how we can define a complex system. For the sake of brevity let’s point out four key features, but understand this is just one way to define it:

1. Diversity. People think differently.
2. Connectedness. It’s not a system if there’s no connection.
3. Interactions. Are people communicating with each other?
4. Adaptation. Simply means “my behaviour affects your behaviour and yours affects mine.”

Based on these principles patterns emerge. Complex systems are nonlinear. You can neither go back and undo a pattern that has been created. This is key.

Dave Snowden explains that there’s two types of linear systems:

1. **Simple Systems.** Imagine a water pump. Anyone can quickly see how the system works. In management this is where “best practice” works.
2. **Complicated Systems.** It’s still linear, but requires expertise or research to figure out. Imagine an engineer building a bridge. In Management this is where “good practice” works.

Now, don’t simply categorize these systems based on “difficulty.” Dave Snowden explains that an airplane is Complicated while Mayonnaise is Complex. Building an airplane is linear, and you can pick it apart and get the original parts you started with after it was built. You can’t take apart Mayonnaise and get the original ingredients again. The chemical process has had a new substance emerge and you can’t go back. Can you see the ontological difference?

I’ll give you a personal example of an “emergent property” in social systems. One of my employees didn’t know I was Mexican (I have white skin and blue eyes but have lived in Mexico most of my life). He proceeded to make fun of a Mexican lady he tried to sell over our dinner conversation. Since my mother and grandmother, who I love, are Mexican, I took this as a personal offense. I scolded him in front of the group, our relationship never recovered and I fired him at my first opportunity. Can you see the four aspects of complexity at work? Can you see the emotional hooks from Raph Koster in the community? Our relationship never was the same after he said what he said, just like with Mayonnaise, once a pattern emerges you can’t go back.

Another key aspect of complex systems is that they’re not causal, but dispositional. We can make a guess as to where they’ll likely move to, but they’ll never repeat a past pattern in the same way.

So quick reference as to how to navigate these systems:

1. **Simple Systems:** Best Practice can be discovered.
2. **Complicated Systems:** Good Practice is applied. The expert knows there’s going to need to be a degree of variation but these are constrained in a single ontological context.
3. **Complex Systems:** We can’t know what’s going to work beforehand. There’s exploratory techniques you apply to discover the nature of the system, and safe-to-fail experiments to determine what’s working, what isn’t, and proceed from there.

Again, this is a very basic oversimplification, and there’s entire books on this subject, but I hope you can start to see where the problem lays. Gamification, as it stands right now, has an epistemological problem. It isn’t too hard to see:

Gamifications focus is on creating best practices for complex systems. They’re assumption is that they can find a causal relationship for “fun” from video games and apply them into the real world. Never mind the problems with this approach that we already covered in the first chapters (that whole not having Godlike powers like a computer programmer argument...), COMPLEX SYSTEMS ARE DISPOSITIONAL. Even if you had a good hypothesis (consulting firm *ReD Associates* says you shouldn't even have one in the first place) It’s not going to work a second time.

I’ve managed multiple sales teams between call centers and door-to-door sales. With door-to-doors I had the most homogeneous groups of people you could imagine. They were mostly about the same age group in their 20’s. They were all male. They were mostly white. They were mostly from Utah or Idaho. They were mostly Mormons, which means they all shared the same religion, morals and norms and had

nearly identical child rearing. So we got age, sex, race, geography, religion and culture to be identical. You would think that if “best practices” would work anywhere would be here. Yet I was NEVER able to use the same technique to engage a different team twice.

I don't need a theoretical reason to suspect on the credibility of their consultancy practices, just based on my own experience I can know it's not going to work. The cookie cutter approach of best practices isn't going to work between teams inside the same company. It isn't going to work between different companies. And it's definitely not some universal solution applied into everything discipline under the sun, indefinitely, as they so wished.

If the systems they're trying to “gamify” are complex then best practice doesn't work. It also means it's not causal so their cookie cutter solutions aren't going to work. Neither is the mountain of case studies and backwards engineering of software companies such Twitter since WE ARE WORKING IN DIFFERENT ONTOLOGIES every single time and complex systems are dispositional, not causal, making repetition highly unlikely.

They're using deductive reasoning when they should be applying abductive reasoning. They can't even get the proper thinking tools for the situation their consulting about right.

Another huge problem with their claims is that they don't have any expertise in the fields their consulting in. Let me explain the marketing alchemy they're running:

When we hire a new employee we tend to want a level of expertise in that field. Let's assume we're hiring an executive. Not only would we want him or her to have at least a bachelors on the field representing the department they'll be in charge of, but we would also expect real-world experience of several years working in that specific field. Can we agree this is a reasonable expectation and a common practice (at least in the US)?

Now, let's assume you have a position for the head of sales and a man walks in. This man has zero experience in sales. Hasn't worked in sales a single day of his life and hasn't even read a single solitary book. In fact, he's an IT guy. Would you hire him?

Any reasonable person would laugh him out if their office. He has no experience or education, who would take him serious?

Now, let's assume we give the man a minute to make his case, and we ask him why he should be hired. He tells you that he's spent over ten years studying how video games make people happy, along with positive psychology and what have you. He's a world expert in happiness. These techniques are universally applicable everywhere. He explains there's research showing that happy people are more productive, and he's going to come in, change everything, and gamify the whole thing since reality is broken and he knows how to fix it. He gives you a big fat grin and stares at you after he's done talking (just to prove what a happy guy he is).

Are you still interested in hiring this man with no education or experience to run your sales department? Not to mention he's not even willing to learn in the job, he already has a tool set of magical solutions he's itching to implement that he discovered by playing video games...

I'm assuming you wouldn't hire this man as an employee. Why are people paying \$400 for a Skype conversation or \$2500 for a three day training class is beyond my understanding.

I guess if an IT guy were to say "gamification has been around in sales for a long time we are the 2.0 version of past techniques" some morons fall for this charlatanism? Seems to be what's happening.

"...he who seeks to deceive will always find someone who will allow himself to be deceived." — Niccolò Machiavelli

In Mexico we still have many charlatans selling magical health potions that can cure all sorts of disease. They can be some magical water blessed by a saintly figure, some magical candle with a specific prayer, some witch doctor with the aid of God or an ancient Native American pagan demon, etc. But it's always the same: Someone with no study or experience in medicine offering a magical solution that cures all diseases. A cookie cutter health solution with universal applications. Can you see any similarities with the "gamification gurus" and charlatanism yet?

But back on track. As I said before a big bulk of my management style comes from the consultancy firms *Cognitive Edge* and *ReD Associates*. Obviously, explaining the practices that they've develop, and that I use, could take hours since I need to explain the theory behind the practice. So, when doing my trainings I've developed and elevator pitch. I say:

"I assume most of you have heard about *The Lean Startup* movement?"

Many are in business, and have heard of it. Very few actually read the book.

"Cool. The book is about a video game company that figured out a process to help them understand their potential customers (the video game players) and discovered what was fun for them. This process has been successfully replicated across diverse sectors in industry and government, and doesn't necessarily focus on starting a new business, but in starting new venture, such as introducing a new product, service or management program."

They tend to follow me in this point. or at least politely pretend to.

"You know your employees better than anyone, I'm not going to tell you how to run your team. But I'll show you a process that could help you understand them even better..."

At that point I explain the "Build-Measure-Learn" loop, how we can't know for certainty what will work before running tests, and how to use "Safe-To-Fail" experiments.

So, if we are managing in complex adaptive systems (which social systems are) then we must use the proper epistemological tools. You can get deeper and deeper into the rabbit hole by studying the authors I've mentioned, but understanding the fundamentals of *The Lean Startup* really is all that's necessary.

The attacks against me from the gamification gurus can be traced to the following statement I first made in LinkedIn:

“The Lean Startup is about a video game company that develops an engagement process that has been successfully applied outside game contexts across industries around the world. You know your business better than anyone... Study those principles, come up with some fun ideas with your staff, run the safe-to-fail experiments with your employees and see what sticks. You don’t need to spend money and time on gamification training.”

When I posted this I soon got “gamification experts” Jumping in defending their consultancy practices. It’s been the same story ever since:

1. I don’t understand gamification
2. They’re the experts
3. I’m stupid
4. I’m hostile after being attacked and “rude people can’t be right”

Their reaction makes sense if you understand the significance of what I’m proposing. When I made that statement they went absolutely nuts. I wasn’t some random guy on LinkedIn giving my opinion, I was writing articles every few weeks in the most visited gamification focused website and consecutively having my work as the most shared gamification publication online in that given week (base on twitter shares). If what I was proposing had caught on, it would have destroyed their business. Pay attention to what I’m advocating:

1. They can’t simply say “I’m an expert in gamification therefore I can consult on every topic under the sun.” The same way you wouldn’t hire a man with no school or experience to be the head of X department as an employee, you shouldn’t hire him as a contractor. You need experience in the field you’re helping manage or their advice is very likely to be irrelevant at best if not disastrous.
2. Requiring expertise in the fields they’re helping manage would drastically narrow the field they’re an “expert” in. It would also destroy their differentiation in that now narrowed field. If what they do for a day job is IT or Marketing, then there’s a million other people with more experience than them. Not a nice sales pitch when trying to charge \$400 an hour for a Skype consultation.
3. They can’t copyright *The Lean Startup* (aka *sensemaking*) or any of the other solutions I’m proposing. Any solution that doesn't come through them is lost revenue.
4. I’m literally advocating other consulting firms who focus on Knowledge Management and the Humanities over their practices
5. I’m suggesting that the “gamification expert” is irrelevant. Complex systems aren’t causal. If I tell management that all they need to do is come up with a few fun ideas, run some safe-to-fail experiments, and come up with practices based on the results of these experiments there’s no need for the “gamification guru.” They’re disposable!
6. Video games aren’t reliable sources for management techniques. Virtual world design practices aren’t applicable in the real world. Video gamers aren’t special and there’s no hidden talent to tap from them at work. If these points are true, it rather crushes their whole sales pitch as for why their knowledge in video games is valuable.

7. Cookie cutter solutions and best practices don't work.
8. The word isn't casual, so their whole personality type and fixed motivation boxes categorizing humanity is a waste of time, leaving them nothing to consult in or copyright. Not to mention it's absolutely discredited by game designers. Richard Bartle himself (creator of the Bartle Types used in gamification) has spoken extensively against gamification gurus using his model outside video games (he says they don't even work between different types of games much less outside the game world).

I'm not going to spend anymore time on this topic, I assume you get the point. If you're interested in knowing more about Complexity I've already provided references where you can start.

Mindsets and The Winner Effect

Anyone working on sales knows that a big part of anyone's success depends on their attitude. Brian Tracy in his book *The Psychology of Selling* explains that the best time to make a sale is right after you've made one, since your success creates an upward spiral for more success.

As a manager one of your greatest challenges is to keep your employees in a positive mood, prevent unavoidable setbacks from demoralizing them, and keep them focused on getting better at their job while adding value to the company by projecting positive energy to the team and obviously increasing profits. There's two tweaks I've applied to my management style and trainings in order to achieve this. A lot of my techniques comes from sports psychology, I won't go into too much detail, but I can say with confidence you'll get more benefit from learning how a coach trains athletes than how programmers design video games.

Carol Dweck came up with some amazing insights that have been picked up by education circles and sports psychology for very good reasons. She explains that there's two basic types of mindsets:

Fixed Mindsets. These individuals believe that their intelligence a skill can't be improved on, they're essentially "fixed." If they succeed it's because they're smart, if they fail it's because they're idiots or untalented. They deeply identify with a win or a loss.

Growth Mindsets. These individuals believe that intelligence and skill can be improved through hard work. They believe success and failure depend on how hard they work or the strategy they implement. They don't take a loss personally, and attribute success and failure on how they execute, not by what they are.

These different mindsets start changing the brains of individuals. There has been studies done with MRIs on individuals who held these different worldviews. One of these tests consisted of asking the individual some questions (such as the capital of X country) and observing if there were any differences when they're told they got the answer right or wrong. The results were as follows:

Fixed Mindset individuals would have a flash of electricity throughout the brain when they were told the answer they gave was wrong. Researchers assume that their brain was reinforcing a negative view of themselves (such as not being smart). After being told their answer was wrong, they were given the correct answer. There was little activity in their brains when listening to the correct answer. This was attributed as developing a learning disability. If they believe they're stupid and can't change that, why would the bother trying to improve and learn?

Growth Mindset individuals had the exact opposite happen in the MRI. When told their answer was wrong there was little brain activity, which is assumed to mean they don't take a setback personal. When told the correct answer right after, there was a flash of electricity in the brain, which is assumed to mean they're storing the information. Their brains are hardwired to learn.

Carol Dweck's research could be narrowed down to two insights for management: Find out what the individual is interested in and praise them for working hard for it.

Praising people on talent or Intelligence creates a fixed mindset. Praising them on how hard they work creates a growth mindset. This is why I recommend finding out what your employee wants in life, convince him or her working for you will achieve this (money or experience) and praising them for working hard for it. Some employees take this approach seriously, other don't.

Setbacks are unavoidable. If you have worked in sales you'll know that a person that hasn't sold in a while will get depressed. Does this person think that his recent failure in selling means he's an idiot and he can't do anything about it or does he think it might be due to how he's executing the sale and this can be fixed with some training? Is your sales rep taking setbacks personally or does he believe it's an indication that there's room for growth? And finally, is he going to learn and improve after you've given him feedback?

Obviously you want to create a growth mindset in the individual. The benefit from a growth mindset is that your employees remain positive, have fun trying to solve their professional challenges, are constantly pushing themselves to perform harder problems and are looking to improve themselves.

There are some insights you gain from watching Carol interact with the children from her videos which you don't get from the book. The children are given puzzles to solve (real-world problems). She gives them some very easy ones to solve at first, all the children have no problem in getting them right. She then creates a fixed or growth mindsets in the children by praising either their intelligence or work ethic. She then gives them harder puzzles to solve, these aren't obvious like the first ones and cause setbacks.

The fixed mindset children get frustrated, want to cry and are having an overall awful time. When asked if they want to go back to the easy puzzles they say yes. Their identity has been put into question and by not being able to easily solve the hard puzzles.

The growth mindset children on the other hand are having a great time trying to figure out the hard puzzles even though they're struggling to solve them. When asked if they want to go to the easier puzzles they say no, that would be boring, and are practically laughing and having fun with the hard puzzles.

After suggesting this approach I've been told by managers that Carol Dweck's work has brought very good results to them, as it did to me. The "gamification gurus" on the other hand have heavily criticized it as being too overly simplistic while ridiculing my education, professional background and overall intelligence for introducing it. This is only natural, it's going to affect their income.

Carol Dweck was able to consistently alter on a predictable manner children having fun in a children's game. This had nothing to do with how the game was designed. It had nothing to do with the child's "player personality type." It had nothing to do with some fixed motivation for playing games.

A few minutes of praising either intelligence or hard work predict if the kid would have fun in a game or not. THIS IS REPLICABLE. We can also recreate this at work. Their consultations and 4x4 personality type diagrams are irrelevant.

If I come out saying that myself and other managers have been able to make employees become positive, have fun, and be engaged while trying to improve their skills through a method that makes their consultancy irrelevant, I would expect the backlash I received. You must pay attention to the conflict of interest, they're livelihood depends on you paying them indefinitely.

Another key feature of these mindsets is that they have an impact on two neurological phenomena called "The Winner Effect" and "The Loser Effect." These happened in different animals varying widely from fish to humans. It's widely studied in skill-based games such as sports and chess along with business. It has a lot to do with gain or loss of status, it's an unconscious process that alters the reward centers in the brain and affects the dopamine and androgen receptors in key areas, which affect future behaviour.

The effects work as follows: If the individual (fish or human) wins an easy win against an easy opponent, the brain floods it with dopamine and testosterone while increasing receptors for these in key areas of the brain. These makes the individual act more dominant and aggressive, while creating a statistically significant increased likelihood of winning a challenge with another opponent of equal or greater strength in the future. The opposite happens for a loss, dopamine and androgen receptors are wiped out, which makes the individual more timid and more likely to submit and lose against an opponent in the future.

The reasoning for the evolutionary purpose for this phenomena is as follows: If the individual is stronger and has higher status than his peers, it pays off to act aggressive and take as much resources as possible. There's little threat for acting dominant and aggressive since he's likely to win, and the rewards are high. If the individual is losing, he must be weaker and any future challenges with peers could result in serious injury. Rewards are unlikely, risks are high, the brain is rewired to avoid competition.

As I said before, the gamification industry is presenting a logical conclusion (which is obviously false) as a fact:

1. Studies show that video games produce massive amounts of dopamine in players brains (true).
2. Gamification uses design secrets from video game design and has applied it successfully on non game contexts (highly questionable).
3. Therefore it's a scientific fact that if these dopamine releases are happening in games, they're happening in gamification, and therefore gamification is as addicting as games (false).

What the "gamification gurus" are offering as fact is simply a rhetorical trick. A logical fallacy. They're claiming that they're recreating the brain responses of video games in the workforce. There's no evidence for this, and this has been very clear to me from the start. I'm offering you another perspective:

There currently are dopamine releases that are taking place in the workforce without game mechanics being applied. This is a documented fact. These releases aren't like those inside video games, but mimic those inside skill-based games in the real-world such as sports and chess. There are well documented ways to manage these dopamine releases in the real world. We should understand these, and attempt to tweak our management accordingly. Sometimes game mechanics from sports will help, sometimes they won't.

Can you see the different approach? Gamification has its foundation in a logical fallacy. My suggestion has basis on the real world.

The gamification gurus have attempted to ridicule me for bringing up these well documented phenomena. They say that my great contribution has been to simply say “winning feels good and losing feels bad.” Let’s bring forth some quotes shall we:

THE HOUR BETWEEN DOG AND WOLF by John M. Coates

This book was written by a successful Wall Street trader turned Cambridge Neuroscientist.

- “These hormonal signals, it has been argued, make sense: if you have just lost a fight, you had better retire into the bush and nurse your wounds; while if you have won you can expect an increased number of challenges to your newly elevated status in the social hierarchy”
- “Just as important as the physical preparation is the hormone’s tendency to increase an animal’s persistence and fearlessness.”
- “The euphoria, overconfidence and heightened appetite for risk that grip traders during a bull market may result from a phenomenon known in biology as the “winner effect.” I first heard of this model during the dot-com years, while listening to a lecture at Rockefeller, and I thought, as I have explained previously, it was the most compelling model of irrational exuberance I had encountered.”
- “So I retired from Wall Street and returned to the University of Cambridge, where I had previously completed a Ph.D. in economics. I spent the next four years retraining in neuroscience and endocrinology, and began designing an experimental protocol to test the hypothesis that the winner effect exists in the financial markets. I then set up a series of studies on a trading floor in the City of London. The results from these experiments provided solid preliminary data supporting the hypothesis that hormones, and signals from the body more generally, influence the risk taking of traders.”
- “The research I encountered on steroid hormones thus suggested to me the following hypothesis: testosterone, as predicted by the winner effect, is likely to rise in a bull market, increase risk taking and exaggerate the rally, morphing it into a bubble.”
- “The winner effect seemed to me a plausible explanation for the chemical hit traders receive, one that exaggerates a bull market and turns it into a bubble. The role of testosterone could also explain why women seemed relatively unaffected by the bubble, for they have about 10–20 percent of the testosterone levels of men.”
- “As testosterone levels rise, confidence and risk taking segue into overconfidence and reckless behavior.”
- “During moments of risk taking, competition and triumph, of exuberance, there is one steroid in particular that makes its presence felt and guides our actions—testosterone. At Rockefeller University I came across a model of testosterone-fueled behavior that offered a tantalizing explanation of trader behavior during market bubbles, a model taken from animal behavior called the “winner effect.”

THE WINNER EFFECT By Ian Robertson

A Cognitive Neuroscientist

- “Professor Landau’s second paper was entitled ‘On dominance relations and the structure of animal societies: II. Some effects of possible social factors’ and it was here that he discovered that a hierarchy will appear if winning a challenge with another animal boosts your chances of winning the next encounter. Professor Landau had – purely using statistical and mathematical models – discovered the ‘winner effect.’”
- “After five days the fish were put back into their original tank and their attack behaviour studied. And just as Landau had predicted, the dominant fish who had spent five days with the bigger fish were much less likely to attack and beat fish than before their stressful ‘loser’ experience. Their friends who had been with the smaller fish, on the other hand, came back into the real fish world fired up and aggressive, more dominant than before

While it is unlikely that boxing managers across the world had followed Professor Landau’s work closely, nevertheless Don King had arranged that on 16 March 1996 Mike Tyson was again breathing the dry, warm desert air in Las Vegas, beneath the roaring lion of the MGM Grand Arena. This time, there were no ‘tomato cans’ – he would be fighting the WBC World Champion, Londoner Frank Bruno. And Tyson knocked him out in the third round, the parolee becoming world champion again. Landau’s mathematically derived prediction of the existence of a ‘winner effect’ came to glossy realisation amid the sparkling neon of Las Vegas. Had scientific evidence caught up with Professor Landau’s mathematics?

This is pretty much what Don King had arranged for Mike Tyson – McNeeley and Mathis were the small fish used to boost Tyson’s winner effect and help win him back his world title.”

- “But while the winner effect was discovered in species after species, there was a problem – what caused it? It was not long before scientists started to measure the ‘sex hormones’ which Landau had only considered as ‘inherent’, or pre-existing factors. But hormones don’t sit in our bodies like milk in the jug: hormones and behaviour are intimately linked, and it became clear that not only did hormones shape behaviour – behaviour changed hormone levels”
- “Study after study showed that winning caused a surge in testosterone, and that this was a major reason why animals were more likely to win their next, non-rigged fight: the testosterone surge made them less anxious, more aggressive, and gave them a higher pain threshold. Testosterone made them mean – and tough Mazur and his colleagues coaxed sixteen chess players from a city chess club to spit into saliva sample bottles before, during and after their matches at an important tournament and analysed the testosterone. They found that testosterone levels surged among winners. What’s more, those who had shown the biggest surges before the tournament were more likely to win – just like the London financial traders. The winner effect is not confined to violent challenges then. In our daily lives, we – men in particular, but more on that later – are constantly challenging and competing with one another other. And how we come out of these challenges depends not just on our state of mind and hormonal activity before the event, but also on whether or not we have won in the past: except that we are still left with a puzzle of how a surge of testosterone following a single victory can have effects that last for months. How exactly did the winner-effect testosterone help Tyson win his bout?

Fuxjager and his team discovered that winning a series of contests boosted the number of androgen receptors in a part of the brain that controls social aggression. It also increased the number of these receptors in parts of the brain’s reward and motivation network called the nucleus accumbens and the ventral tegmental area.

Siegel's research shows us that the very chemistry of our bodies is tuned to the physical, social and psychological environment. Could this also be true for the chemistry of winning? Was Mike Tyson's testosterone-fuelled winner effect another example of brain and body chemistry being shaped by environment? Fuxjager's brilliant study showed that it was: not only was brain chemistry shaped by winning in the home environment – brains were changed and androgen receptors were created. If a new stem-cell therapy had achieved this, it would have been in headlines throughout the world and the Nobel Prize would have been on everyone's lips.

But it is underpinned by a strange type of chemistry – a sort of chameleon chemistry – the very matter of the brain being shaped by environment. Our brains are precisely shaped by the physical, social and psychological world we inhabit.

If we can generalise from Fuxjager's work, it seems that these 'tomato can' defeats may have physically reshaped Tyson's brain, increasing androgen receptors in the motivation parts."

- "The winner effect, then, almost certainly does not work by simply maintaining super-high levels of testosterone until the next contest – winners would likely suffer damage to their heart or risk injury because of their aggressive demeanour. Yes, winning boosts testosterone levels and may leave them in the long term somewhat higher than before. But the real effect of winning is in physically shaping the brain, so that the brain behaves like a turbo-charged car that pushes out more power for the same amount of gasoline.

But these changes are context dependent. Context means place – sights, sounds, smells like those of the White Room or the Vietnam rainforest – and for Mike Tyson it probably included the sounds and smells of the boxing ring. Context also means people – the presence of a partner, of an enemy, of a boss – or of an entire institution like a company or a school. But perhaps most of all, context means the mental landscape, the beliefs, emotions, feelings – some conscious, most unconscious – that encompass the event or the contest.

This is a truly fundamental discovery: we are totally connected with the world around us, shaped by and linked to its changing landscape right down to the very proteins expressed by our genes. Winning is just one important outcome of the shifting patterns of a web of interconnections between our brains and the surrounding world."

- "The higher you are in a steep hierarchy, the more power you have over those below you, whether psychological, financial or physical. Power pumps testosterone into the blood, which in turn – via the winner effect – further inflates your power by helping you win in future. The flip side of this is that the lower down a steep hierarchy you find yourself, the less power you have, and so the less hormonally empowered you are to have the 'balls' to stand up to people above you: this is one reason why, historically, most revolutions have been led by upper- or middle-class people, rather than by those lowest in the pecking order. Meekness and a reluctance to question the boss by testosterone-depleted underlings can have fatal consequences in any organisation, as we saw at Chernobyl."
- "One consequence of such power is that it makes us, in a certain sense, smarter. The prefrontal cortex of the brain is the seat of the brain's 'executive' – the general manager responsible for planning, forethought, setting goals, and then seeing them through. This CEO – prefrontal cortex analogy is a reasonably apt one: neither the CEO nor the prefrontal cortex are inclined to get their metaphorical hands dirty with the everyday operations which they delegate to people/brain areas lower down the hierarchy.

Both operate at a strategic level, setting rules and goals as much as following them. And both have to sort things out when events don't go to plan or when the normal routines get fouled up. It is no coincidence, then, that we describe what the prefrontal cortex does as 'executive function'.

Pamela Smith and her colleagues at Radboud University in Nijmegen in the Netherlands wanted to see what happened to these high-level thinking skills when people were made powerful or powerless in an experiment.”

- “In the current chapter I have shown that for human beings it is not just the fact of winning that makes us winners. More than that, it is the fact that power reshapes our brains to make us smarter and more focused, thus boosting our power and opening up for us opportunities for even more success.

But money acts like a drug, Stephen Lea and Paul Webley of the University of Exeter in England have shown,

Democratic governments are not the only source of power across the world – far from it. The 2008 financial crash that impoverished hundreds of millions of people across the world was caused by the toxic winner effect on bankers and traders whose brains were addled by the testosterone-fueled ‘success’ of escalating profits which skewed their judgement and crushed any moral compass they may once have had.”

THE SECRET LIVES OF SPORTS FANS by Eric Simons

- “But you can ask them to play sports against each other. That’s what Mazur did in the 1990s, and that’s where he found most of the evidence to support this theory in humans. He found winners with increased testosterone and losers with decreased testosterone after playing tennis, judo, and even chess. Others have since found it consistently in all sorts of tasks: soccer, basketball, even video games. It’s significant to find the same effect in competitive Tetris that you find in judo, since physical activity also changes the hormone balance in the body. Video games and chess confirm that a winner effect isn’t just something that happens when you exercise.”
- “The question for our purposes is whether a sports team winning—again, a random collection of dudes competing for dominance for themselves—also hooks into a fan’s own dominance feelings. Back in the language of psychology, we’re making this a vicarious dominance competition—the critical bit there being that we are not participating, and at least as it appears, our own status or position in the social hierarchy is not at stake. Are we really like Rui Oliveira’s spectator fish? Or are my hormones while watching the Sharks just doing their own thing, totally unconnected to the game?”
- “Neuroendocrinology is an active field, and researchers already are identifying some of the things that play into winner, loser, and challenge effects. One definite marker appears to be stress.”
- “Maybe one of the most intriguing things about the winner/loser effect in fans is that it would be proof that the fans are essentially reacting the same way the competitors are. Based on everything we’re going to learn about how we view our teams, I believe that’s likely to be the case, meaning the lessons learned in direct experiments should apply whether you’re competing or watching.”
- “THERE’S ONE FINAL, OBVIOUS, SIMPLE CONTROL ON YOUR HORMonal response to a game: how the winner and loser interpret the result. Underlying everything we’ve talked about in this chapter is the major point that you have to care first. Carlos Carvalho probably had a testosterone surge because Brazilian victory in the World Cup meant a personal and professional confirmation.

Alicia Salvador, a researcher at the University of Valencia, has identified a whole host of things that might change your testosterone response: Do you expect to win or lose? Anticipation could activate brain structures that we’ll talk more about later, setting up a testosterone response that’s much more

related to the fulfillment of an expectation than to the actual outcome of the competition. Does the competition matter to you? How much do you think you can control the outcome? Salvador suggests that athletes who think they played an important role in winning the game for their team will show a winner effect, but those who played a minor role won't."

- "Researchers in neuroendocrinology started out thinking they could follow the evolutionary predictions and just account for everything with observations of winners and losers, Salvador wrote in a 2009 paper in *Neuroscience and Biobehavioral Reviews*. That didn't turn out to be the case, and now researchers have begun to understand that perception, appraisal, control, and importance are just as significant to understanding the hormone response as who won and who lost. "Only when we started to ask about motivation to win, causal attribution of outcome and satisfaction did we start to explain part of the hormonal response variance," Salvador wrote. "This need to take into account the individual's cognitive processes has been increasingly considered in the studies on this topic, but when their findings are analyzed, a puzzle with a lot of missing pieces still appears that nature gave us hormonal reflexes and then we found a way to exert control over them without even knowing it is powerful idea. It is one of those things that seems fundamental to our species. It is one of those things contributing to the seething, frothing cauldron of feedback loops that makes fall Saturdays in Berkeley the most emotional moments in my life. It is also the exact same thing, it appears, that's happening in the brain."

I hope you can start to see why understanding mindsets and the winner/loser effect has its value. Don't assume though that we want to create "a winner effect" indefinitely. Everything has its inconveniences. John Coates explains that traders will become over confident and start making stupid decisions. Some sales reps eventually believe they have "the golden touch" and stop paying attention to their sales process or to what the client is saying and start going down hill.

Neither is the winner effect some form of positive "self-esteem" movement like solution. Ian Robertson does give some examples of this, such as the positive effects that come from leaving an abusive relationship and entering one of mutual respect and love. But the primal origins are much darker:

"As a species, we share the same biology with other animals, but express it uniquely. We can have two humans sitting at a table doing nothing more physically taxing than one of them moving a little piece of wood on the table. And if it happens that these two individuals are at a chess tournament, then they are able to keep [up] a blood pressure for six hours [at a level] that you normally only see in a marathon runner, while doing nothing more than thinking. And this is outrageous because when you look at these chess Grand Masters who've just taken down an opponent, they will have the exact same physiology of some wild baboon in the savannah who has just ripped open the stomach of his worst rival." Robert Sapolsky, during a lecture at Stanford University in 2010.

It's also valuable to note that these releases in dopamine in work and skill-based games are much different than those in the virtual world. I would recommend reading the research of Stanford psychologist Philip Zimbardo to cite an example.

In his research he claims that pornography and video game addiction work in similar manners. The level of "dopamine triggers" that these virtual mediums produce in the male brain is unprecedented. The brain constantly being stimulated with constant new pornographic images or artificial power-ups in video games begins producing negative effects. This overstimulation is actually decreasing the number of receptors in the reward areas of the brain, by default creating a "loser effect" despite "winning" in the virtual worlds.

I'm mentioning this just to make sure no one comes up with the notion that video games are "winner effect machines" in the highly unlikely possibility my writing becomes popular again. Video games aren't "deliberate practice machines" and certainly aren't producing winner effects as a general rule.

It also gives you a new perception on the marketing claims of the gamification community. They claim that videogames have rewired employee's brain through constant dopamine triggers. They say this new re wiring is a positive thing that the world is just too boring and our new gamer geniuses are just bored.

This goes 100% against my experience managing "gamers" which I've explained before. The gamers are the least likely to get excited about a competition/game we create and are always complaining, and can't wait to get back home to play their video game instead.

This may sound vulgar but I believe it worth saying since it destroys this marketing lie. Philip Zimbardo also explains that pornography is also inducing erectile dysfunction in men. This porn induced erectile dysfunction has nothing to do with testosterone levels or blood flow but it's caused by changes in the brain that arise to combat the over stimulation in the virtual world. They can no longer get erections with partners in the real world because of lower dopamine receptor in key areas of their brains.

My suspicion is that in a similar way the brains disruptions from porn preventing engagement in the real world is having an effect on "engagement" in the workforce. This means that "gamers" are the least likely to engage from gamification. And if someone were to say "this is evidence that gamification is needed to combat these negative effects in video games" I would like to remind them that the dopamine triggers from video games aren't being recreated in the real world by the "gamification gurus" or that these destructive effects from porn can't be overcome in the real world with real partners. Their receptors are just depleted.

The best hope would be to avoid video games and hope the receptors slowly grow back.

But remember, if I say alcoholism is a problem I'm not saying all drinkers are alcoholics. These negative effects happen in those with excessive video game and pornographic use. The poster children for gamification who have played 10,000 hours by age 21 perhaps?

These is an obviously goes against everything the "experts" have been telling you. I believed it once before also. It makes sense. My experience managing in the real world, along with my research on the effects of dopamine in the brain, have, however, changed my views.

HISTORY REPEATS ITSELF

During WWII there was a massive number of women who entered the workforce for the very first time. A mother-daughter team by the names of Katharine Cook Briggs and Isabel Briggs Myers decided to apply their interpretation of Carl Jung's typology into management to aid them. Their assumption was that there were 16 personality types. These types were discovered by combining eight traits in a 4X4 box. These were:

- Thinking
- Feeling
- Judging
- Perceiving
- Introverts
- Extroverts
- Sensing
- Intuition

The ideas was rather simple. By asking a few questions you can find out what personality type someone is. The whole point of finding out what personality type these women were was to assign them a job that they would be happy in. Over the years it was picked up by businesses and universities across the world. They wanted the workers to be productive and happy by being assigned to the job that best suited their personality type. Eventually consultancies came about, along with specialized training. Despite having been discredited decades ago by psychologists, the Myers-Briggs Type Indicator (MBTI) are still a multi-million dollar business being used in many Fortune 500 companies.

So here we have a widely adopted business practice created exclusively to drive up engagement and happiness in the workforce. Despite being refuted by psychologists, it has many believers forcing these personality types down management's throat. Despite being refuted by psychologists, companies are paying millions of dollars to learn and apply these techniques. A certification has been created for it, where these "professionals" are making roughly between \$40,000 to \$75,000 a year or an 80 million annual industry (by some estimates).

This story is essentially about two individuals who created a personality test with the best of intentions to drive up engagement and happiness in the workforce. They had zero background in psychology so they took the work of someone else to gain credibility (Carl Jung) and reinterpreted it to their convenience, which started a multi-million dollar industry in consultation with personality types that were essentially as accurate as the god damned Horoscope.

I'm not going to go on listing the criticisms on MBTI. If you want a quick reference you can read Malcolm Gladwell's article on his website "Personality Plus." There are few authors in business as credible and well known as Gladwell. Many authors I've already mentioned in this work have spoken against personality types in business, you can do a quick Google search and go through the arguments pro and con yourself.

It points out to mention that MBTI is very similar to what the consultants in the “gamification Industry” are selling. One example can be the “Octalysis” which also creates its own 16 personality types with a 4X4 box:

Achievers
Explorers
Socializers
Killers
Discovery
Onboarding
Scaffolding
Endgame

There are other variations of similar 16 “gamifield” personality types. Some people swear by them, I find them to be a waste of time. The entire community (or most of it) is using an adaptation of Richard Bartle's Personality Types (Socializers, Explorers, Achievers, Killers). There are different approaches but the general argument says that you have to discover what personality type your workforce is, and then create a “gamification design” that that particular workforce will find fun.

If you were able to understand the difference between skill-based games in the real world vs time-based games in the virtual world and brownfield design vs greenfield design, you'll be terribly aware of how much more realistic MBTI is to the gamification approach despite MBTI being a complete fallacy. Instead of saying they're going to change the world to trick the brain into triggering dopamine at levels found in video game players like gamification does, MBTI would say “if you're an extrovert you probably will like talking to people.”

So you have to realize that at its core “gamification” isn't innovative. It's essentially the repackaging of personality types developed and disproven decades ago with game design terminology. Instead of saying you're “an extrovert” they're saying “you're a socializer.” It's essentially a superficial change to an old and outdated concept which is being marketed as the greatest management innovation of the 21st century.

Richard Bartle is essentially to “gamification” what Carl Jung was to MBTI as far as “gamification typology” is concerned. The difference is that Bartle is alive and well and able to comment about his theory being adopted by the gamification industry. There is a video in the Youtube channel “CasualConnect” that goes over the gamification community taking his personality test. The video is titled “Player Type Theory: Uses and Abuses | Richard BARTLE” and he begins his talk on gamification industry right around minute 15:00. Feel free to go watch the video yourself, I'll give you a brief rundown:

Bartle explains that people saw similarities in the workforce and his player types and soon picked it up. Gamification proponents thought something in the lines of “People like to socialize and achieve in work. People socialize and want to achieve in games. If we allow people to socialize and achieve in the workforce they'll have fun in a similar fashion as playing games.” **He explains that it's fine if his players are taken as an analogy, but there's danger when it's taken as a fixed identity in the individual.**

“The danger is when the analogy becomes an identity. You stop treating it as an analogy and start treating it as if it applied 100%”

He explains the above quote with the following metaphor:

“An airplane is like a big bird, but it isn’t a big bird...”

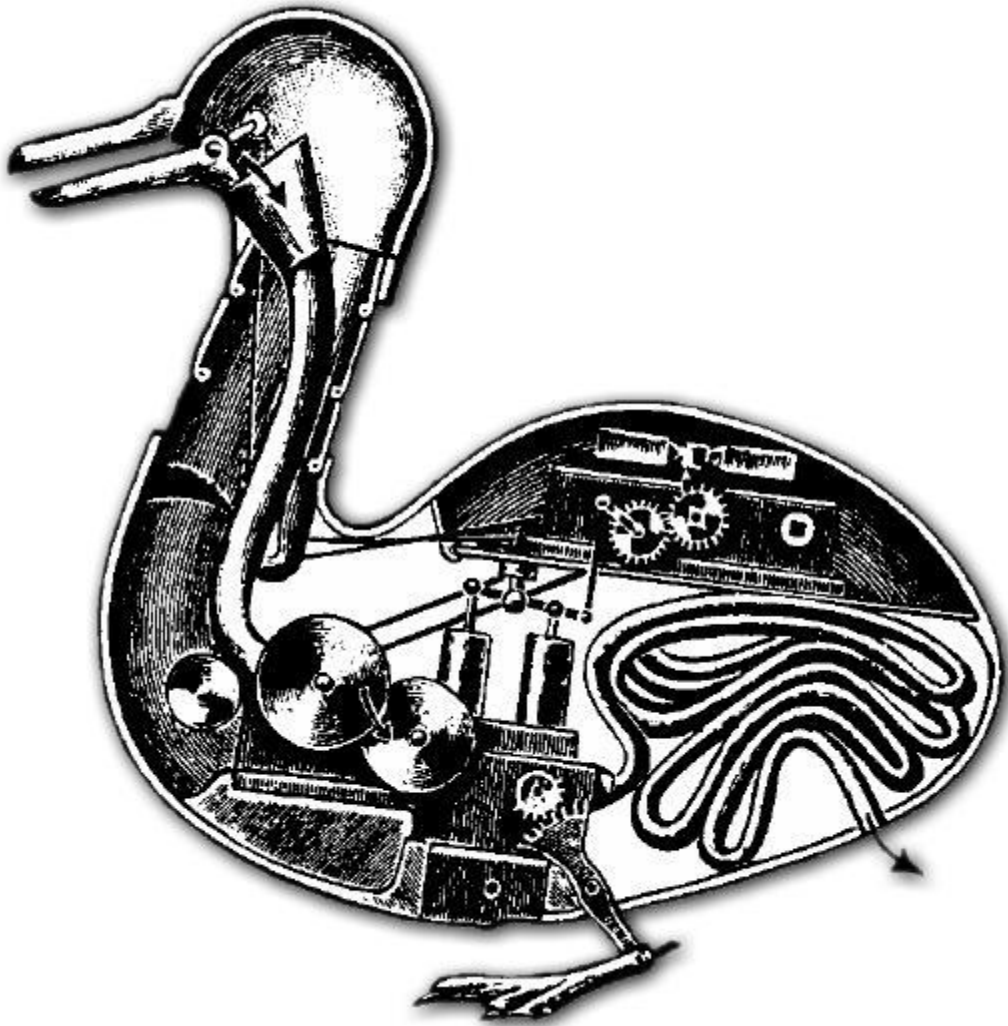
He goes on explaining that gamification isn’t understanding the limitations of the player types. They’re not taking into consideration “context.” What they’ve done instead is create these “cookie-cutter” techniques and mindlessly enforcing them into every situation. He ends the talk by saying that a few in the gamification industry are smart and use his player type theory as an analogy, but most “aren’t very smart” and are using it as an identity instead as an analogy.

By that he is technically saying that “gamification gurus” are saying that “a plane is in fact a big bird.”

The problem with the “gamification gurus” isn’t new. My training was in history and I’ve wrestled with how ideas have developed throughout time. The “fixed personality type” as known today can be argued to have originated during the Age of Enlightenment. The idea at that time was that the world was mechanical, as were humans. So they used a mechanical world view to understand society and people. This has an actual name called “Social Atomism” and is discussed in political science.

The opposite view of this would be “Communitarianism.” This view says that identity and motivations change depending on the social context the individual finds himself in. These social contexts are always shifting and so are a person's identity and motivations.

The main problem with their thinking can be defined as “Reductionism” which can mean oversimplification, but in the context of applying mechanical and linear constructs to complex systems. Such as saying that a living organism works like a pocket watch:



For example: The book *The Dream of Reason* by Anthony Gottlieb explains that the ancient Greeks were obsessed with a “fixed identity” or “fixed property” in things. That is to say, a person is the same person regardless of their position in life. If they become a father, become wealthy, achieve status, or lose it all, he’s still the same person. This is social atomism when taken to an extreme (different time periods had different ideas but this is the argument in the book).

The Chinese on the other hand believed a person's identity shifted depending of his position in life. If he becomes a father, he’s now a completely different person, he’s “the father.” If he becomes a boss in a group, he’s no longer that previous person but his identity is completely dependent on his position in life.

The truth lays somewhere in the middle.

The phenomenal book *Strategy* by Lawrence Freedman also touches on this. He goes over the history of strategy, through chimpanzee battles all the way to modern consultancy firms. The idea that the world is mechanical, we can understand it with our intellect from afar, and come up with cookie cutter solutions for strategy, was developed in the Age of Enlightenment. There were many authors attempting to find universal formulas for success. He contrasts Jomini (son of the Enlightenment) with Carl von Clausewitz (son of German Romanticism).

Clausewitz thoughts were more in tune with modern complexity techniques for management. He gave us notions such as “the fog of war” making us understand that we’re always managing our operations with limited information (a key concept in knowledge management when navigating complex systems). Instead of offering us mechanical formula for success, he gave us heuristics. There are three strategic words in German worth mentioning:

Friktion: all your initial plans will fail and you need to quickly adapt to destroy obstacles. Eric Ries would call this “pivot” if you want to link it to business terminology.

“No battle plan survives first contact with the enemy” Carl von Clausewitz

Wechselwirkung: It means mutual altering, when I make a move, my opponent will make another. If you're playing a game of chess this is very obvious, you're always thinking on what to move in relation to the possible counter move from your opponent. Business strategists Michael Porter talks about gaining a competitive position that can't be imitated to detract competitors from kicking you off the market. Strategy to a large degree is about what you do and don't do. Destroy your opponent's capability to maneuver against you.

It's similar to management also. Promote a great employee and he turns into a tyrant as a manager. Be too nice to employees and they'll start to take advantage. You may praise someone but they take it the wrong way. Create a competition and it may be a wonderful experience, or cause the whole team to turn on each other, etc.

Kritik: This is referred to as “the eagle's eye.” It's pretty much becoming a generalist (as opposed to being a specialist) and making interconnections between different aspects of a venture. In strategy it's called “grand strategy” if you want to research the concept further. In modern terms it could be said it's “understanding the complex system you're in.”

Carl von Clausewitz (one of the most influential military thinkers in history) is offering heuristics. The gamification community, like Jomini, is offering cookie cutter solutions for complex systems. You can't have best practices in complex systems. Dave Snowden explains this difference with a metaphor:

You are either a chef, or a recipe book user. A recipe book user can make a decent meal if all the ingredients and conditions described in the book are 100% available. If there's a problem (which in management there always is) then he can't make a meal. A Chef will make a decent meal with whatever random ingredients he finds in the fridge. He has a tacit knowledge and understanding of theory.

Ever since I started writing on the topic with the ridiculous name “gamification” I've been trying to lay the groundwork for heuristics. The “gamification gurus” for best practice recipe books with nonsensical

“theories” even game designers discard. It’s a lot easier to make someone part with their money when you offer a recipe book. How else is a “gamification guru” going to charge \$2,500 to get a “gamification certificate” in three days if not laying an easy to follow step by step process any moron can grasp?

Point being I’m not pulling my management ideas from a hat. There has been debates over these different interpretations of the world for centuries. Lawrence Freedman explains that a lot of the “strategy” views in consultancy come from a mistaken world view that originated in the Enlightenment. They’re looking at case studies, trying to find best practices, and applying cookie cutter solutions to business problems.

You must understand the difference between deductive reasoning and abductive reasoning and which situations require what method of reasoning.

This also has a historical context. The Soviet Union's whole master plan to reengineer society was funded in Social Atomism. This shows up in many history books. Their whole concept of the “new soviet man” explains this in detail. If you don’t have the time or the will to read a history book you can simply watch the documentary titled “Pandora's Box, E1: The Engineers' Plot.”

So we have philosophers (Mary Midgley in particular), strategists, historians, cognitive scientists, psychologists, managers, KM experts and even game designers (Raph Koster and Richard Bartle mentioned in this work alone) all speaking against Social Atomism in favor for a Communitarian approach. Humanity has already figured this one out, why are we still arguing about this? It’s like listening to children when I hear rebuttals telling me: “I’ve been doing this for 15 years and I’m a happiness expert and gamification guru so personality types work...”

One odd behavior that they do when one brings up Richard Bartles comments (him explaining that his theory is an analogy, not a fixed identity) is to say that they are using the personality types as an analogy as Bartle suggests, “It’s just a tool for understanding what people find fun” as Bartle suggests, but then turn around and use it as identities, which Bartle argues against and they claim they don’t do. They’re either don’t understand what Bartle says when he explains they’re using his theory as a fixed identity when it should be an analogy (It’s Bartle himself saying they’re getting it wrong for Christ sake), or they’re completely dishonest and are simply trying to profit from a lie the same way MBTI have done. They simply say “I’m not doing that” and turn around and sell people the cookie cutter solutions since it’s simple to understand.

I’ll give you some examples from LinkedIn I’m familiar with to illustrate that they are in fact teaching the player types as fixed identities in people:



“ Killers are limited by their innate desire to kill and so they are the only one we can be absolutely certain will die out... ”

The above comment isn't from a "gamification expert" but someone who follows the industry. Her comment was encouraged and liked by the experts though. If you talk to people this is the general belief they hold. It's social atomism. They've believing there's a "fixed identity" just like MBTI and management should apply game techniques to accommodate certain identity (or in this context fire "Killers" as they're described as a cartoon version of the word "psychopath."

The following LinkedIn comment I'll simply copy-paste it. This comment does come from someone who does "gamification" for a living and has been around for some years:

"Wow, this is turning out to be an amazing discussion! User typology is one my favourite aspects of gamification - the fact that you need to tailor your approach according to the audience is a challenge I'm really enthusiastic about.

Regarding types, I've done a lightweight comparative analysis between the Bartle Types and MB Types with some employees from my company: basically I'm designing an idea submission/sharing/crowdsourcing platform to use in-house, and since just plastering on PBL was making me itch, I needed to get a good idea of the people I was working with.

I work in IT consultancy, we have an entry-level training program that begins with a MB test in order to give a picture of the trainees for the coach to use (btw, he's awesome with that! sometimes even scares me... xD).

So I asked him for the test results of the last few years, which accounts for roughly a quarter of our employees. The results were really interesting!

We've got mostly ISTJs (25%) and ESTJs (35%), and ENTJs (10%) to top it off, the rest being scattered throughout the rest. We've got next to no ISFPs and INFPs.

So, since I was more familiar with the Bartle types as applied to gamification, I decided to use this analysis (<http://stratsynergy.wordpress.com/personality-types/>) to establish a connection, coming up with this conclusion: i've got about 60% of Achievers and a relevant percentage of Explorer types too. No Socializers... in a 2000 strong company, these are relevant percentages!

This is an interesting conclusion for two reasons:

** IT consultants are stereotypically hard core competitive types - this accounts for achievers;hey're not Killers, since they don't aim to maim, but they to want to get results, they need objectives. Now.*

** my company recently did an in-house study to understand its corporate culture - the results were mostly in the red (competitive, pragamatic, result driven), so there's some corroboration there!*

So, in conclusion: I just wanted to pitch in and provide you with some interesting data to discuss and throw you a question - faced with these types of players, how would you (ok, they're two questions!) first, engage them in order to share ideas and comment on others, secondly, slowly change their mentality into a more colaborative altruistic approach?"

:

Now, notice what this “gamification expert” is doing. He has taken the data from MBTI in his company and split up his company with new video game terminology. Is there any doubt that he’s using Bartles theory as a “fixed identity” in his employees and not as an analogy? Can you see that the very “gamification community” sees the Player Types as an extension to the discredited MBTI? It’s not that the guy is stupid he simply has a wrong view on how the world works which is propagated by “gamification gurus” in order to make an easy profit. The “guru” either plays on the already existing beliefs in personality types, gives it game design terminology in order to copyright it and marketed it as “new” and “innovative” or just oversimplifies the world for an easy “recipe book” to sell.

One of my readers told me that he agreed with both me and the gurus at the same time. While people do have multiple identities (father, brother, son, boss, student, etc) gamification is applicable because we’re addressing one of those identities: “The employee.” I didn’t bother to argue, the guy was simply not getting it. I don’t know how else to explain how social contexts are always shifting and altering people's identities. Do I need to explain the difference between status and power? How these affect identity and brain? A philosophy book? Real world example? I don’t know how to explain it, at that point I’m practically throwing away the towel.

I guess few will understand me. Your employee isn’t like a Barbie where you can change the dolls cloths and have her change her identity which will remain fixed as long as those cloths stay on.

Another argument in favor of the player types is that they’ve personalized Bartle player types to such a degree that they are applicable to work despite the criticisms of Bartle. This is essentially saying “Fixed identities work because we’ve added onto Bartles original four types for a more complete understanding on what different people find fun.”. This is ridiculous. If I’m doing a financial model with a bell curve when I need a power curve no amount of editing on the bell curve will give me a proper result. It’s absolutely mental.

Now they’re saying they can’t be criticized for using a “fixed identity” with personality types. They admit the original model was wrong, but they’ve improved on the wrong model to make social atomism work. That’s like arguing with a biologist that the mechanical duck image I introduced would be correct if we added more gears to the clockwork like model of the duck.

Let me explain this with an analogy:

A historical example explaining this problem comes from cosmology. From the first century up until the 16th century AD, the smartest people in the planet thought the earth was the center of the universe. The sun, the moon and the stars all revolved around the earth in a perfect circle. This was obvious because the sun rises in the East, went down and on the West and came back up in the East the next day. Isn’t this logical?

In the late Middle Ages mathematical prediction models were made and they noticed that the planets weren’t supposed to be where they were. That is to say: Mathematical models predicted planet to be in X spot, but when they looked to the heavens with their telescope it was somewhere else.

So what did they do? They started creating ever more complicated models built upon the original fallacy: The earth is the center of the universe and every celestial body revolves around it. They figured

there were smaller circular motions being done by these planets as they also revolved around the earth (planets behaving like a satellite making circles around a larger body while also revolving around the sun). These new models were still at fault.

Eventually Copernicus came around and said: “Maybe the earth revolves around the sun.” Can you imagine that? Then Kepler came along and said: “Yeah, and maybe the orbits are elliptical.”

It took about 100 years but eventually the models were changed to represent the earth revolving around the sun and orbits being elliptical, not circular.

According to many authors we are in a similar transition in management with the introduction of Cognitive Complexity. I’m suggesting then, that “gamification” is using the wrong models, a point brought up by game designers themselves. Instead of making these models more complicated (multiplying Richard Bartles theory by four) there should be the introduction of the proper models backed up by new management innovations revolving around Complexity and cognitive science. But the “gamification gurus” aren’t going to accept that since if this were to be true then:

1. The models they’ve spent 10+ years building don’t work
2. The cookie cutter solutions must be do away with
3. If they’re false, they should stop making a living off them
4. The actual solutions for “engagement” come from sources they can’t profit from or call themselves experts in

But the argument that there’s nothing original about “gamification” and they’re simply “repeating history” and simply hiding this fact with game design terminology can be stretched further.

For example, they claim that one thing that engages video game players is “immediate feedback” therefore one key to engagement in work should be adding “immediate feedback.” You hear this and you wonder who the hell is paying these guys for their advice.

Management already has a name for their “immediate feedback” and it’s called “quantitative metrics” and believe me, there’s a lot of research on its use and misuse. So they either call it “real-time feedback” or “immediate feedback” but it’s the thing: They’re giving quantitative metrics a new name inspired from game design terminology and calling it new and innovative concept. Can you see the level of charlatanism yet? Why are people paying these scam artists?

Games are essentially mathematical models with a layer of narrative. You’re not moving a piece of wood in a 8X8 board, you’re moving a “Knight” or “Bishop.” We don’t have Godlike over these mathematical models as computer programmers do. We can’t give our players an artificial power up as a reward for these immediate feedback looks (which is what causes the dopamine released, the illusion that power is increasing). We’re also stuck in a brownfield design paradigm.

Not to mention that quantitative metrics has its limitation! As of writing this the Wall Street Journal has recently released an article titled “Goldman Sachs to Stop Rating Employees With Numbers” that explains that they’re abandoning quantitative metrics (the grand “innovation” some gurus are trying to profit from) for qualitative metrics. Essentially saying the manager is like a sports coach trying to improve the employee in a similar way an athlete would receive feedback from a coach.

This is what I've been advocating for some years, at least in sales. Understand there's different metrics in business. Friends of mine working in tech companies explain that they would hate to work in publicly traded companies, since they tend to cut out innovative projects if the quarterly report (financial metrics) aren't performing properly. Food for thought.

There's been another management movement that is nearly identical to "gamification" with the exception of cartoonish game terminology. You can Google "Pay-per-Performance" in healthcare and read it yourself (of course "gamification" hardly bothers reading anything outside game design, and can't even get that right according to game designers).

The basic story behind this management movement in healthcare was to motivate employees to increase productivity. They've essentially replicated gamification to the letter:

- Create clearly defined goals
- Have quantitative metrics to track progress in these goals
- "Points" would be added up at the end of the week
- Money and promotions would be given out based on what the feedback revealed

It's essentially the exact same concept from gamification. Guess what happened? Staff became motivated to "win the game" and get as many points as possible from their "real-time game-like feedbacks." So, the intrinsic motivation to help the healthcare patients was gone. No longer a human connection, all they cared about was getting points. As a result many people died (mainly in England) and it's generally considered a managerial disaster.

If anyone were to simply study this they'll realize "gamification" is the same nonsense but has simply been repackaged with game design terminologies. But have I said that already? But who listens?

Putting this into perspective one should assume there's an ethical responsibility to call these charlatans out. They're no longer just taking the money away from fools but putting people's lives jeopardy.

Now, it might be possible that game design thinking may bring some insights to management. The CEO of IDEO Tim Brown created a program where his team role played as if they were patients while they had a camera in their head. This was in a sense "game-like." After watching the footage they noticed that the camera had been pointing directly to the ceiling for long periods of time. The healthcare clinic then decided not to leave patients lying down and staring at the ceiling for long periods of time, and patients became happier from this small tweak.

Tim Brown is applying abductive reasoning. Gamification is applying deductive reasonings based in design theories for video game programmers and concluding it applies as a general rule for any subject under the sun. Am I the only one that can see how absurd this is?

Tim Brown also explains he only uses "play" techniques when he's doing research (as roleplaying as a patient), but when it's time to work, it's time to get serious and work. Gamification aims to make life a game 24/7.

We already know for a fact that their promotion of video games in the classroom is dumbing down children. When I call them out on them one simply got angry and said “Whatever.”

Simply Google “screen time children intelligence” and you’ll have many studies revealing that there’s a point of diminishing return in children concerning intelligence and screen time (computers, phones, TV, video games, etc). The mere fact that children are wired on a device will begin to literally lower their IQ. Many children are already over spending their time in screens in their free time outside school. But what is gamification saying about this?

“Engagement is key to learning. If children are playing video games outside school let’s introduce them into the classroom...” essentially dumbing down children even more.

It wouldn’t matter how great the game design is, if children reaches the point of diminishing return use on screen time (which most have already reached outside school) they’re being literally dumbed down. As an “insider” in gamification let me be very clear about this: They do not care. They’re getting paid by many educational software companies for their garbage.

And it’s not like they’re not aware of this. One of the most popular books in the industry *Reality is Broken* touches this. They just simply do not care.

If you’ve ever seen the comedy bit from Bill Hicks on marketing, you’ll know my general opinion for these “gamification gurus.”

The “Mario Party Method”

A lot of the buzz for gamification has come from its use in call centers. I have some experience in them so I'll give you an example in this context as to applying “skill-based gamification.” You can contrast my method (that of a manager performing in the real world) to those of the gamification consultants (advisers imagining how their methods work in the real world).

One problem you face in applying any type of games-like features is that the “engagement” never lasts long. For example, if you're trying to engage a sales department for an entire summer, running a competition that ends at some distant point months in the future isn't going to motivate them since they'll lose interest. Running small competitions every week turns those competitions meaningless.

This method I developed is called “The Mario Party Method.” It's not entirely original, since we had something similar knocking doors but I've tweaked it when I was in charge of a team in a call center.

If you've ever played Nintendo's Mario Party series you'll know it consists of a “board game,” which lasts for hours. Performance in this “board game” is determined by some luck (roll of a dice) and some skill (how you perform in the “minigames”). After everyone rolls their dice in the board game, the players go into playing a very short game that lasts for a couple minutes.

Board game, the “game on top of the games.” The “Metagame.”



The “Minigames” basically the bulk of the “play.”



By themselves the board game and minigames wouldn't be very interesting, but together the combination makes them rather engaging. The minigames aren't meaningless since your performance counts for ultimately winning the metagame. The metagame neither becomes some far off goal that the urgency to win is lost.

Some years back I got promoted to team leader position in a sales department in a call center. The building had two floors. Top floor (where I had worked as a sales representative) had about ten teams all mingled in one giant room. The bottom floor had two sales teams, along with some customer service and several rolls of empty computers for training new employees. So the bottom was isolated, didn't know the people on top floor and it was actually much like being in an entirely different building. When I was promoted as a manager I was assigned one of the teams downstairs.

The managers are given \$100 every month for incentives for our teams. We give out gift cards, buy pizza, etc. So we have to make it stretch. The games being played for these incentives were limited to every team, that is to say the employees only competed with members of their own teams. But if you understand The Winner Effect you know that competing against friends creates a loser effect that is strongest to the "winner" in that particular situation. There seems to be a biological mechanism that punishes backstabbers. For example:

Men who are introduced to attractive women have a testosterone surge. But if this attractive woman is the wife of a good friend, their testosterone will drop when you're near her (Google "testosterone wife friend" to gain several articles on this subject if it sounds unbelievable to you).

In player-vs-player video games there's also similar social context dependent outcomes. If video game players compete online against strangers and win, they all have a testosterone spike, and the players

with the highest scores (most responsible for the victory) have the highest testosterone and dopamine boost. But if these same friends compete against each other in free-for-all then they'll all have lower testosterone when the game is over (The Loser Effect). What's interesting is that the player who wins first place against his friends has the biggest drop in testosterone from the group! He's "being punished" by unconscious biological forces for competing against his friends (article in Daily Science titled "Male testosterone levels increase when victorious in competition against rivals, but not friends" explains this if you're curious).

So human beings are tribal and we don't want our tribe to directly compete against itself but against an opponent in order to really fire up some primal urge to succeed.

Knowing that my team didn't know anyone upstairs I decided to start a competition with some of the managers upstairs. We would bet the \$100 we were given each month instead of simply spending them between our teams. We developed a "Game of Thrones" themed competition simply because the managers running it were big fans of the show and we had fun with it.

We started off with three teams (me and a couple of friends from upstairs) and took \$25 that we put aside for the grand prize, and kept the \$75 left for the competitions. So it worked like this:

Whoever won the Metagame would get \$75 grand prize (the \$25 every team set aside) and we would use the \$225 total (\$75 each) when playing the "minigames." At the end of the month we would spend whatever was left with our team. "Feast or Starve" we called it implying that whoever won more minigames would be getting that grand prize of \$75 (and probably collected most of the rest by Winning the minigames) and spend it mostly in food for the next weeks until it ran out (feast). The losing teams are left without their incentive money (starve).

But that was a key rule also, we weren't allowed to keep and "roll over" any of the money won. We had to spend it on our team, and start every new month with only the new \$100 given us.

The competitions were a lot like gambling bookies in how we made up what the rules would be about. "\$5 for whoever sales the most accounts in the next 4 hours." Or we might use different metrics. For example, we calculate the "revenue per call," that is to say, how much money that team made the company by dividing the total profit by the number of calls taken, or "Revenue per Hour" number of calls are irrelevant, just the profit your team is making.

Note: You have to make sure to keep proper track on these, with the time and date with the results of the competitions. Since you are dealing with real money, if there's a disagreement on who owns what to who, it's going to get heated. Remember: Everything has its inconveniences.

So there's different strategies for these. In revenue per call you might not want to burn through calls and take your time, in revenue per hour you're trying to avoid any idiot wasting time by "just asking questions" and get to the leads you can close as fast as you can.

We varied these depending on the amount of traffic to the call center. If there were calls waiting to be answered, we used Revenue per Hour, if we were slow, we used Revenue per Call.

We varied it also with what we sold, if there were any extra features added to the sales, etc. Again, imagine how bookies make bets on anything. We simply created bets in favor of our own performance. We discussed about making bets on two opposing team's performances but decided to go against it. It would over complicate the dynamic plus our paycheck was linked to the sales reps performance and we only wanted them to be motivated to sale more.

We kept track of these rules and the profit distributed in Excel spreadsheets and emailed it to the teams every few days. I have experience in financial modeling so this was rather easy for me to create these. No expensive software required you can do this in Google Docs.

There was some joking around with this whole process. My team played as "House Lannister" and if you ever seen the *Game of Thrones* TV show you'll know that members of this family have a saying that says "A Lannister always pays his debts." One of the managers as a way to tease me sends an email to the three teams competing saying he's glad he won to the Lannisters because we are great losers by always paying our debts.

Paying financial obligations is certainly one aspect of the saying, but also means that if you wrong the Lannisters they'll get back at you in horrible ways. If you know what the "Red Wedding" means from the show you know what I'm talking about. I'll try to explain this quickly without getting too into the show:

There is a song that is popular in the fictional world of Westeros glorifying the character Tywin Lannister from a battle he had when he was young, the song is called "The Rains of Castamere." The title is a play of words. The Reyne family from the city of Castamere who attempted a *coup d'etat* against the Lannisters (the ruling family in the region). Tywin explains that his father was a good man, but a fool, and this revolt came along due to a lack of respect other Houses had for his father. So in order to gain respect and prevent a revolt and destruction of his family Tywin marched to Castamere and murdered every last member of the Reyne family and burnt down their castle.

Lannisters and their men often whistle and sing the song (even beloved Tyrion). Tywin sent a musician who simply played this song as a reply when he had one lower House he ruled begin questioning the Lannisters. It was also played during the infamous "red wedding" where the Lannisters "paid their debts."

Below is the song. The reference to the "cats" comes from the sigils of both families. Lannisters have a golden lion, while the Reyne a red lion:

*And who are you, the proud lord said,
that I must bow so low?
Only a cat of a different coat,
that's all the truth I know.
In a coat of gold or a coat of red,
a lion still has claws,
And mine are long and sharp, my lord,
as long and sharp as yours.*

*And so he spoke, and so he spoke,
that Lord of Castamere,*

*But now the rains weep o'er his hall,
with no one there to hear.
Yes now the rains weep o'er his hall,
and not a soul to hear.*

So what I did was flip the script. You can Google “your brain on metaphors” to get a better understanding on how to use metaphors in your management style. Dave Snowden from *Cognitive Edge* touches on this also. I mainly use metaphors on trainings linking sales as developing skills similar to sports. But instead of being “the losers who paid up” as my buddy wanted to paint my team, we became the ones who would ultimately destroy them for any insult. I bought posters of the song and put them around our area. There was a bit of Pavlovian conditioning I believe. Whenever someone was slacking off or starting to complain, we would smile and say to get his act together since we needed to beat the other team.

But you have to remember it was a backstory to the work we kept performing. We weren't roleplaying every instant in work. Work didn't become a game. Here is the change:

Sales in a call center can be repetitive and boring. This can start adding “mental pressure” on the employee. There is a point where they're going to get terribly sick of the job from this “mental pressure,” which might start making them cranky. If they're not in a good mood, their sales will go down. If their sales go down they may become emotionally imbalance. If this is taken too far they'll “explode” emotionally, by having a depression or simply being terribly cranky. Sometimes you'll have criers the moment someone was rude with them in the phone but these happen as “the straw that broke the camel's back.” You could see it coming sometimes.

You can study the evolutionary theories on why there's humor in humans and get great insights for management. One argument claims that comedy comes as a mechanism for lowering stress from tense situations. This is called the “relief theory.” You've probably experienced moments where you don't know if you should “laugh or cry.” Or you've been overworked for a long period of time, and you start cracking stupid jokes you would never have done if you were well rested.

So in this situation you can see the difference in what I'm doing, as opposed to the gamification consultants. My claim is that work will always be work and you can't change that. Your job then is to create ways for “relief” from the psychological tension from work, not to make the work itself as pleasurable as a game. At least in this situation in jobs such as those in call centers. Let's call this “Relief-based gamification.” You create an excuse for them to joke around and distract themselves.

This is a little different than the “skill-based gamification” where people are obsessed in improving in a similar way athletes do as was achievable in the door-to-door context and many in banking and finance cultures carry. In call centers most people are just trying to get by with a job.

One way to look at it could be to go back to our analogy between casual players and hardcore players and dividing our works between “casual workers” (those just working to get by) and “hardcore workers” (those obsessed with their job who want to “win”):

“Casual workers need relief-based gamification’ while hardcore workers need ‘skill-based gamification.’”

It's just a rule of thumb I use, nothing to take literal. Of course situations can overlap. Someone with an attitude that is too casual doesn't need and “relief” but the exact opposite and another that has been working hard might need that “relief.” It's very intuitive, there's no recipe to follow.

Another thing you must understand also is that in MOST situations you won't need a game-like solutions like the one I've mentioned above. In this particular job I had a LOT of free time. It's not customer service so I'm not getting escalated calls with a customer asking to speak to a manager. There weren't many meetings, emails or trainings. In every other management job I've had it would have been impossible to coordinate something like this. There's just no free time.

And “game-like solutions aren't even necessary in most cases. Maybe the “relief” comes simply from a playful culture of playing jokes with each other. This tends to arise naturally. It might be bringing pizza once a week and giving them 15 mins of time off from the phones, etc. In most situations I wouldn't recommend this. There's neither an “engagement crisis” as the “gamification consultants” love to point out. Most of the employees were very focused on performing well since their commission was based on it. There wasn't any “crisis” this or any other game-like solution resolves.

Remember: Gamification doesn't make someone who doesn't want to work start working, it simply gives an excuse for someone who already wants to work to work harder.

But honestly it just depends on the situation and culture and what management intuitively feels would work best. You can't use theory to determine what's going to work in particular situations (deductive reasoning). You have to observe the behavior of the employees, interact with them, come up with ideas you believe might work, test them, and discard that didn't work, use and tweak what did. A lot of these solutions will have NOTHING to do with “playing a game.” You can't have some “expert” tell you what will work based on theories and case studies, your situation is different.

But to continue with the story you have to imagine your employees being like a pressure pot: There needs to be a release valve. If there is no release valve they'll overheat and eventually explode. When you release some pressure, they're ready to go back and take more heat. You can read more on the relief theory of humor and others to aid your management. But the goal is that you don't turn work into a game, you offer a release from the pressure of work.

*“All work and no play makes Jack a dull boy,
All play and no work makes Jack a mere toy.”*
-Maria Edgeworth, Harry and Lucy Concluded

This also worked to create the “emotional hooks” Raph Koster talks about for game design:

- **Guilt:** You feel guilty if you abandon the game (like not watering your virtual crops). This is linked to conscientiousness;
- **Love:** You love the community! The game is a hobby. You love what you've created in it and the friends you've made;
- **Obligation:** The feeling that you must support your friends in the game (for example in online games where a player's success depends on his/her team's overall performance);
- **Pride and anger:** Defeating a level or opponent in a game becomes personal. Raph explains that a big feature of games comes from the desire to rise in a social hierarchy. Pride and anger are very strong motivators in gameplay.
- **Security:** Players can escape reality through the game. Raph gives the example of a mother wanting to stay away from screaming children for 10 minutes;
- **Curiosity:** The desire to know what happens next in the game.

What began to happen was that employees would start feeling guilty for not performing well. Would stop taking voluntary time off if it was available. Began helping each other to improve in their sales and share their closing styles instead of frivolous talk. They loved sharing the bounty if they won, got angry at the other team if they lost. It was an overall increase in performance.

This technique does rely on management the same way online games need guild leaders to keep engagement up. I already discussed this above. But the goal was practically generate these emotional hooks to drive up engagement, and use these as a relief valve throughout the day and create a desire to improve sales that wasn't simply based on commission.

Stop seeing people as individual atoms and start seeing them as a group. Human beings are social creatures. In prison as a punishment they put inmates in solitary confinement: they're taking someone away from thieves, murderers and rapists is a punishment! Everyone is a "socializer" looking for different ways to gain status in our tribe.

But let's not forget there has to be a real world benefit for them to play these games at work. Not only would they get food, but if they sold more accounts their commission was higher. They're not simply fools being taken advantage by the gamification design to work harder, **the real benefit is money.**

Also, there's a whole movement to avoid "extrinsic motivations" and create "intrinsic motivations" in gamification, and because of this they advise not to use money to incentivize employees since it's claimed to not work. The mere fact that these gamification consultants are making a living by lowering the standard of living of my generation alone makes me want to spit at them.

Ask yourself this: Would gambling be as engaging if it was played with fake Monopoly money instead of real money? A little common sense goes a long way.

This anti-money movement came from the book *Drive*. It's bogus. Money alone isn't going to motivate per say (sometimes it does), but it's necessary. Besides most people have money problems. Commission is an operational expense used to create the feeling that the sales rep is being properly rewarded for their work. You can only read history (economic in particular) to find out that most revolutions came about through the conflict of "who deserves the wealth and rewards." This was a big part of the conflict between Achilles and Agamemnon in Homers Iliad! This is also the case in animals (Google or Youtube "Equal pay for monkeys" for articles or videos on these studies).

Remember: artificial “virtual rewards” aren’t going to work in the real world despite all the gamifications talk of intrinsic motivations and addiction to video games. Many of these consultants don’t have any experience managing teams in the real world. Studying video games doesn’t make up for that fact.

I’ve seen these “gamification” solutions in place. They spend thousands of dollars on programmers who have studied “gamification” to develop a software that links to their current operation systems. These programmers don’t have any experience in sales in general much less interaction with the sales floors. They come up with super-hero themed games where you get the “Iron Man Reward” for showing up in time for a whole week. These are providing “experience” points. You can compare your experience points with other employees and use them to customize your employee’s character with new hair styles to share with others.... NO ONE EVER CARES.

Management and employees hate it. Some may interact with it for a few days but some grow bored, others think it’s condescending, others a distraction to their work.

Again: Have the managers in the floor come up with any solutions, “experts” applying deductive reasoning will be a disaster. You have only to see the success rate of “gamification” and agree with me on this. Conveniently the consultants will point out at the “success of video games” when making their case. Don’t be fooled.

“Gamification” and Employee Training

“The only sustainable competitive advantage is an organization's ability to learn faster than the competition.” Peter Senge

Gamification has big promises for employee training, but like much other promises I find it to fall short. What I’m going to offer is a process I’ve used to drive up engagement for trainings in my management with the lenses of “skill-based gamification.” This isn’t a universal cookie cutter approach, it is based on my experience as a manager and my brief experience educational game developer.

My background is as follows:

1. As a sales manager my job is literally to train employees in the art of sale. I was training people nearly every single day of my career in sales. I know a thing or two about training and motivating employees to spend time learning on their free time.
2. While in school I was in charge of the Business Club for my college. I won first place in the entrepreneurship challenge for DECA, the largest business contest in the country in terms of competitors, while winning or becoming a finalist in many other competitions at a state and national level. Now, you might argue that this isn’t real world experience, and you would be right, but you have to realize what I was doing as the leader of the club: Getting students to participate in these business competitions that offered no pay or school credits. I literally convinced them to spend their free time studying, training and competing for purely intrinsic purposes.
3. I spent a couple of years developing a software exclusively for the purpose of employee training before abandoning for more profitable business ventures through private labeling. I have also worked with some small companies in their educational software design, nothing huge, but I’ve been there, done that.

So the gamification community isn’t going to tell me “what’s what” in this regard. I say this because I’ve been heavily attacked by sharing experience by “gamification experts” as I’ll show below.

I’m hardly the best sales rep in the world. I’m hardly the best manager in the world. I’m hardly the best designer in the world. But I am competent. I think that one advantage I have is naturally being an introvert. This means that success in sales and management didn’t come to me naturally, I did have to work very hard for any competence in my career, but this also helps me explain what I do better. Since I spent a lot of time through trial and error and figuring out what works and what doesn’t, I’m able to pick apart my process. One of the reasons I’ve studied on my free time these diverse topics has been because I’ve always been hitting walls in my job, and have been looking for solutions in order to crush my competition and take myself and team to a new level in performance.

Let’s start...

By now you should be aware of the difference between explicit and tacit knowledge. Another word for these used in business and Wargaming is “hard data and soft data.”

Wargames are a type of “game” used by historians, financiers and the military. They were first invented by the Prussian military and have had a strong impact in these fields ever since. I first came across these games as a historian and latter in finance. The goal is to recreate the real world, and play the “what if” game with in order to gain new insights and predict what a competitor will do.

You can study the difference between soft and hard data more deeply on your own, but I’ll give you a basic run through:

Hard data might is the quantifiable information (explicit knowledge). For example, this may be the number of soldiers a military general had, the amount of arrows, food and horses, the nature of the terrain and its advantages and obstacles, how fast he moved, etc. In business hard data would be determine by creating financial models and mapping the supply chains.

Soft data is the attempt to get inside the head of the person you’re playing as (tacit knowledge). What are their motives and beliefs? What are their character traits? How are they going to react to X move?

I’ll give you an example:

There are many analysts discussing how we are in the verge of entering, or have entered, into a new cold war with Russia. These conclusions come from both Western and Russian sides.

Let’s say we create a Wargame and are able to map out macroeconomic forces including currency wars. We are able to recreate the Western dependence on Russia for energy (Google how the US depends on Russia for Uranium and Europe liquefied natural gas and oil. If we go to war with Russia and end this supply it would cause a massive power offs in the West leaving entire cities without electricity). And we are able to recreate military capabilities of Russia and NATO.

Now, that’s all well and fine but we won’t have an accurate simulation if we don’t get inside the heads of the players.

Let’s take the side of NATO. Is Russia attempting to financially bankrupt the West and rise as a world superpower? There are many analysts who believe this is the case and point out at Russian financial warfare through cyber hacking, their maneuvering for control over energy resource sector making the West dependent on Russia, all the while the maneuvering for the destruction of the petrodollar. Some say “why is Russia buying so many tons of gold and transporting them into their country by the truck loads while maneuvering to destroy the petrodollar if not to destroy the dollar's place in the world as the currency reserve and create a financial atomic bomb for NATO?”

So the point here is to wonder if Russia is the aggressor and NATO is reaction to this aggression.

Other analysts would say that the West is the aggressor, and have been mingling in the affairs of other nations for decades. Russia is actually attempting to gain their independence from these foreign forces so their main drive is sovereignty, not empire. They have been hacking the NASDAQ and created other forms of financial warfare as a defense mechanism from NAFTA aggression.

An example of this could be the expansion of NATO. Originally it wasn't supposed to move a single inch further from East Germany, an agreement made before the dissolution of the Soviet Union. It has now expanded many miles further and it's bordering Russia. Now, not only this, but NATO is carrying out military exercises in Russia's borders and creating military missile defense systems. Remember what happened when the Soviet Union placed defense missile systems in Cuba under president Kennedy? These NATO missiles are much closer to Russia than Cuba is to the US...

But why is NATO doing this? Is it aggression masquerade as self-defense? Is it actual self-defense? Is it a big game of chicken?

As you can see, the "soft-data" can become really problematic and the rules you create will have completely different outcomes as to how the hard-data is managed and the simulation comes to an end. But make no mistake about it: there has to be a role-play.

As for education purposes Wargames serve as better models than the entertainment industry with video games. In fact, the military has attempted to avoid video games. They prefer "manual games" (games you have to manually move every component to make it work) or simulations with robots on the real world as opposed to video games, but we'll keep our subject inside sales training, but there is much to be gained from their study for those in education.

But can you start seeing the difference between my approach and those in the entertainment industry? My training in history and finance has driven me for attempts to replicate the real world through simulations. The military knows very well what the goal of these Wargames are: To create tacit understanding about the hard and soft data that is accurate and therefore TRANSFERABLE TO THE REAL WORLD.

If you create tacit knowledge that is inaccurate, it isn't transferable into the real world. For example: A chess player can use chess as an analogy for his interaction in the real world, but the memory chunks it has developed over the years are only applicable to the game. **We need domain specific knowledge for it to be useful in the real world outside the game.** Video games in entertainment industry are about creating an illusion for the sole purpose of pleasure, Wargames are about recreating reality in order to gain skills that are transferable to the real world. Can you see the difference?

The design between video games and Wargames are very different. As a manager looking for results I've needed to find something that works. In my experience Wargames work, not the pleasure seeking techniques from the gamification industry that are simply imaginary causes and effects created by consultants with no experience in either design or management.

Remember: Even game designers say they get game design wrong. They have little to no background in the fields they're consulting in most of the time. There's nothing for them to claim credibility. It's an illusion.

How can these Wargame insights impact us in sales? One quick reference is roleplaying. Roleplaying is a common training tool in sales, it's nothing new, but I believe them to be doing them wrong. The problem is this:

Two people role-play. One is the potential client and the other the sales rep. The “potential client” will create a very general “character.” Let’s say they’re playing as a single mom and their objection is money. The sales rep and potential customer banter back and forth, and at eventually happens is that the role-play becomes a simple game of “make up a new objection and don’t let the sales rep win.” The problem is that there are too much freedom, the “potential customer” isn’t necessarily breaking out of character, there’s no character to begin with. It just becomes a game of regurgitating objections.

Some idiots make this really painful to listen to as they’ll never let the sales rep win. They’ll simple make up another and another objective with no end goal. They claim that their unrealistic performance was an attempt to give the sales rep “a hard time” to better prepare them for the real world... Bah!

I developed a different approach based on my involvement with Wargames and understanding of soft data and its impact on tacit knowledge. To create games you have to create boundaries. These boundaries are a requirement when roleplaying in Wargames. It’s a lot like people playing *Dungeons and Dragons* and attempting to “stay in character.” So I developed a few characters to play with:

Assuming we’re selling an alarm system I would give the rep a piece of paper that looked something like this:

You’re a single mom of three small children that gets back from home rather late. You know that you’re in a somewhat dangerous neighborhood. One problem you have is that your children (who are all under 12 years old) tend to forget to lock the doors. They spend many hours unsupervised after school while you’re at work and this is a cause of worry for you. You’re constantly texting your children while at work to make sure they’ve arrived safe from school and remind them to lock the doors. Your boss has already warned you about this constant texting, and not texting has made you worried and harmed your job performance.

When the door-to-door sales reps arrive you’re initially distrustful because you worry he might be a criminal trying to get in. How does he gain your trust?

Your major objection is the money, it’s tight, but the alarm system is affordable. Can the sales rep ask the right questions to make you talk about your family and your concerns? Has he convince you that the alarm will give you peace of mind concerning your children staying alone in the house? Did he mention how automatic door locks lock the front door automatically or you can manually do that from her phone? Did he mention doorbell camera that sends you an email with footage to her phone anytime the motion sensor is activated? Did he mention the live footage from indoor cameras you can access anytime from your computer at your office or phone? How police and fire department will arrive at any break in or fire? etc...

This little tweak changed the entire dynamic. When you role-play this way, you give the employees a way to develop a theory of mind (Google that if you don’t know what it is). As they get inside the head of the client, by having role-played as them, they get a better understanding of the sales process. Of the type of questions the sales reps should of asked, what was her real concerns, how these could have been overcome, etc.

This little change also helped in the engagement. Before this style of role-play, this was to the employees a stupid activity the manager was making them do, now that there was a clear boundaries in their behavior it became a game. They were actually learning. Both the sales rep and client were learning as opposed to the client just being an unthinking mouth spitting meaningless objections for the sales rep to practice. They started giving each other very good feedback, the overall performance improved.

“The map is not the territory” -Alfred Korzybski

One of the big fallacies in the gamification community comes from believing that learning can come through games indefinitely. You have to realize that games aren't very useful tools for learning in the long run. They're the “map” but not the “territory.” You have to create a “map” (training program) that is as accurate as possible to help the employee navigate the “territory” (the job). Games are simply temporary tools to create an analogy of the real world, but most of the learning will come from interacting in the real world. Once the employee has experience in the real world, the simulations are a detriment.

This isn't a crazy idea I invented, but it's a general theme in many of the authors I've mentioned so far, plus it's complete common sense is you've worked in the real world. I can have my sales reps roleplay for years. It's not going to matter since the real learning happens on the job. Ann Pendleton-Jullian specifically talks about this in her TED talk. Games teach tacit skills, these tacit skills work as scaffolding does in a building. Once the building is done, you don't need scaffolding. Once the student is in the real world, he or she doesn't need these games anymore.

An example is a game MITs developed in the 1950's still used today called “the beer game.” It's a very simple games used as an analogy for understanding a phenomena in supply chain management called the bullwhip effect. These effect simply means that small changes in retail will have large impacts on the suppliers and vice versa. The game serves as tacit knowledge for understanding the explicit knowledge being taught in the textbook and lectured by the professor, but once the game is played it's over. There's no more use for the game, it was simply a stepping stone on the student's path for his career in the real world.

Wargames are also temporary tools. Role-play is a temporary tool. Their purpose is for the creation of a tacit understanding to be used in the real world. They're ALWAYS inaccurate tools, but can serve as a starting point to developing skills by interacting in the real world.

“While tacit knowledge can be possessed by itself, explicit knowledge must rely on being tacitly understood and applied. Hence all knowledge is either tacit or rooted in tacit knowledge. A wholly explicit knowledge is unthinkable.” –Michael Polanyi

Now you have to understand that explicit knowledge and tacit knowledge are held in two distinct brain regions. Declarative memory for explicit knowledge (accessible to consciousness) and implicit memory for tacit knowledge (not accessible to consciousness).

So when we play, we're learning in a way that has a specific name: implicit learning.

Implicit learning is improved through fun. Through games, play, fun conversations, etc. There are evolutionary reasons for this type of learning. You can read *The Origins of Stories* by Brian Boyd if you want an easy read on this.

The reason all this terminology is significant is because you as far as learning is concerned, you can't activate both declarative and implicit memory lanes at the same time.

"Explicit and implicit learning do not happen at the same time; using one method of learning seems to be at the expense of the other." Chelsea Stillman, a PhD candidate in psychology at Georgetown

What this means then is that when you say you're going to use a game to learn explicit knowledge and through a fun game-like process, what you're saying is that you're going to use the implicit memory lane to retain explicit knowledge. THIS IS AN OXYMORON. Can you follow me so far? Can you see what I see?

There certainly are memory games that could help improve retention, this is something I spent two years developing, but their design is very specific and usefulness very limited. It's complementary to study, but it's not the main source of study. It would be moronic to suggest that the financial exam Series 7 should have only be thought with flashcards in group settings. Game techniques don't apply to reading textbooks or taking lectures.

Simply saying "games are about learning so let's make all learning fun through games" is the equivalent of a little girl saying "Daddy is a doctor." When you're learning you want to activate the proper memory lanes, and there's different ways to do this.

I'll say this once in far all: The "fun" element you'll find in work will be through the interaction with coworkers and the sharing of stories. Remember my example of the second sales team who wouldn't read a book but would joke around and share stories? That's the closes thing to fun you'll get in work. It's actually great. Gamification dreams of Never Neverland aren't happening.

So, with our understanding of cognitively complex skill-based games in the real world such as chess we know that reading is the #1 predictor of skill improvement. Not "gamified" play, but old school reading. TRADITIONAL EDUCATION IS THE BEST METHOD FOR ACCESSING DECLARATIVE MEMORY PATHS FOR EXPLICIT KNOWLEDGE.

Does that make sense so far? Chess players who only play soon plateau, only chess book readers see increase in their skills. The same is true for professions in the real world. If you read the biographies of great figures in history you come to realize they're mostly readers (with few exceptions such as Genghis Khan and Attila the Hun). Read the book *Grand Strategies* by Charles Hill for a detailed history on the subject of reading and leadership.

So you can't really turn training into a pleasurable game. Let's go back to a few points we've discussed before:

- Game designer Raph Koster explained that a game isn't going to be fun unless there are "memory chunks" for solving problems that are similar to the game being played. If the individual doesn't have these memory chunks, the game won't be pleasurable until these are developed.
- If you're trying to learn a new skill, which is what we're trying to do in corporate training, the *deliberate practice* is a mandatory requirement.
- *Deliberate practice* by its very nature isn't fun, it's boring and painful.
- Cognitive complex skill-based games in the real world require explicit knowledge. So do our careers. This is mandatory to improve performance.
- Reading books isn't "gamified" for chess players or entrepreneurs or any other business professional for that matter. If you understand how memory works, traditional learning, without any games or "fun" elements, is the best path for obtaining explicit knowledge.

So what does this ultimately mean? The techniques for turning corporate training into a game is a complete joke based on fallacies the gamification consultants refuse to address.

In most cases you don't need to turn training into a game. Why don't you try this simple idea: If you have an employee that can't even read a training manual, fire him or her and find someone who will. Isn't that crazy?

Gamification consultancy is basically a form of "generation consultancy." They say that Generation Y is fundamentally different than previous generations. They don't really want to work, they want to have fun. If you make work fun, they'll work. The ONLY way to do this is by understanding their entertainment. Since they love video games, we must make work like a game. ALL-THE-GOD-DAMNED-TIME.

Understand this: I'm from generation Y. My employees have mostly been from generation Y. The students from the business club I had studying for competitions are from generation Y.

This is how you engage Generation Y to work:

- Work is like a sports game, not a video game. It's going to be hard, not easy.
- You want money? A high position in the company? You'll going to have to work for it.
- *Deliberate practice* is THE ONLY way to achieve this.

Remember how we talked about Sapolsky mentioning the difference between animals and humans? Animals need constant dopamine releases to be able to do an activity, humans can put off immediate pleasure for some far away goal.

How did I make the students work like demons for the competitions mentioned before? I asked them what their goals were after school. Cool. I asked them "Are they going to attend one of the top universities in the country?" Most weren't. Ok. So I explained to them that if all things being equal, when you and another job candidate were applying for the same job, what would look better: If you

have no extracurricular activities, or if for fun you participated and won in the largest business competition in the country?

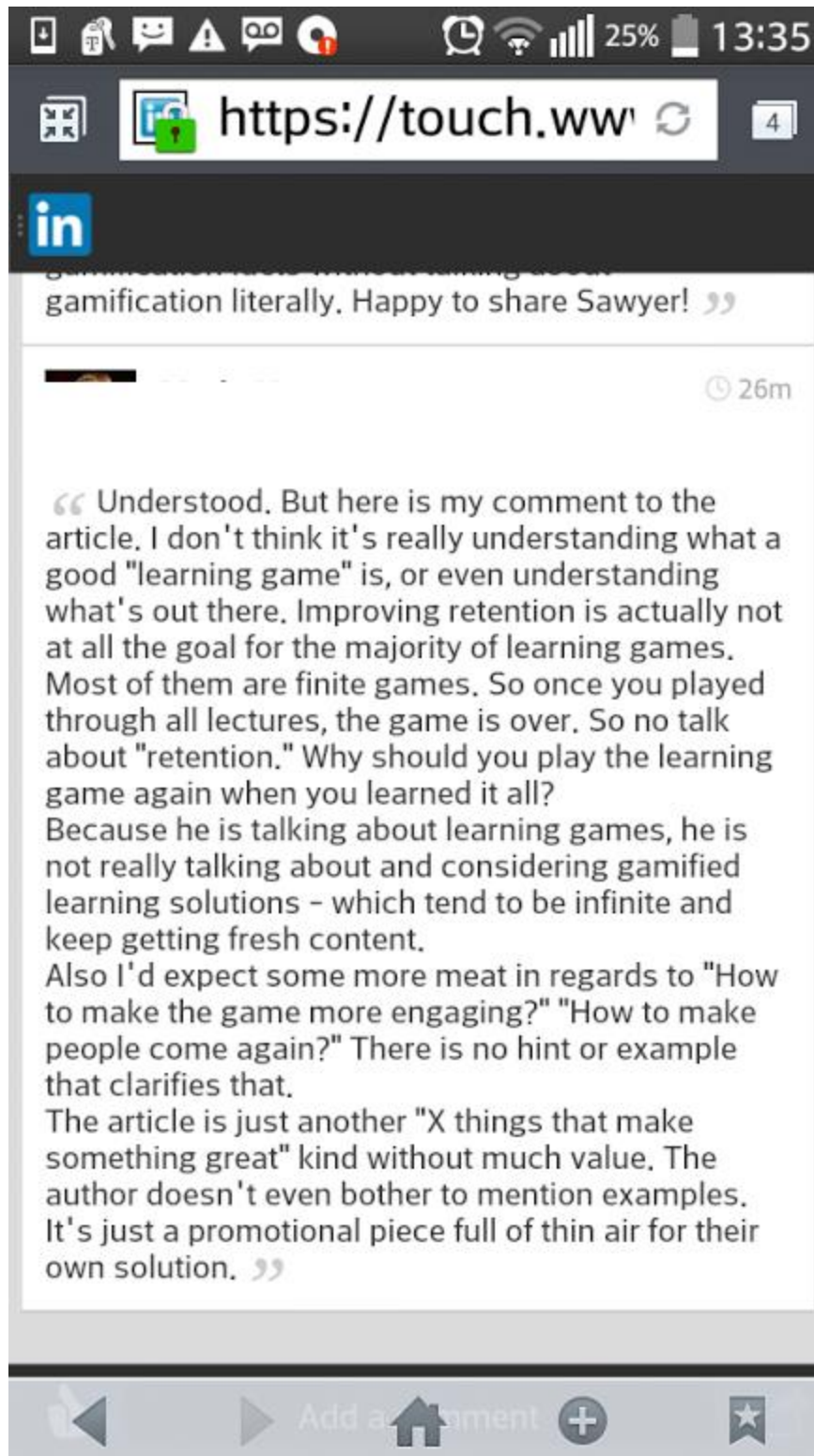
Another factor is leadership. Since I had won these competitions before I had what the ancient Romans called *Auctoritas*. I had credibility based in my past successes. They trusted me to help them achieve similar goals I had already achieved. I was an authority in this particular respect. The same is true in video games for guild leaders. The topic of leadership and management is NEVER touched by the gurus, it doesn't exist, it's the "game design" that matters. This is a fallacy.

A similar approach happened with sales. Why are the employees working in sales? They want money. Why do they want money? Might be to pay for school. They just like having money. They have a family to take care of, etc. So you tell them it's going to be hard, but it's achievable. They're going to have to learn the skill, stay positive throughout the process, and WORK HARD. Deliberate practice and book reading is THE ONLY PATH to reach their goal. So they do it.

Read the book *Mastery* by Robert Greene. This book will help you come up with a better management game plan for yourself and your team than any game design theory.

This is the same reason why athletes go through such intense training. They want to win badly, *deliberate practice* is the ONLY path to victory, so they endure the pain and boredom to develop the skills that will turn them into champions.

One last aspect I would like to clear up once and for all is the belief that you should "gamify" seminars and reading. I took the following picture of LinkedIn some months ago after the "gamification guru" began insulting me for advocating the use of applying knowledge management for a lady asking about how to engage employees in a training program. I did block his name and face, but I have no problem in revealing it if the dog keeps barking.



Try to follow this man's train of thought:

1. *"I don't think it's really understanding what a good "learning game" is, or even what's really out there."*
2. *"Improving retention is actually not at all the goal of the majority of learning games"*
3. *"Most of them are finite games."*
4. *"So once you play through all lectures, the game is over."*
5. *"So no talk about retention."*
6. *"Why should you play the learning game again when you learned it all?"*
7. *"Because he's talking about learning games, he is not really talking about and considering gamified solutions - which tend to be infinite and keep getting fresh content"*

Translation:

1. *He has a significant piece of knowledge and expertise he's about to share with us*
2. *50% or more of "learning game" designers aren't concerned about the player memorizing the material in the game*
3. *Most games will come to an end*
4. *"Play through lectures" should go on forever in a proper design which he's advocating*
5. *He concludes that designers don't care about "retention" because these "play through lectures" aren't "infinite games." The lectures come to an end therefore the organizers don't care about "retention."*
6. *Now he finalizes his argument by saying that the reason these games aren't infinite, is because the player doesn't want to "play again" because he's "learned it all." Isn't "learned it all" another way to say "retention"!?*
7. *So, the grand solution isn't through "learning games" but through "gamification" (which he's an expert). So the solution for people not memorizing the lectures is by making them repeat these lectures. People don't want to repeat these lectures because they don't want to repeat content they've already memorize. The solution from gamification is to create new fresh content for infinity to keep them repeating these lectures and memorizing the content they didn't memorize because they already memorized it. And they'll finally memorize this original content by engaging on it in a repetitive bases through new content that has nothing to do with the content of the past.... (is your head about to explode also?)*

Let's reorganize his argument then be changing "retention" and "learned it all" to one simple word: Memorization.

"The majority of instructional game designers don't care about the player memorizing the content in their design. The reason designers don't care about players memorizing the content is because these games come to an end. If these players "play through all lectures" it means that there is "no talk about memorizing" the material they're playing. If they're no talk about players memorizing lectures because these lectures come to an end. But why do these lectures come to an end? Because they've memorize all the content in the lectures and don't want to repeat them. So the solution for gamification is to make the lectures fun enough to have them repeat and memorize the original content, by coming up with new fresh content that has nothing to do with the content they need to memorize because they've already memorized..."

By this same logic:

Instructional book writers don't want readers to memorize the content in their books. These books are finite, which means they come to an end. If these books come to an end, it means these instructional book writers don't talk about memorizing their content therefore there's no desire the content in the books to be memorize. And why do these books come to an end? Because the reader doesn't want to read it again. Why doesn't he want to read the book again? He's memorized all the content...

He finalizes the argument against "learning games" with the "gamified solution" of keeping "content fresh." Since we're talking about lectures and reading training manuals here, one can ask what does he means to say is that to keep employees from reading these training manuals and attending these seminars, the content in them should be "fresh."

Pay attention to what he's saying: The problem from is that "finite" lectures and training manuals aren't memorized because people stop reading them after the content is memorized. The solution to keep reading these training manuals and attending training seminars indefinitely is by "keeping content fresh." By keeping content fresh they'll finally be able to memorize the content they couldn't memory in the first place since they didn't go back to study after they memorized the content...

I have two questions: If the training material has already been learned why the hell do we want our employees to continual studying it?

What the hell does he mean by "keeping content fresh"? Is he saying we should generate new material to learn or repackage the existing material to be restudied?

He has determined that the "engagement problem" is that people don't want to "play again."

- If the employee has learned what they have to learn then there's no problem. The employee can go back to work with his new knowledge.
- Is he saying the employee should be instructed in "fresh content" as in "new knowledge"? What's the point of this new knowledge? Is it to keep the "gamified learning solution" to go on indefinitely or is it to aid the employee in his job? Is there a point where "new knowledge" through training is irrelevant and the employee must learn "on the job? I think so. The map is not the territory.

I can tell you exactly where this confusion is coming from: games-as-a-service are games that are played for years and have no definite end. Examples of these are *World of Warcraft* and *Eve Online*. One way these games keep players playing for years is by hiring an army of programmers generating "fresh content." The goal of these games are recurring revenue.

I'm going to make a guess here but I'm assuming that the reason "gamified solutions" are now "infinite games" arise from a desire to gain recurring revenue somehow. The same reason there's a push for the "gamification of everything." It now seems like the Toy Story character Buzz Lightyear is their new mascot since they're shouting "*To Infinity and beyond!*"

Second point:

You can't "play seminars." Let's not forget the difference between explicit and tacit knowledge. "Fun" and games activate the implicit memory lanes for tacit knowledge, traditional learning the declarative

memory lanes. Lectures are explicit knowledge and should not be learned through “games.” You can’t activate them both:

“Explicit and implicit learning do not happen at the same time; using one method of learning seems to be at the expense of the other.” Chelsea Stillman, a PhD candidate in psychology at Georgetown

Third Point:

I’m not against continual learning from employees as they’ll probably paint me as saying if they ever comment on this work. Another way to create “fresh content” in games-as-a-service is through “user generated content.” There’s a specific term for this called “eldergames” which both Raph Koster and Richard Bartle talk about. I’ve already explained how to create an eldergame for learning three times in this book:

1. Door-to-door sales team who started reading books and talking about the insights about these books and seminars as a group.
2. Door-to-door sales teams who would tell stories to each other about their day in a humorous way.
3. The call center who started helping each other out once we began competing against other teams.

If you’re going to attempt to create “infinite learning game” you’re better off analysing user generated content from these games, and study Knowledge Management while you at it.

P.S. I have read *Finite and Infinite Games* by James Carse, I’m well aware where this “infinite game” term has probably come from. You’re not applying it in this original philosophical context so don’t even try to defend “infinite games” by referencing Carse.

Fourth point:

This “gamification expert” claims that in order to make employees join the training material we should find out “what would make the game more engaging.” There are three ways it’s been attempted to have games create readers:

1. The seminar and reading material are turned into a game. For example: Lectures are called “levels” and just like in a video game you can’t access a new level without mastering a previous one. Or they may give artificial rewards for completing a “level.” They might make it social by giving the opportunity to brag to others about levels being completed.

This is what I believe this “guru” is referring too when he say “play through lectures.” But you never know with the man, I was never able to make any sense of his “articles” or LinkedIn posts. But I may be wrong, let’s hope he can save the corporate world by coming up with his happiness expertise developed through his incongruent thinking.

2) The game has a certain theme that made the player want to explore that theme in the real world. For example: For me playing historically themed strategy games encouraged me to start reading history books in my early teens.

3) The game requires “how-to” knowledge that can only be accessed through video tutorials, online communities or discussions with friends. In my case chess books where the first “how-to” books I ever read before I was a teenager.

Constance Steinkeuhler did an excellent study on this. Teenagers didn’t want to read community content from video games unless it was SPECIFIC to the problems the teenagers were facing inside the game. Why the hell do you think entrepreneurs and investors spend so much time reading? It’s because they’re trying to find solutions to problems that are important to them.

This was how I got my sales reps and students in the business club to start reading books and look at online seminars/talks. I convinced them that engaging in these activities would help them resolve problems at work or in the business competitions, and had already convinced them that it’s in their best interest to perform well on these.

This persuasion by the way isn’t always a logical conclusion. It might simply be them attempting to fit in the culture of the group. If my group of sales reps finds it valuable to have intelligent conversations based on ideas they’ve read in books, the individual sales rep will try to fit in by offering some good insights from his experience or study. If this cultural factor doesn’t exist, many “logical arguments” attempting to persuade the employee will fail.

And of course, results always vary from person to person and team to team. But this last method is the only one I’ve found to work. The content they’re studying has to be of interest to them. This interest can be manipulated to a certain point the same way you can make someone interested when selling a product or service. Ask the right questions, observe their behaviour, read between the lines, try to guess what their motives are through the general mind reading in sales, and try to convince them that it’s in their interest to engage in said activity.

Fifth Point:

If you’re going to attempt to manage the knowledge of your company, you should probably study Knowledge Management. If Raph Koster is right and fun in games comes through the development of domain specific tacit knowledge:

“Our brain works by attempting to assemble heuristics, habits, and schemata [Schema (psychology)] to be applied towards fresh and novel situations as we encounter them. We cluster together knowledge into groups we call “chunks” in order to better manage them with our relatively limited bandwidth. In other words, we function through pattern recognition.”

A big part of knowledge management is about the assembly of heuristics, habits, and mental schemas. Based on this insight, you should study and apply techniques developed exclusively for the management

of businesses and not try to use deductive reasoning from the study of video game theory for computer programmers into your management practices.

Remember: If you're going to use deductive reasoning, the theory has to be specific to the situation you're trying to understand. Game design theory may work great in games, but you need to understand management theory in the real world if you want to manage the real world.

The Happiness Fallacy

“A really efficient totalitarian state would be one in which the all-powerful executive of political bosses and their army of managers control a population of slaves who do not have to be coerced, because they love their servitude.” - Aldous Huxley, Brave New World

The gamification community ultimately themselves as “happiness experts.” This concept is pervasive in their writings. Their logic goes as follows:

- Engagement is about fun and happiness
- Video games have mastered the creation of fun and happiness
- We understand what makes people happy from playing games despite having little to no background in game design and pervasive criticism from video game designers
- Video game design theory for computer programmers can be taken literally and applied into management without much understanding of the real world context or any background in that particular real world domain
- This is possible since what makes someone have fun is the same no matter the context
- Fun and happiness can be explained by the video game pandering to fixed motivations or personality types despite game designers and professors claiming otherwise
- The fact that cognitive science and management has done away with fixed personality types is irrelevant, this is “gamification” not management
- We can pander to these imaginary motivations or personality types in the real world by our reinterpretations of video game design theory
- These interpretations are universally applicable to any discipline under the sun
- Therefore the “gamification of everything” will create a happiness revolution while increasing productivity in the workforce
- Therefore companies should pay us for consultancy and training since employee happiness is morally right and it will increase productivity in the company

And so they market themselves as a humanitarian force of goodness in the world by creating pleasure to everyone. There is already a word to describe this philosophical view: Hedonism. I won't bother breaking down criticisms for Hedonism throughout the centuries but it's a fascinating read. But it's not that I'm against happiness, but against the idea that pleasure and happiness are the sole purpose of life, or the ultimate good.

This whole “quest for happiness” is actually another manifestation of my argument that they're simply repackaging old management theories that have failed in the past with game terminology and presenting them as “new and innovative” to an unsuspecting public. In this chapter we're talking about a more abstract philosophical argument, but it's been around for decades nonetheless.

There are two books that characterized two very different approaches on how management would change in the near future to gain a totalitarian control of citizens (totalitarian means that a ruling body is engaged all aspects of an individual's life, watch game designers Jesse Schell's talk called "Gamepocalypse" for an example of where "gamification" could be headed if they had their way):

- *1984* by George Orwell
- *A Brave New World* by Aldous Huxley

Both authors write about a dystopia where citizens are controlled, but the means of control differ significantly. Orwell claimed that it would come about through fear. He was inspired by fascism and communism at the time. Huxley thought control would come about through pleasure. That is to say, people would be happy in their servitude.

The whole purpose of gamification is to create a Huxleyan dystopia. Now, they're probably not aware of this, I highly doubt they read any of the literature on the subject, but the end goals of Huxley's technocrats and the gamification gurus are the same: keep people working hard for the benefit of an oligarch (in the consultant's case it's the companies who are paying them) through the manipulation or hormones and psychological traits that aim for them finding happiness and pleasure in their servitude (the company benefiting from "intrinsic motivations" that will keep employees salary low).

Huxley called this pleasure centric control in later years "*New Totalitarians*" who were determined to create an enjoyment of servitude in its citizens. Huxley explains the reasons for this as follows:

Every new regime needs to employ a level of terror at first, but ultimately can't rely on terror indefinitely for control of a population. At some point if the ruling oligarchs wish to stay in control, they need to use persuasion. They must persuade the population to accept and enjoy their condition of servitude, which by any objective standard they ought not to enjoy. And so the reason for creating the enjoyment of servitude doesn't come from any humanitarian reasons, but are simply effective means of management and possibly enslavement if taken to an extreme and probably logical conclusion.

Gamification consultants call their movement the "pleasure revolution." Huxley called this same drive of control over pleasure many years ago the "ultimate revolution" referencing to the fact that if a scientific dictatorship used our new knowledge on the social sciences to control us through these hormonal and psychological manipulations, humanity would never be able to escape again.

Fortunately gamification has been a complete failure in this regard. Some of the greatest minds of the 19th and 20th century have already pondered this problem. In all honesty there are a lot better resources to control people in such a mischievous way than to say "we found the solution in video games" but make no mistake about it: There are intellectuals that have concluded that the control of humanity through hormonal and psychological devices that would create an enjoyment of servitude are as condemnable as the totalitarian regimes of the 20th century.

Do I or you agree on this? Depends on what you value. Is pleasure and happiness the ultimate moral good? That's a popular belief today and many do not see anything wrong with a Huxleyan dystopia. Some are laboring this moment to achieve it in a similar way the totalitarian regimes of the 20th century saw themselves as morally righteous. But there's other ways at looking at the world.

“What have you done? Thousands of years of building and rebuilding, creating and recreating so you can let it crumble to dust. A million years of sensitive men dying for their dreams... FOR WHAT? So you can swim and dance and play.” George, *The Time Machine* film 1960

“One day the last portrait of Rembrandt and the last bar of Mozart will have ceased to be — though possibly a colored canvas and a sheet of notes will remain — because the last eye and the last ear accessible to their message will have gone.”

— Oswald Spengler, *The Decline of the West*, Vol 1: Form and Actuality

“You must make you choice. Our civilization has chosen machinery and medicine and happiness.” Aldous Huxley, *A Brave New World*

“The world's stable now. People are happy; they get what they want, and they never want what they can't get. They're well off; they're safe; they're never ill; they're not afraid of death; they're blissfully ignorant of passion and old age; they're plagued with no mothers or fathers; they've got no wives, or children, or lovers to feel strongly about; they're so conditioned that they practically can't help behaving as they ought to behave. And if anything should go wrong, there's soma.” -Aldous Huxley, *A Brave New World*

“It's curious,” he went on after a little pause, “to read what people in the time of Our Ford used to write about scientific progress. They seemed to have imagined that it could be allowed to go on indefinitely, regardless of everything else. Knowledge was the highest good, truth the supreme value; all the rest was secondary and subordinate. True, ideas were beginning to change even then. Our Ford himself did a great deal to shift the emphasis from truth and beauty to comfort and happiness. Mass production demanded the shift. Universal happiness keeps the wheels steadily turning; truth and beauty can't. And, of course, whenever the masses seized political power, then it was happiness rather than truth and beauty that mattered. Still, in spite of everything, unrestricted scientific research was still permitted. People still went on talking about truth and beauty as though they were the sovereign goods. Right up to the time of the Nine Years' War. That made them change their tune all right. What's the point of truth or beauty or knowledge when the anthrax bombs are popping all around you? That was when science first began to be controlled—after the Nine Years' War. People were ready to have even their appetites controlled then. Anything for a quiet life. We've gone on controlling ever since. It hasn't been very good for truth, of course. But it's been very good for happiness. One can't have something for nothing. Happiness has got to be paid for. You're paying for it, Mr. Watson—paying because you happen to be too much interested in beauty. I was too much interested in truth; I paid too.” -Aldous Huxley, *A Brave New World*

“Exposing what is mortal and unsure to all that fortune, death and danger dare, even for an eggshell. Isn't there something in that?” he asked, looking up at Mustapha Mond. “Quite apart from God—though of course God would be a reason for it. Isn't there something in living dangerously?”

"There's a great deal in it," the Controller replied. "Men and women must have their adrenals stimulated from time to time."

"What?" questioned the Savage, uncomprehending.

"It's one of the conditions of perfect health. That's why we've made the V.P.S. treatments compulsory."

"V.P.S.?"

"Violent Passion Surrogate. Regularly once a month. We flood the whole system with adrenalin. It's the complete physiological equivalent of fear and rage. All the tonic effects of murdering Desdemona and being murdered by Othello, without any of the inconveniences."

"But I like the inconveniences."

"We don't," said the Controller. "We prefer to do things comfortably."

"But I don't want comfort. I want God, I want poetry, I want real danger, I want freedom, I want goodness. I want sin."

"In fact," said Mustapha Mond, "you're claiming the right to be unhappy."

"All right then," said the Savage defiantly, "I'm claiming the right to be unhappy." -Aldous Huxley, A Brave New World

I could go on quoting philosophers and other works of literature but I believe I've made my point so far in stressing that there's other ways at valuing and looking at the world. Their quest for happiness through secrets gathered through the entertainment industry is not one I want to join or wish them to accomplish (not that their mediocrity has prevented that from happening already).

So, "gamification" without happiness seems like an oxymoron, what is the goal of "Skill-based gamification" then?

"The question of whether world peace will ever be possible can only be answered by someone familiar with world history. To be familiar with world history means, however, to know human beings as they have been and always will be. There is a vast difference, which most people will never comprehend, between viewing future history as it will be and viewing it as one might like it to be. Peace is a desire, war is a fact; and history has never paid heed to human desires and ideals ..."

— Oswald Spengler, Aphorisms

The world is what it is. We should be preparing employees and students to confront it instead worrying about how to entertain them indefinitely. Business can be unfriendly, filled with hyper-competition trying to eat away at your market, or preventing you from entering in the first place.

- What are companies looking for in employees? Skills.
- What are skill-based games aim for players? Developing skills.

Both business and sports require the development of skills in a competitive setting in the real world.

You can research the cultural ideals of *Arete* and *Paideia* in ancient Greece and Machiavelli's *Virtú*. Those would be the epistemological foundations for my "gamification." But I doubt most have the time or inclination to study these ideals of the past, so if you just read about sports psychology you should have a rather useful framework to work from. Even though much of the sports psychology literature

seem quite cheesy to me. They lack the seriousness and realism I love from some works of history and political science. Even so, they're an antidote to the "positive psychology" I find so repulsive in some management circles.

But like I've said before, I'm only speaking from what has helped me in my own management, you must adapt to your own context and taste.

"Gamification" Is Advergaming

"Gamification gurus" try to convince potential clients that the real world is essentially boring for generation Y, but they find video games fascinating. Therefore, through "gamification" they'll control the behavior of generation Y by turning X activity pleasurable since their brains are tricked into thinking it's a game by releasing massive amounts of dopamine. This is claimed to work by referencing at the growth of the video game industry in general....

But there already exists a particular type of game used to make people do activities they would normally not do, and it's been around for decades. These games are called "Advergaming" or "advertising games." Now, there's nothing necessarily wrong with Advergaming, there have been successful for some companies, but they don't tend to have long lasting effects, they fail more often than they succeed and aren't applicable for most companies.

The situation is as follows: there's already a whole industry focused on literally making games to make people do things they would normally not want to do that has been around for decades. Can you see how "history repeats itself" with gamification? Can you see how they're manipulating you through marketing tricks? There's hardly anything new to "gamification" other than the marketing innovations to present old tried and failed methods as new and innovations promising fantastical results.

So, what I'm saying is that the consultants shouldn't be claiming their practices are an extension of the video game industry, but be specific in presenting them as an extension of advergaming.

This statement is most obvious when you're seeing "gamification" in marketing. They're using games or "game-like mechanics" for marketing purposes, exactly the same way Advergaming are used for marketing.

Advergaming started with the problem of having low engagement through marketing, someone must have realize "people like playing games, so let's turn advertisement to a game."

The same is true from "gamification." Either if it's a corporation trying to increase sales or productivity in employees, or some kind of non-profit social issues the reasoning is the same:

You have an entity (corporation, nonprofit or government) who have the interest of changing the behavior of a group of people (customers, employees, citizens). These groups of people aren't behaving

in the way that would benefit this entity. The entity realizes that this group of people likes games. The attempt create a “game” that would persuade this group of people to change their behavior in the real world in order to satisfy the interests of the entity.

The “game” in essence has an ulterior motive and aims to control behavior in order to satisfy this ulterior motive in the real world.

Ask yourself this: If a marketing department wanted to make an advergaming today and was looking to get budget approval, should they quote the growth of the video game industry in general, or be specific about the past history of advergaming?

If they’re building an advergaming and there’s a long history of advergaming, they should use data specifically from advergaming. That’s the honest thing to do. But advergaming don’t have a very successful track record, so if they’re looking to get money for their project, what would be a more successful (yet dishonest) argument look like?

Maybe something like this:

“You would think games are for children, but in fact most gamers are adults. The video game industry is growing at exponential rates. So we know for a fact that our target market loves games! We plan to create a game in order to capture our target market into engaging with us. Base on the success of the video game industry in general, I’m sure you’ll agree this is a very reasonable solution...”

That is exactly the argument used by gamification consultants. Now, if you mention this to them, they’ll fall back on their humanitarian goals of universal happiness and abstract claims on how gamification is much, much more than mere “advergaming.”

At the end of it all it’s the same premise:

You’re advising an entity on how to persuade people to do an activity they don’t want to do. This “new behavior” is in this entity’s best interest. This is hoped to be accomplished by tricking the people’s brain into believing it’s playing a game. By tricking the brain, dopamine will be released, making an activity they once didn’t care about pleasurable. The “game” being developed has an ulterior motive that is hoped to be accomplished by making X activity pleasurable through game design. The “game” being designed is aimed to control people in the real world, usually for financial or political gains.

Again, some people have had some success with advergaming, but it’s hardly universally applicable, it doesn’t show a reliable track record, much less a long lasting effect (sorry “gurus,” no infinite advergaming for you).

Don’t be fooled by the consultants when they tell you their ideas are new, or will work based on data from the video game industry. That has never been the case for Advergaming. That has never been the case for “gamification” either. They’re fooling you into creating a false sense of credibility. The curtain is lifted, you can decide interpret what’s behind it.

The Moment of Clarity

I would like to end this short piece with an example of *sensemaking* from the book *The Moment of Clarity* by Christian Madsbjerg. There are other books and examples I could use in both business and game design but this one is too perfect: It was used to find out the motivations of children for playing video games and use this to make them with the LEGO bricks.

Notice the different approach: While the gamification consultant tells you he's discovered the fixed motivations for playing in the whole of humanity which happens to conveniently be in a 4X4 graph you can apply anywhere, the sensemaking uses ethnography and is focused on understanding the social context before coming up with any conclusion.

Sensemaking is rooted in the understanding that we live in social complex dynamic systems and our status and identity is always shifting and is rooted in these systems. It's founded in ethnography, anthropology and the humanities.

P.S. An anthropologist will never tell you he has an answer for you until he has spent time immersed in the social situation he needs to study. Even an expert can't give you cookie cutter solutions. Neither can the "gamification experts" even if we give them the benefit of the doubt that there's even some kind of expertise in "gamification" in the first place...

Keep in mind I've been heavily attacked for introducing *sensemaking* to gamification. They don't want it since it will affect their business model and revenue.

I'll show a collection of quotes from the book. The background story is as follows:

LEGO was in the path of financial disaster and had a hard time figuring out why sales were going down. The basic idea was the same as gamification: Kids today find the real world too boring and playing with bricks was just too dull for today's video game players. They sent a team of anthropologists along with a small team of employees to follow some children with their family for a period of months. They were performing "business ethnography" (If you're not familiar with the term feel free to Google it. There's entire books written on it).

"The company also felt the need to compete with the instant gratification of plug-and-play toys. The digital space was bringing so many bells and whistles to the play experience, LEGO assumed that its old-fashioned bricks could not compete with the excitement."

- *"One of the insights to come out of the study had enormous profit and growth potential for LEGO. The researchers kept hearing the kids talk about going up against authority: teachers, parents, and other adults. "For the first time, I really understood Nickelodeon," a researcher told us. "Every single story on that channel shows kids rebelling. There is just a lot of energy around that idea for kids.""*

- *"These and other findings led the researchers to identify the key patterns: children play to get oxygen, to understand hierarchy, to achieve mastery at a skill, and to socialize. The patterns were simplified into four categories: under the radar, hierarchy, mastery, and social play."*
- *"The most salient observation revolved around an old shoe. An eleven-year-old German boy showed a researcher his most prized possession. It wasn't a video game or a fancy new toy. It was his beat-up sneaker. He lovingly pointed out all the ridges and nooks along the side and the bottom. They communicated to his friends that he had mastered a specific skateboard trick. From this observation, the researchers discerned a larger pattern of mastery. Children play to achieve mastery at a skill. **And if the skill is valuable to them, they will stick with it.** The German boy's dedication to skateboarding—and the social currency it brought him—dismantled all of the earlier assumptions about time compression and children's need for instant gratification from their toys. In fact, the analysts discussed, it was the exact opposite. **The most meaningful play for children seemed to involve degrees of difficulty and skill acquisition.** The team dubbed this insight "instant traction versus paying your dues."*

The above quote practically makes the argument for "skill-based games" over "time-based games" even in children looking to play. I've had similar results in management with employees. The skills for the job (in my case it's selling) will help them in ALL areas of their life, including their love life or future careers outside our company in their chosen professions after school (the book *To Sell Is Human* by Daniel H. Pink is filled with useful examples for this purpose).

Even though gamification does mention the word "mastery" in their techniques, if you pay attention to what they're referring to it's the use of artificial power ups such as used in the game *Skyrim* we introduced the book with. The use of *deliberate practice* in skill-based games isn't to be found in "gamification" (and the "experts" have attacked me against suggesting it) despite there being many examples of these games being highly addictive and people dedicating their whole lives to it (think of chess players or the examples from the book *The Secret Life of Sports Fans*).

The best book I've read for the creation of a "path to mastery" is *Mastery* by Robert Greene. I highly recommend this book, it will do more wonders for your "design of management" than any game design or gamification literature.

- *"Another anthropologist talked about the almost incessant discussion of video game scores within a group of boys. He reported that every day seemed to bring a new assessment of the hierarchy based on the video game's rankings. The research team turned again to the phenomenon: what did the kids' attention to rank say about the role of play? **The team discovered that just as animals use play as a means of establishing social order and hierarchy, so too do children. They are playing to understand who is alpha and who is beta.**"*

This is also true in sales. The top sales reps are treated with respect, while the struggling reps, while being treated politely, don't carry the high status of top performers. If a struggling rep becomes a top performer, you notice how the group treats him differently as his status rises on the basis of his competence.

In a similar fashion, there's a deep contempt for a manager that can't sell. Read on the effects of power without status to understand why this happens in a deeper way. The manager might be a nice guy, but there

are few ways to have employees challenge manager's authority and constantly insult them other than a lack of competence

"An important insight came to the group through the discussion of all of these observations. One role of play for these children was to find pockets of oxygen, away from adult supervision. The group realized that kids were desperate to sneak some element of danger into their lives. If the researchers had used a more linear process—one focused on the properties of the children's play—the team would never have thought to put poisonous mushrooms and booby traps in the same category. But the nonlinear act of connecting the dots revealed that the underlying phenomenon of both behaviors was the same."

This quote is significant in two ways:

1. It shows that the reason children are attracted is rooted in the social context they live in. Parents are controlling every aspect of their lives and they're looking for an escape. It's not a predefined cookie-cutter personality type/motivation
2. The particular social context for children playing video games isn't applicable to a universal setting in adults or work. To do so is a miss application of deductive reasoning

This isn't hard to see. Do adults play video games in order to escape the supervision of their parents? Do adults play video games to gain "social currency" and increase their status in a group? Do adults play video games to gain a sense of mastery over an activity they find important?

Aside from a few rare cases adults aren't playing video games for the same reason children are, so studying the motivations of children in their entertainment is irrelevant to understanding the motivation of adults in their entertainment. You must apply abductive reasoning and study adults a figure out why they're playing video game.

Despite what the gamification gurus tell you, most adults are "casual players." There's two main reasons why adults play: relaxation and brain health (games similar to those of *Luminosity*).

Does the motivations for play tell you why an adult works? I don't think so. Let's take the motivation of "relaxation" for playing casual games (a simple game you play for a few minutes and put down):

- A young mother playing a casual game on Facebook for a few minutes to take her mind away from screaming children. Does her motivation of for relaxing from her screaming children for a short breath of time tell you why she takes care of her children in the first place?
- A college student that spends most of his time working and studying spends 15-25 minutes a day in the casual game *Clash of Clans* as a short break from his busy day. Does relaxing for a breath of time from work and school tells you why the students spends time in work and school?
- Let's say a real estate broker spends 15 minutes at the end of the day playing *Solitaire* from Windows in her PC. Does her entertainment tells you anything about why she works or how to "engage" her better?

Can you start seeing the fallacies in the deductive methods of these "gamification gurus"? Using deductive logic to find out why someone spends time in entertainment doesn't tell us anything about why they spend time working and is therefore irrelevant for management. What should of had happened years ago is the use of abductive logic in the specific context of "engagement in work." There are already plenty of individuals

who are highly engaged in their work, there are plenty who are not, what is motivating and demotivating workers?

But “reality is broken” the “gamification guru” will say, abductive logic can go to hell, their expertise can’t be questioned, they have the fancy title of “guru” after all.

- *“These kids were bubble-wrapped,” one team member recalled. “Every physical space in their life was curated, managed, or staged by an adult. Whereas children in the past used to find freedom and an appropriate level of danger on the streets, playing on sidewalks throughout the neighborhood or roaming free in the country, these children needed to find their freedom in virtual spaces through online gaming or in imaginary zones (like the box of magic mushrooms).”*

Video games exist in Mexico, but it’s hardly a cultural phenomenon. My family would invite many American businessmen and their families when I was growing up, and myself and friends could never understand the American obsession for playing video games all day. They always became boring really quickly for the Mexican. The ironic part is that we had more access to games than the Americans. There were shops that would alter our game consoles with “the chip” which allowed us to read any pirated game. Essentially we had access to every single game in the market for free and didn’t even care.

If we come to accept that the motivations for playing video games comes from a social setting and not a “fixed motivation” as the “gamification guru” claims, this starts to make sense. In Mexico we spent a lot of time in the streets with a significant level of dangers (gangs and drunks could roam the streets, not to mention some guy from school that might want to beat you up for whatever reason). We enjoyed playing in the sidewalks better than playing a video game, and spend a lot of time exploring roaming free in the country and beaches. Not to mention we weren’t supervise by any adults for most of our lives.

If the anthropologist is right, then the reason why my generation in Mexico didn't care about video games that much was due to conditions on the social contexts, and we should be abductive logic to find out what these social contexts are if we are to find motivations for either work or play.

P.S. Video games are still so very boring compared to reality. This love for entertainment is no life worth living. As Tyler Durden said in the 1999 film *Fight Club*: *“What do you want? Wanna go back to the shit job, f***in' condo world, watching sitcoms? Fuck you, I won't do it.”*

- *“In this same session, several researchers reported that children were hiding things from their parents. The observers noted the acronym POS (parent over shoulder) so prevalent in online gaming. One researcher reported being invited into a young boy’s room to see his most secret prized possession. The child pulled a shoebox out from under the bed and announced that it was filled with magic poisonous mushrooms. “We asked one kid to design his ideal room,” another researcher told us. “And it had all sorts of covert elements: booby traps and CSI [from the Crime Scene Investigation TV series] secret doorways. Everything was communicating, ‘Stay out!’” The anthropologists discerned that the box of mushrooms and the booby-trapped room were both reactions against the staging and surveillance happening in the children’s lives. After further discussion, the team saw a pattern emerge more clearly: the children were suffocating.”*

- *"Knudstorp recognized that if he truly wanted to investigate a phenomenon as deep and rich as play, he would need to enlist the help of experts. He sponsored initiatives to embed trained research teams—referred to as the LEGO anthros—with"*

The "LEGO anthros" were going to go and study their specific market in the real world. They're not some "experts" that are giving them cookie cutter solutions and telling them they already know why their target market is playing. BIG DIFFERENCE. It's the application of *sensemaking*, abductive logic. Not cookie-cutter best practice solutions claimed to work based on miss applied deductive reasoning of their own interpretation of video game design theory game designers themselves claim they're getting wrong.

- *"“The best anthropologists admit they don't know anything,” Bell concluded. “Whenever we were approached by department heads in management, we told them we were up for anything. They would come to us with a project, and we would say, ‘We have no idea how to help you, but we're going to try.’ We were always game to participate because that's how the conversations start changing. ‘You have a business challenge? We have no idea what the answer is, but excellent! Let's get going!’”"*

Do I even have to bother explaining this?

- *"Peirce contended that only abductive reasoning—starting with observation and then moving next to possible hypotheses—was capable of generating new ideas"*
- ***"Once we embrace the importance of context, it becomes impossible to strip people and objects away from their embedded circumstances."***
- *"Phenomenology is the study of how people experience life. Although the word is rarely bandied about in a business context, phenomenology is the philosophical inspiration behind a method like sensemaking. It is the study of everything we feel in the world, everything that gives our lives meaning."*
- ***"The current understanding of human behavior in business is predicated on a simple model that sees people as predictable, rational decision makers able to optimize a set of predefined preferences"***

The optimization of predefined preferences has been around for a long time, and is being rejected by management. The reason it's kept in gamification consultancy is because many people already believe in them, and it's a lot easier to put people in predefined cookie-cutter boxes than doing some actual research. Not to mention this way they can exploit clients with another lie: "These fixed motivations/preferences for play are universally applied to all people, therefore I can consult you in any situation despite lacking any background. Remember: it's not "management," It's "gamification" and I'm the expert in "gamification.""

I hope you can start seeing the difference between this approach and what the "gamification gurus" are selling. Remember the anthropologist, even someone who is an expert can't tell you what is going on without the application of abductive reasoning. I believe "gamification expert" to be a meaningless term, but even if you believe in some kind of expertise in them, you can't count on them of knowing by regurgitating case studies and prepackaged "fun predispositions."

The study Constance Steinkeuhler did on teenagers is a perfect example of the need for *sensemaking* and abductive reasoning. Like I've said before: She developed an after school program that was aimed at getting teenage boys falling behind their reading grade level to begin reading online content from the game communities of the video game *World of Warcraft*. The general idea was that these kids liked video games so they would enjoy reading literature from the video game. A logical conclusion, and a very sensible one.

The teenagers weren't engaging in the online content. She had to change her approach and applied *sensemaking*: Her team began playing the game alongside with the teens and having conversations with them. They then went online and found literature that was specifically talking about the problems, and after they found specifically what their interests were, the teenagers finally were interested in reading and had a perfect understanding of the content.

Sensemaking is mandatory. You can't have cookie cutter personality types for the people you're trying to sale, neither the team you're managing. You have to be able to ask the right questions, make observations, and come up with the proper solutions.

Another example of this comes from a video you can find in Youtube from Dave Snowden called "The Children's party Metaphor." Now, it's not necessarily guide for "engagement" but it makes sense:

Let's say you're in charge of a small office party for 30 people. Which approach would you use:

1. Find out what their personality types are through a questionnaire and divide three main activities for Achievers, Socializers and Explorers while keeping the Killers away
2. Or create different options for the staff to engage on. One table might have a set for playing poker and other games, the TV might be playing an NBA game (or something you guess they'll like by having to know them, another area might have some chairs laying around for people just to gather and talk, another table will have the food, etc.

Which approach do you believe to be more effective? Personally I've found the second to be the most useful, unfortunately the "gamification gurus" can't copyright it and consult you on it.

The final argument that I'll make is the understanding of *The Lean Startup*. This is a book from a video game programmer that developed a *sensemaking* approach to engage video game players that has successfully been recreated by millions of people all around the world in nongame contexts. It's the best "gamification" book ever created. The "gamification gurus" absolutely hate this idea since they wish to remain "the experts" in order to keep cashing on their marketing movement.

This is how I profited from applying *The Lean Startup* in organizations I've worked with or worked for:

1. You talk to the team leaders. Not middle or upper management, but the people in charge of directly managing the employees.
2. You explain the Build-Measure-Learn loop, Pivot, etc
3. You tell them "you know your team better than anyone, try out some ideas you think they might enjoy and build it from there. If they like something, encourage it, if they're not interested, discard it."

That's it, really simple. Another thing you should remember is that YOU SHOULD NOT TEACH THEM GAME DESIGN THEORY. When you do this you start creating mechanistic worldviews and their designs go to hell. If you tell them about a case study, they'll try to imitate that case study in their team. If god forbids someone tells them about the "gamified personality types" they'll try to figure out what their team's personality is and develop solution from there.

I've never been able to make one of these programs work when two things happened:

1. A programmer who has watched too many gamification videos on Youtube is in charge of the "gamification software design" and not the managers running the teams. They tend to do similar superhero themed garbage giving points for good attendance and sales. They don't have any experience in sales or have any idea of what it's like in the floor. The managers and employees hate their software and irritates the floor since they're forced to use it.
2. Someone gives a training on the gamification theory and why the staff must conform to this theory.

When you tell the manager to "come up with something that's fun" you start seeing very innovative solutions. I think two things happen that bring in better success:

1. The manager puts himself in the place of the sales reps (a job he or she probably had in the past and was promoted from).
2. He sees his reps of real people with all their complexities and shared histories and not as a one dimensional Personality type that wants to Achieve or Socialize (as their perception is ruined once you get theory thought).

Now, the idea that the managers shouldn't be thought any gamification theory might sound counterproductive but it really isn't. If you listen to standup comedians on how they come up with their material there tends to be a really straightforward trend:

1. They come up with an idea that is funny
2. They test the joke with people to see if they find it funny
3. Try out different variations of the joke and tweak it based on the positive and negative results of these variations

What the "gamification gurus" are advocating if we are to keep our standup comedy analogy is as follows:

1. Determine the 16 motivations for laughter
2. Find out what personality box our audience falls into based on a questionnaire
3. Never test the jokes on anyone, but base on case studies and comedy theory perform best practice solutions

I'm not going to find any support or love from the "gamification gurus" when I say their certificates are hazardous for managing a sales team. This however has been my experience. If it worked I would have been endorsing it, it doesn't so I'm rejecting it. And trust me, it didn't work because I didn't understand gamification properly as they love to fall back on by quoting Gartner.

The Creation of “Artificial Necessities”

“What primitive man did to scratch an existence from nature civilized man must do to stay ahead of his rivals.” Harvey C. Mansfield, Machiavelli's Virtue

The above quote grasps my goal for my style of “skill-based gamification” design. It's not about tricking the brain into believing it lives in a utopian game-like world, but closer to trigger some primordial survival instinct. The goal should be to create “artificial necessities.”

Most of us have survival taken care of. Food and shelter is relatively easier to come by than our prehistoric ancestors digging for roots. Most successful people seem to have created for themselves some drive that reflects these drive for survival in an existential level. Instead of merely surviving, they wish to leave something behind and have their peers talk about them after death.

“Ambition never is in a greater hurry than I; it merely keeps pace with circumstances and with my general way of thinking.” -Napoleon Bonaparte

“I always felt I had no time to lose even though I had nothing to do.” -Napoleon Bonaparte

This has been a common trend in Western thinking since Homer, where he describes in the Iliad how Achilles preferred to die young and have his name live on forever than die of old age but forgotten by history. You can hardly expect the common man and women who care little more than their own comfort to attempt immortality in a way, but other forms of “artificial necessities” that can be created for the general public.

It is somewhat simple: find out what they want in life. Make them realize that they can achieve this by working for you. But the ONLY way to attain this is by working hard. If they don't achieve it, there's going to be awful consequences they'll have to endure. These consequences aren't in the form of a punishment by you, but simply the way life catches up on you when you slack off. Imagine a doctor telling a patient to rethinking their health habits for they're in a collision course with disaster.

“Unless we become more, she shall become less.” Prussian motto in aristocratic circles after their defeats under Napoleon when analyzing how to keep their small state from surviving against other powers

These “artificial necessities” help create a “growth mindset.” Praise them for the hard work, while making them understand their job is to learn and get better at their performance through *deliberate practice*. Remind them what happens to those who slack off and wait for good things to drop to their lap from heaven:

“[I]n nooks all over the earth sit men who are waiting, scarcely knowing in what way they are waiting, much less that they are waiting in vain. Occasionally the call that awakens— that accident which gives the “permission to act — comes too late, when the best youth and strength for action has already

been used up by sitting still; and many have found to their horror when they 'leaped up' that their limbs had gone to sleep and their spirit had become to heavy. 'It is too late,' they said to themselves, having lost their faith in themselves and henceforth forever useless." -Friedrich Nietzsche

Why do you think a professional athlete or Grandmaster chess player or a military branch like the Marines push themselves so hard? It's because they have a goal. There's a powerful drive to attain that goal that has an existential link that creates a desire to acquire it similar to that of primal survival forces. And the ONLY way to attain the goal required to perform at a high level come from improving skills in deliberate practice. Or in other words: working hard is in their interest, so they're now engaged in it.

Instead of asking yourself "how can I make work pleasurable enough for my employee to engage in it the same way he engages in cheap entertainment and video games." ask yourself "how do I make my employee work for the company as if it was his own company?"

Again, this isn't a magical formula, it doesn't work the same between individuals or between different groups and industries, but it's headed to the right direction. You can't bullshit the employee with "virtual rewards" aimed for "intrinsic motivations" either. There has to be a REAL WORLD benefit for them to work hard. How does it align to their interests?

The following quote comes from Machiavelli's masterpiece *Discourses on Livy* and help clarify how these "artificial necessities" propel men to work hard. Basically it's saying that if there is no need in the environmental conditions of a people (such as extreme poverty) then proper laws have to be set in place (artificial necessities) in order to prevent idleness and a love for pleasure:

"The virtú of whom is recognized in two ways: the first is in the selection of the site, the other in the establishment of the laws. And because men work either from necessity or from choice: and because it is seen here that virtú is greater where choice has less authority (results from necessity), it is (something) to be considered whether it would be better for the building of a city to select sterile places, so that men constrained to be industrious and less occupied with idleness, should live more united, where, because of the poverty of the site, they should have less cause for discord, as happened at Ragusa and in many other cities built in similar places; which selection would without doubt be more wise and more useful if men would be content to live of their own (possessions), and not want to seek to command that of others.

*However, as men are not able to make themselves secure except through power, it is necessary to avoid this sterility of country and locate it in very fertile places, where because of the fertility of the site, it can grow, can defend itself from whoever should assault it, and suppress whoever should oppose its aggrandizement. **And as to that idleness which the site should encourage, it ought to be arranged that in that necessity the laws should constrain them (to work) where the site does not constrain them (does not do so),** and to imitate those who have been wise and have lived in most amenable and most fertile countries, which are apt to making men idle and unable to exercise any virtú: that to obviate those which the amenity of the country may cause through idleness, they imposed the necessity of exercise on those who were to be soldiers: of a kind that, because of such orders, they became better soldiers than (men) in those countries where nature has been harsh and sterile: among which was the Kingdom of Egypt, which notwithstanding that the country was most amenable, that necessity ordained by the laws*

*was so great, that most excellent men resulted therefrom: and if their names had not been extinguished by antiquity, it would be seen that they would have merited more praise than Alexander the Great, and many others of whom memory is still fresh. And whoever had considered the Kingdom of Soldan and the order of the Mamelukes, and of their military (organization) before it was destroyed by Selim the Grand Turk, would have seen there how much the soldiers exercised, **and in fact would have known how much they feared that idleness to which the benignity of the country could lead them if they had not obviated it by the strongest laws. I say therefore that the selection of a fertile location in establishing (a city) is more prudent when (the results) of that fertility can be restricted within given limits by laws.***

Another form of artificial necessities are the emotional hooks discussed earlier. They have to work hard in order to not let down their team in the sales competition. Waking up a basic sense of tribalism.

Having an overall “growth mindset” as a team culture helps for this also. People will typically conform into the group they find themselves in. If in order to belong to the social group (work team) it's necessary to think like them by having a growth mindset, they'll probably develop one.

So that is my different approach to “gamification.” The creation of “laws” that create artificial necessities so that civilized man will work to stay ahead of his rivals the same way primitive man worked to scratch a living of nature.

I've found this approach to be a lot more useful than the unrealistic promises of the “pleasure revolution.” My advice if free and honest, you can choose which style to apply.

“We should strive to welcome change and challenges, because they are what help us grow. Without them we grow weak like the Eloi in comfort and security. We need to constantly be challenging ourselves in order to strengthen our character and increase our intelligence. ”

-H.G. Wells, The Time Machine

Skill-based Gamification Maxims

1. We don't have God-like powers to change reality the way a computer programmer changes virtual reality. I don't care to hear about how "Reality is Broken." since it's irrelevant.
2. *"The real world just doesn't offer up as easily the carefully designed pleasures, the thrilling challenges, and the powerful social bonding afforded by virtual environments. Reality doesn't motivate us as effectively. Reality isn't engineered to maximize our potential. Reality wasn't designed from the bottom up to make us happy."* Jane McGonigal, Reality is Broken. The quote is irrelevant, reality is all we have. We can't change it with computer programming techniques the same way we can't change it for TV lovers or comic book lovers by understanding storytelling.
3. The dopamine triggers from video games are generated through "artificial power ups." That is, the illusion of power created in an artificial virtual reality. In the real world we rely to a large degree on the winner effect and certain mental traits. Sports psychology teaches us how to utilize these. Video game design theory is therefore for the most part irrelevant.
4. Don't rely on "gamification experts." This applies for both consultants and employees. I've managed call centers who have hired programmers to create gamification softwares. I've talked to the programmers, they don't have any experience in sales but have read the garbage from the consultants. Guess what happened? My employees didn't get tricked into believing they were in a game. They hated the software. Work is still work.
5. Don't tell your employees that they'll have fun working. Let them know it's going to be one of the hardest things they've ever done, but it will be worth it due to experience, money or both.
Read sports psychology for inspiration on how to do this.
6. The only people that should be "gamifying" should be management. If there's any design done from upper management make sure they've done the actual job the employees are performing. In sales that means the VP was once a sales rep. If this isn't the case, decentralize it. The manager knows his team and job best.
7. Don't give the manager game design theory. It's irrelevant for reasons already mentioned. Instead have them come up with what they believe would be fun, and run some experiments
Lean Startup style.
8. Just because something produces dopamine doesn't mean it's a credible management tool. Facebook creates dopamine and it disrupts most jobs. Food, drugs, pornography, etc create dopamine, these aren't credible management techniques, nether are games per say.
9. Just because my employees do X in their spare time for entertainment it doesn't mean that applying that to my management toolkit will improve performance. If I like to read fiction it doesn't mean I want to make a living writing or reading fiction. If I like to watch sports games it doesn't mean I want to make a living watching or commenting on sports games. If I like to cook it doesn't mean I want to make a living eating or cooking. If I play video games it doesn't mean I want to make a living playing games.
10. "Gamification" industry is setting up the framework that employees are lazy, your job is boring, employees don't want to be there and they'll be miserable. The "gamification" factor is here essentially to make the job pleasurable. If it isn't pleasurable, you've failed as a manager. This is essentially begging the employee to work for you by putting *fluffy feelings in their tummy*. "Please work, aren't we fun enough for you?" Game mechanics don't work with people who don't want to work but they may motivate someone who wants an excuse to work harder. If

someone doesn't want the job you offered, don't pay a "gamification guru." Fire that employee and find someone who wants to work instead.

11. Study knowledge management and complexity. Any "game mechanic" you apply must be subversive to management theory and practice in the real world.
12. Any design you do has to be brownfield design. Techniques from KM and Complexity allows you to understand the nature of the system you're in and once you know where you are, you can know where to manage future emergence. Read the book *A Moment of Clarity* for further info on this.
13. You can generate "fun and engagement" to a large degree by creating "growth mindsets." These are done by finding someone interest and praising them for working hard. "Fixed mindsets" are created by praising intelligence or talent. These techniques applied to management and education make "gamification personality types" irrelevant.
14. *The Lean Startup* is about a video game company that developed a process to engage video game players. This process has been adopted around the world in multiple industries and governments. This means it's a process taken by game designers successfully applied into non-game contexts by millions. If you understand complex systems you understand the need of "safe-to-fail experiments." This makes *The Lean Startup* the best "gamification" book in existence.
15. You can't rely on best practice to operate in complex systems. The fact that the gamification industry is mainly a collection of best practices makes it for the most part irrelevant.
16. Saying you're a "gamification expert" doesn't give you credibility to consult on every topic under the sun. You need real world experience to justify your consultations. Your study in video game theory is irrelevant since it isn't applicable to designing in the real world. Saying you're a "gamification expert" is a trick to turn yourself into a "universal consultant" where you lie about being able to "gamify everything" and therefore "funnify everything" with the promise of increasing productivity of employees.
17. The closest thing to dopamine addiction and engagement from it will come from the winner effect. If you understand it, you'll also know there's inconveniences.
18. By the biological laws bestowed upon us in the real world, we can't necessarily make something fun from the start. As game designer Raph Koster explained, we need "problem-solving neurological connections" aimed specifically for a certain activity to be fun when practiced. If these tacit skills aren't in place, the activity won't be fun at the start. Eventually, through *deliberate practice*, the activity may become fun. If the activity becomes intrinsically pleasurable due to this neurological development in a tacit skill, then there's no need to "gamify" the real world or job, the activity is already pleasurable.
19. There's no secret talent in video gamers waiting to be exploited by making the work like a video game. Video game players haven't been "deliberately practicing to play games." If *Flow* and *deliberate practice* aren't compatible, and video games are about generating a constant state of *flow*, then their time playing games has been mostly a waste. Also, deliberately practicing a game doesn't give you magical skills in other areas since most skills consists of developing domain specific memory "chunks" that aren't applicable outside that specific activity. A chess Grandmaster will be able to remember an incredible amount of data from the chessboard, but this enhanced memory isn't a skill available outside chess.
20. Most of gamification is the repackaging of old management concepts that have been discredited for decades. They've simply wrapped it with game design terminology. These includes a reliance in personality types, quantitative metrics and a "pay-for-performance" management style.
21. Video game addicts have a disrupted reward center with a depleted number of dopamine and testosterone receptors. This means that the real world doesn't stimulate them properly. They

rely on time-based games in the virtual world and their constant artificial power ups. This means they can't engage properly in the real world. If they're bored it's not because their brains is too complicated for our modern jobs, but because their reward sensors aren't being stimulated properly. They're the least likely to engage in "gamification." Nongamers a lot more likely to enjoy gamification design.

22. Some gamification techniques were founded on a belief that "left brain people" are extrinsically motivated and "right brain people" are intrinsically motivated. This is absolute nonsense, and they've now claimed it was just a metaphor. This is most likely false, and their models were based on inaccurate understanding of the brain and they're trying to save face.
23. Don't obsess over "intrinsic motivations are good and extrinsic bad." The gamification community claims it's going to recreate the intrinsic motivations to play games into the workforce. Lies. They take their ideas from a book called *Drive*. The book is over-simplistic and mostly irrelevant for management. They claim money destroys intrinsic motivation therefore must be avoided. Understand: You have to create a REAL benefit for your employee to engage and "play your game." Money is a great real world reason to work hard. Most of life's problems are related to money. I couldn't make my sales reps work like demons without commission.
24. Studies in the winner effect show that making money creates this epigenetic change. This is the same change caused by playing Player-vs-Player video games and skill-based games in the real world. Money also raises status and helps our employees achieve their dreams. Obsessing over "intrinsic rewards" has led to a series of "meaningless rewards" in gamification design.
25. The book *A Moment of Clarity* offers everything you'll need to know about "gamification" in a strategic level. Read LEGO chapter. *The Lean Startup* focuses on a tactical level. I recommend studying knowledge management through consultancy *Cognitive Edge* also.
26. You can't just say play is an evolutionary tool for learning therefore any game you make is a learning tool. Games are very limited in what they can teach. Mostly they rely on imparting tacit knowledge, not explicit. This is great for students and new employees with no experience in a field. A sales rep may roleplay with a trainer. A logistics student play MITs "beer game" to understand the "bullwhip effect" in supply chain management. A financial student gets a stock simulator, etc. This training is never sufficient, the player needs experience in the real world. After having experience in the real world explicit knowledge will propel the individual forward. The new argument of the consultants that "gamification training is about infinite games" is just a marketing trick to generate recurring revenue. It doesn't have any real world benefit.
27. You should study the "apprenticeship model" and apply it to management instead of looking at games for training tools. Two books I recommend: *A New Culture of Learning* by John Seely Brown and *Mastery* by Robert Greene.
28. Gamification literature is too overly simplistic and without any deep understanding. Remember example in chapter 1 where the girl knows "daddy is a doctor." You can't simply say "achievers like to achieve" "people learn in games" "games are fun" etc. Once you start using specific terminology such as greenfield vs brownfield design, time-based vs skill based games, explicit and tacit knowledge, analogy vs fixed identity in player types from Bartle, etc, their whole consultancy claims reveal to be have no merit.

Conclusion

I'm not going to make a long conclusion or create some kind of summary of the book. I hope I have lifted the curtain and revealed the charlatanism being carried out and save you from wasted time and money. There are few things I hate most in this world that conmen. Parasites living off the exploitation of my species. But that's just how I see them, I'm sure there are many others who think otherwise, as it's always the case with a good illusion. Others will have their own opinions and unbound love for "the gamification revolution."

I believe that most sensible people fall for "gamification" by believing that "fun techniques" from video games are necessary for management for Generation Y. I'm told that they do agree that their consultancies sound ridiculous and rather creepy, but that they'll probably appeal to the type of employees in their department: low ambitious "gamers" who would spend their entire day in cheap entertainment had they no need of a job to pay the bills. I hope to have changed your mind otherwise. Certainly there are fools in every generation, but Generation Y shouldn't be viewed as a whole as a bunch of pleasure loving morons who have had their brains changed through video games.

I do suspect that "gamification" will go on for several years in a similar option MBTI has continued for decades. That's fine, if the "gamification gurus" can find loyal fools who believe the greatest innovation in management from the 21st century comes from their interpretations of video games than let the "gurus" take their money. You can't save fools from making bad investment choices.

I hope this book gave you new insights on managing your team, guided you to further reading (especially towards knowledge management I can't emphasize that enough) and helped you avoid mistakes promoted by the consultancy business that surrounds the world "gamification."

Best luck to you,
-Eugene Sheely