

**AUTHORISED EXCERPT  
FOR  
InfoQ READERS**

# **Infinite Gamification**

Motivate your team until the end of time

By Toby Beresford

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First published 2020 by Bot Kiln

ISBN 978-1-8380453-3-3

Edited and typeset by Bot Kiln [www.botkiln.com](http://www.botkiln.com)

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# FOREWORD

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Most books or courses on gamification tend to focus on the broad picture, either introducing surface level concepts or presenting as many approaches as possible to the gamification process.

In *Infinite Gamification*, Toby Beresford focusses on a specific experience in gamification and then offers practical techniques for maximising the experience.

Most of us in the gamification community tend to focus on “finite gamification,” programs that have a beginning, middle, and end. But Beresford notes that “infinite gamification” is powerful in situations where consistent improvement over time is desirable, such as in the workplace. Instead of completing a training course, for example, and then getting back to work, infinite gamification efforts seek to improve performance in lasting ways by motivating players day after day for weeks, months, perhaps even years.

The main mechanism Beresford examines is the use of scoring. He shares with readers why and how scoring has sustained motivation. He then

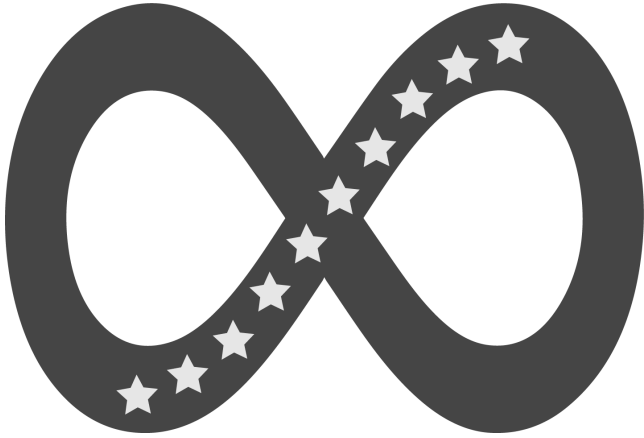
offers different metrics we can use to engage players, as well as different methods for scoring. Next he offers practical advice about adverse situations we may face in infinite gamification. Finally, and perhaps most enlightening for me, Beresford presents the “Maturity Model” whereby players have different attitudes toward, and engagement in, gamified programs.

Even a gamification novice will find this book helpful, although the reader does need a basic understanding of gamification. However, gamification practitioners and senior leaders will find this book both applicable, and enlightening.

Jonathan Peters, PhD  
CMO, Sententia, Inc.

Author, “Deliberate Fun: A Purposeful Application of  
Game Mechanics to Learning Experiences”





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# INTRODUCTION

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In 2011, the word *gamification* made the Oxford English Dictionary shortlist for word of the year.

Since then, it has become one of those concepts that many business leaders feel they understand, yet too often create programs that are too complex or mix up the motivational goals of their players.

Perhaps this accounts for why so many gamification projects fail.

## Finite and Infinite Gamification

Gamification can be split into two types—finite and infinite.

A **finite** program has an end, an epic win, a top level, a complete collection of badges.

An **infinite** gamification program is designed to continue forever.

There is no end, no final level to reach, no epic win, just a continuous, upward progression or an ever-greening competition.

Most gamification programs are directed by a training goal of some kind and so usually fit into the finite gamification model: there is an end when the learner passes the final hurdle to supposed mastery.

But, real life mastery doesn't happen just because you've completed the education process: there is still the need to *adopt* the skills into your day to day life and then, once adopted, *perform* them well.

It is in these latter stages—**adoption** and **performance**—that infinite gamification becomes more important.

**A sustainable program that motivates teams and individuals to continuous improvement is the goal of infinite gamification.**

## **Examples of Infinite Gamification**

You may be thinking, what obscure branch of gamification is this? But, in fact, modern culture is filled with examples of infinite gamification. Indeed, some of the most successful gamification programs are infinite by design.

Good examples of infinite gamification include:

- **The Oscars**—where status is awarded annually based on the votes of a select few.
- **TIME Magazine’s Person of the Year**—where status is accorded based on media coverage.
- **English Premier League** (or insert your country’s favourite sporting league here) —where status is based on the results of games played throughout a season.
- **Transparency Index**—where countries compete not to be shamed at the bottom of Transparency International’s leaderboard.

- **UNDP Human Development Index**—where countries compete to provide an holistic standard of care for their citizens.

In fact, in most businesses you can find examples of infinite gamification such as:

- Employee of the month
- Quarterly Sales Leaderboard

Online communities also get in on the act such as:

- StackOverflow Score

And last, but not least, loyalty programs that show no sign of ending:

- Air Miles

Infinite gamification programs can be immensely powerful. They can create value for managers, teams and players. They can spawn an entire industry with an associated ecosystem around it.

When you take into account ticket sales, TV sponsorship, player salaries and so on, the English Premier League is worth around £2.5 billion a year. Not a bad outcome for a gamification design!

## Who is this book for?

This book is targeted at any leader and manager seeking to influence the behaviour of those around them.

So that could mean:

- A **sales manager** looking for better sales results from your team
- A **change manager** keen to see staff use new tools and processes
- An **operations manager** with field engineers not using the new IT system properly
- A **diet and exercise coach** looking to focus participant attention on the metrics that matter
- A **charity leader** looking to influence organisations to bring in sustainable supply policies
- A **marketer** enabling customers to track success in using a particular product or service

- A **community manager** devising feedback systems that publicly recognise the most engaged community members

It doesn't matter whether your program is small scale or huge; whether it stands alone or is embedded in a larger program; whether informal or formal; or whether those you are influencing are individuals, divisions, organisations, or even entire countries.

*Infinite gamification* will equip you with a powerful new influence tool.

## **Why gamify?**

Leadership, whether you are influencing colleagues or directing subordinates, usually involves an infinite gamification program of one kind or another.

At some level, leaders signpost the behaviour they want to see in others. It might be as simple as 'doing or not doing' (a binary score) or much more complicated ('doing or not doing well') with graded levels of achievement.

In return we are all conditioned to calibrate our behaviour to the score given to us. Formal education tells each of us, right from a young age, to

pay attention to scores. We are all hypersensitive to our score.

This conditioning presents a problem for leaders in that even when you don't offer up an explicit score, your people will invent one of their own and channel their activity in that direction!

It is important to remember that since every organisational context is unique, with different goals and current priorities, the score that each leader highlights also will be different.

**EXAMPLE:**

Sales manager selling an entirely new product—key activity metric: Outbound calls made to new prospects

Sales manager selling an old product—key activity metric: Outbound calls made to previous customers and old prospects

In infinite gamification design there is no one-size-fits-all 'correct' answer. Every context is unique; each team can be at a different stage of development, and goals can vary greatly between businesses, and even teams, in the same business.

## **It all starts with a score**

Most infinite gamification programs are based on a score.

Scores are at the heart of the most important stories we tell ourselves.

We use them to track our success at every level, whether personal or corporate.

For example:

- How many hours did I go to the gym this week?
- Is my diet working?
- Did our team improve its productivity last month?

Whether a journey takes a single step or a series of steps to reach our final goal, we usually use some sort of score to evaluate our progress:

- 47 likes for that Facebook post
- A sales target might be displayed as 57% achieved



Scores can take many forms; but they don't always look like numbers.

For instance:

- Driving over the speed limit—an unhappy face emoji.
- Volume of applause after a theatre performance, or indeed, a standing ovation!

However they are displayed though, scores can measure our own performance or that of our team, organisation or country.

Scores at best, drive personal enquiry—"did I do better this week than last week?" while at worst, they demotivate—"I will never be as good at this as them."

Whether consciously or not we all keep track of the scores that matter to us; we all operate our own scorecards.

These scorecards might look like a quick mental check "Am I doing okay at this?" or a more structured approach—a dashboard on a mobile phone, for example—"how am I doing against my targets?"

For leaders it's important to remember that if you don't show your people the score, they will probably invent one. How many of us have worked in offices where success was thought to be measured in amount of overtime worked?

With the rise of the digital world, we are now presented with more scores than ever. How many followers do I have, likes for that post, answer views this month, etc.

## **Scores are everywhere**

These presented scores are often displayed in ways that make comparison easy. For example, analytics dashboards that compare us with previous weeks (e.g., follower increase over time), or league tables that show how we are doing versus others (ten most viewed writers).

## **Infinite gamification is everywhere**

But these presented scores don't appear out of nowhere. Somebody, somewhere has designed the score we are using—and, of course, that means there are well-designed scores and badly designed scores.

A **well-designed** score enables you to succeed.

A **badly designed** score drives negative behaviours – like apathy, cheating, or other wrong behaviours.

Sometimes, badly designed scores can wreak havoc.

For example:

- Daredevils taking selfies from roof tops risking death in the quest for more social media “likes”.
- The 5,600 Wells Fargo staff who lost their jobs in 2016 having created two million fake accounts trying to hit their sales target.

So, if a badly designed infinite gamification program can kill you, or lose you your job, it's worth taking the time to design the score well...

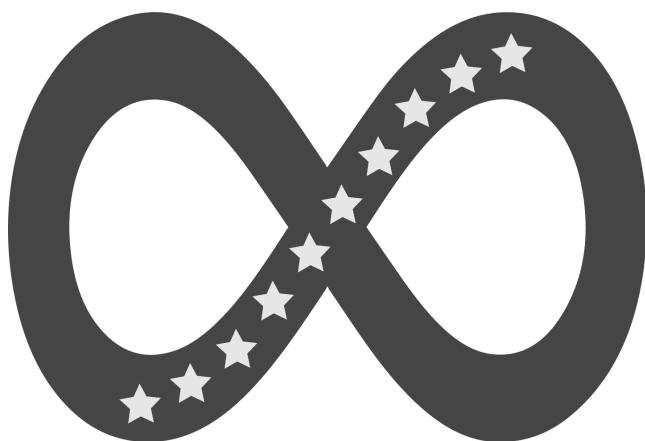
## **Book structure**

Any new program comes to fruition in three main phases each outlined in this book:

- Analysis
- Design

- Evolution

I recommend you use this book as a travelling companion on your own journey. Use the models and checklists to test your own design thinking.



## DESIGN

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**Scorecards** and **leagues** are where the ‘rubber hits the road’ in an infinite gamification program. This is how players get feedback on their progress.

Designing a **scorecard** for each player will require you to consider the metrics—the score algorithm that combines metrics into a final score for each player.

A **league** design determines how players compare progress with others.

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# Vanity and Clarity metrics

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**Vanity metrics** are the metrics other people use to evaluate you.

**Clarity metrics** are the operational metrics that you need to get right to be successful.

A scorecard may include vanity metrics, but usually the player can only indirectly affect them.

On the other hand, clarity metrics are the ones a player can affect directly; and so are worth an optimisation focus.

## EXAMPLES:

**Vanity metric** - the number of Twitter followers you have.

**Clarity metric** - the percentage of your Twitter followers clicking on a link you shared.

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*“Let them talk; I have new  
metrics now.”*

*— John Mark Comer*

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## Lag and Lead metrics

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**Lag metrics** happen after the fact—they are usually easy to measure, but difficult to influence directly.

**Lead metrics** are what happens beforehand—often they are the activities we can influence, but they can be hard to measure.

Lag indicators are sometimes known as “outcome” measures, while lead measures can also be called “process” measures.

If in doubt, it’s often better to count the fruit not the leaves—what you actually want more of, “the fruit”, rather than what gets you there, “the leaves”.

### EXAMPLES:

If the percentage of Twitter followers clicking on a link is the **lag** metric then the **lead** metric might be number of Twitter follower bios read per day. The reasoning being that the more you know your followers, the more likely you are to post links that interest them enough to click.

Another example, losing weight isn't an activity, but eating and exercise are. So, the **lag** indicator is weight lost; the **lead** indicators are calories consumed and exercise done.

By splitting lead and lag indicators you can easily display who's climbing—hopefully on their way to success—and who's cruising—possibly on their way to failure.

<b>Lead Indicators</b>	High Score	Climbers	High Flyers
	Low Score	Grounded	Cruisers
		Low Score	High Score
		<b>Lag Indicators</b>	

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*"Correlation does not necessarily imply causation."*  
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## Late Arrivals Handling

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Late arrivals to any scorecard can present an infinite gamification design problem. Should they start with a zero score, and then have to catch up?

What if catching up is impossible? This can disincentivize participation. Not everyone starts scoring at the same time.

Here are four “handling late arrivals” design solutions:

1. **Cohort sharding:** bunch newcomers into cohorts in which all have an equal chance and time to succeed.
2. **Score resets:** everybody’s score resets periodically, i.e., each week they start again at zero.
3. **Catch up ladders:** offer late arrivals a way to catch up with leader scores, perhaps with special bonuses.
4. **Divisions:** structure the score in different divisions so you only compare with people at the same stage as you.

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# Anti-Gaming Mechanics

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With any long-term program there is time for gamers to figure out the system and “game it”. This is typically where they find the cheapest way to win.

When you design, you need to design out unwanted gamer behaviours. Here are twelve anti-gaming mechanics you can deploy:

1. **Opaque scores:** hide the full details of the scoring system.
2. **Metric caps:** restrict capacity to score unlimited points.
3. **Penalty points:** dock points for bad behaviour.
4. **Reciprocity:** reward the response not the activity.
5. **Enforce a code of conduct:** set clear legal controls around the game.
6. **Remove financial rewards:** don't make winning prizes the sole aim.
7. **Peer transparency:** allow players to check each other's scores.

8. **Relative ranking method:** activity in every metric is required for a top score.
9. **Focus on intrinsic reward:** the main benefit is not the game.
10. **Stay the course:** continue the program after initial excitement has passed, the gamers may disperse naturally.
11. **Use score ratios:** ensure balanced behaviour across two or more metrics.
12. **Tweak metric weightings in mid-flight:** don't be afraid to change the rules until the mix of point allocation is correct.

More established programs will need to signpost this in advance for fear of losing player trust. e.g., Google tells websites about impending search engine ranking algorithm changes well in advance.

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*“Don't blame the gamer,  
blame the game”*  
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