Wicked Problem Games

We make fun, engaging & realistic simulation games about the biggest challenges to humanity, daring players to find the solutions

- We make video games for gamers to solve the world's biggest challenges

- There is an enormous amount of energy people are prepared to put in to solve games. As Foldit demonstrated (240,000 people online folding proteins), this creativity can be channelled to teach and solve real-world problems.

- Our mission is to extend this success by taking realistic and sophisticated simulations of real-world challenges, turning them into strategic puzzle games and then challenging the world's gaming community to discover the solutions.

- Our first project is gamifying the psychology of conflict resolution. When players get it right, they see peace being created, their score rising, their name rushing through the ranks of the world's best online conflict solvers.

- Our unfair advantage is expertise in war-gaming and an emotionally intelligent AI agent that allows the realistic modelling of how the human mind reacts to experiences and information to form emotionally motivated opinions and behaviour.

- We make fun, engaging & realistic simulation games about the biggest challenges to humanity, daring players

- We are specialists in building simulation and interactive narrative video games. We have two aspects to our business:

- 1) We help organisations solving global challenges turbo-charge their message by creating mobile and browser games to help better communicate to policy makers and stakeholders.

- 2) We believe there is a pent-up demand for the world's gamers to engage with and solve real-world issues, Our vision is to take a small part of the segment that plays strategy games like Heartstone and to use their creative energies to solve simulation games of real-world challenges by applying well-known gameplay mechanics to sophisticated simulation models.

- to find the solutions

- Learn how to improve the world through a fun simulation game.
  - Narrative game. You into the world with and learn how to solve it by doing. Choose-your-own-adventure.
  - Simulation. T
  - They can test out ideas in the virtual world before the real world., learning how the real world would works as a result

  - From policy makers to regular people, our realistic but mega-fun simulation games make you the policy maker and dare you to understand and
  - figure out and test solutions to the world's toughest problems. W
  - We make two types of games: interactive games and We model the complex interconnected systems that make a problem like peace or fake news so wicked by using the abstraction of traditional wargaming and the computational power of
  - agent-based models. We then carefully distill it to create a game that characterises the essence of the problem. So when YOU play the game, you're actually not just learning about the s'learning by doing' how to make the world a better place.

Two businesses

- Policy communication & Community Engagement
  - We create games that fit in with your communication strategies to turbo-charge your message

- Mass-market games
  - We are currently creating a strategy trading card game called 'Peace Engine' that simulates information warfare. It is free-to-play for now!

Mass-market games

- We believe there is a pent-up demand for players to engage with real-world issues, but using the game mechanics they know and love.

- Card games are ideal for this as they are not only fantastically popular (market size), but also fit in a lot of complex information and strategy. And they work well with simulation models.

- Monetisation: (example of Faeria)
  - Stage 1: free-to-play to build audience
  - Stage 2: convert audience to paying using premium model

Flag-ship Product: Living Mind Games

- Welcome to Peace Engine, a uniquely strategic card game using Living Mind.

- Living Mind – highly realistic emotional AI that literally lets you see into how they make decisions

- Two ways to play:
  - Challenge yourself to make war.
  - But the real challenge for the best players is to bring peace.

- Co-op quests to bring peace to impossible conflicts

- Over 400 different cards and endless possibilities offer insane tactics for destruction or peace-building

- Spend hundreds of hours playing in :
  - Sandbox mode: YOU construct the conflict online
  - Ranked mode:

- Play now and be part of a unique community!

- Build your deck, shape the minds of the People and defeat your opponents in epic battles!

- Closest analogue - Faeria :
  - 500,000 downloads in Beta
  - Hybrid of card and board game

- How it works:
  - Some players (or Ais) take on the role of warlords or demagogues competing for influence over a population hoping to gain power through division, war and loot. Carefully mirroring the psychology of real inter-ethnic civil wars
  - Others

- Our Unfair Advantage is two world firsts!
  - For the first time ever in card games, players can also take on the role of peacemakers who must use your cards to convince the Sims to follow leaders who want peace.
  - Living Mind technology. Our unique Living Mind experience makes a highly realistic emotional AI the centre-piece of the game. You literally see the mind of how your Sims think.

Wicked Problem Games

- We make computer games for mobile phone and browsers that help organisations communicate to policy makers and stakeholders better.

- The aim of the game is to play at being a policy maker and see the impact of your policy.

- We focus on:
  - Simulation games. These are powerful agent-based models using academic models, but with a friendly gamified front-end. Best for: exploring complex non-linear systems, when you want to encourage experimentation, when the point you are making is relatively clear, but why it works so well involves a lot of justification (that a 'learn-by-trying' approach gets accrsoss much better)
    - Example: The Peace Engine. You play the role of an NGO trying to stop an inter-ethnic civil war spiralling out of control, using just information.
  - Interactive narrative games. The game becomes a story that tells your vision of how how the world will be in reaction to the players's choices. Players are immersed in drama. Best for: bringing dull complex topics to life, when you need to explain a lot to get your message across. These are choose-your-own adventure pre-scripted games where you make choices to influence policy makers decision. They use either comic book, written word or filmed drama.
    - Example. USEF. By Ranj games, Antony wrote and directed this film about…

- We do true gamification!
- We learn by conflict: one wants this; you want that.
- When you know what you want, and especially if it is opposed, you'll try hard to figure out whatever it is you must do to win. So you learn how the simulation works to win. Which means you learn the real world.
- Our games place conflict at its core.
- We learn how to make peace because we want to beat our enemy – it just happens that make war.

- Our aim is to turbo-charge your messaging.
- We make a game to fit in with your strategy
- Each game is your complete policy message in a fun accessible package that can be downloaded as an app or played in a browser.
- Do you have?
  - Desire to spread your word virally to new audiences and significantly boost impact
  - Short-attention span audience
  - Target audience wants to explore the issue themselves to feel engaged with it… but either has no time to do so, or cannot easily engage with a complex issue
  - Have a complex, even boring issue that you struggle to turn into a compelling message that people can evangelise
  - Policy on a 'wicked problem' and/or complex system, where you feel people will only see the power of your solution if they experience it in action

Which game do you need?

- Types of games:
  - Choose-your-own adventure Drama: Have what might seem a boring complex issue that you need turned into a compelling message that users can evangelise. The positive fun gaming experience transforms their view of something. USEF example
  - Simulation Games. You are dealing with a 'wicked problem' and/or complex system. Simulation games allow users to experience the complexity and interactions on a 'learn-by-trying' basis. Think games like SimCity or Zookeeper Tycoon but for your specific issue.

For Organisations

- Are you a do-good organisation that wants to raise awareness about a problem and crowd-source solutions and engagement?

- Do you have an empirically validated model of how the system works that is complex and challenging to solve?

- If so, then we can help by designing and building you a game.

- If so, then we can help by designing and building you a game to turbo-charge your communication goals.

- And, of course, you'll have a ready-made community of our passionate gamers-for-good.

For Gamers

- Play our games and become a different person.
- Do something that has real relevance, that makes you proud.
- Measure yourself against something that has real meaning
- Use abilities you didn't know you had.
- Through playing, learn about and help contribute to the solution for real-world challenges facing humanity

Our gaming expertise

- Simulation:
  - Peace and conflict modelling
  - Public opinion, evolution of ideologies and information impact modelling
  - Ecosystems (trophic cascades such as impact of fishing)
  - Epidemic models (diffusion of ideas, memes, viruses) across networks

- Choose your own adventure games
  - Smart electricity grid

Who we are

- Wicked Problem Games was founded by documentary filmmaker turned games designer Antony Butts.

- He saw that the most important issues in the world weren't getting traction with policy makers because the issues were too complex to be explained to time-poor policymakers using the written word, PowerPoint or by-the-numbers videos.

- Games provide a turbo-charged experience for a policymaker that puts them in the cockpit of a journey into the complex world where their decisions make real impacts. The policy maker can test their preferred strategy against your organisations in the simulation to see which one comes up top.

- [Our agent-based simulations are academically and empirically robust meaning they are true simulations as opposed to simulations designed to reflect a fantasy. This helps put the policy maker at ease they are not receiving propaganda.]

Our process

- We work with you to determine the best type of game and make sure it gets your key message across in time

- Games vary from:
  - 15-20 minute game designed for once-only play (choose-your-own-adventure)
  - 2-10 minute game designed for exploration and repeat play (simulation)

  - Games are coded in Unity 3D and playable via web or mobile

Which game do you need?

- Antony Butts is a former documentary filmmaker who became obsessed with the power of games to communicate complex issues.
- Multi-talented:
  - A former physicist with a background in computational social science and agent-based modelling, he saw that agent-based models can be turned into great games
  - Games programmer in Unity and Javascript, Antony can build games
  - Filmmaker and scriptwriter who loves turning complex issues into fun engaging dramas

- Wicked Problem Games

- Games to turbocharge your message

- We also do training games and wargames to practice decision support in complex environments

- DO NO EVIL: Our core mission is to help make a better world.

- Crowded market dominated by Heartstone.
- Why?
- Totally different so room for both

- We make powerful browser and mobile simulation games about the real-world issues that really wind them up.

- We sell wish-fulfilment & fun.

- But also a serious non-partisan simulation of how and why their world works the way it does

- We market directly to the world's echo chambers using social media.

- We take powerful academic simulation models of particular social or political systems, turn it into an awesome game, and then 'skin' the same game many times over to be super-focussed to each person's echo chamber.

- E.g. Political manipulation / rhetoric simulator turns into
  - Trump supporter in Ohio gets Trump Term 2 with Ohio skin.
  - Noam Chomsky supporter in LA gets Trump: The Downfall with super liberal skin.
  - Hardcore Brexiteer in England gets Brexit: Civil War.
  - Hardcore Remainer gets Brexit: Why it sucks so bad.

PROBLEM

- People don't <u>just</u> want escapist killing, they want:
    - Wish-fulfilment and experiments in the real (non fantasy world)
    - What would life be like if Brexit became a civil war? Can I de-program Trump supporters? Can I create my own religion?
    - To interact with real-world issues in a game and engage their creative, problem solving abilities
    - To be curious and learn useful stuff! (stopping extremism vs. stopping zombies)
    - Remember Zoo Tycoon, SimCity etc – simple games where you learned lots of cool useful stuff and had fun? That's us.
    - To play the simulation with others, or also by themselves

- BUT you can't get these simulation games because the big companies are set up for huge MMOs

SOLUTION

- We've developed a social simulation game template that mixes card game mechanics (card-games are HUGE now) with a realistic interactive model of how the human mind thinks.

- Revolutionary mechanic (gamers love new mechanics, and we developed and own all the IP)

- Simulates huge variety of real-world subjects – basically anything about anyone doing something based on beliefs

- Experience and play about:
  - How wars start and end
  - How extremism works and ends

- Each simulation uses the same basic template so each simulation uses the code of the other, meaning cheap to make

- Computationally lightweight - runs on browsers (Facebook) and mobiles (largest growing market)

- Can be multi-player against friends, or single-player against AI

- API means can mechanics can be injected into a cloud simulation platform in the future if market demands

REVENUE

- Depending on topic being simulated:
  - One-off download cost of £2-3
  - In-game purchases of cards

- We will make hundreds of games using the same engine, specially customised to different markets, which we'll laser-target using social media.

- Central hub so if you like one game (e.g. Trump Term 2) then buy the next (e.g. Brexit: Civil War) and without having to learn a new game mechanic.

- Geo- and demographically highly diversified income stream

Revenue

LET'S PLAY: BREXIT – CIVIL WAR!

- You play Oxbridge Analytica, commissioned to turn England into a battleground over Brexit.

LET'S PLAY: TRUMP TERM 2

- Mission: Beat down the lame-stream media and get him!

LET'S PLAY: BURUNDI PEACE

- Mission: Calm ethnic tensions and create peace

POSITIVE SOCIAL IMPACT!

- Teach practical lessons
- Experience is the best teacher (our games are safe risk-free ways to learn about the real world)
- Engages curiosity to explore further
- Even the cynical games teach how our biases work in practice
- Can educate about how real people think about issues in different places

MARKETING

- We don't need millions in marketing to get noticed.
- Our games are about the topics everyone talks and thinks about everyday
- Our games are micro-marketed via social media.
  - To Trump supporters: Keep him in power
  - To everyone else: Get him out
- Mainstream media love anything about some crazy idea to stop wars, engineer society especially after Cambridge Analytica has become so current. E.g. Cambridge Analytica for Peace let's you play the good or bad guys

PASSIONATE TEAM

- Creative-led team from simulation, journalism and peace disciplines
- Focus on gameplay
- Passionate! Already doing it! Wanted to make it for a long time.
- We need experienced talented designers, artists and engineers

CONCLUSION

- Creative-led team of iconoclasts outside the industry

- Focus on gameplay

- Revolutionary design will attract large and loyal audience

- Hot topics and controverso

- Adaptable to thousands of uses.

- Passionate! Already doing it! Wanted to make it for a long time.

- Need experienced talented designers and engineers

- We are in the Age of Simulation
- As fundamental to our understanding of things as spreadsheet
- We don't just simulate the human mind, we've turned it into a game
- And made those minds link up
- Competition (Improbably) focussed on bigger is better: huge MMO worlds, complex neural networks, hard-wired rules …
- We've stripped cognitive emotional science to its fundamentals

How to change minds

- Problem: Current solution of written word sucks. Reports:
    - Commissioned after decision has been made – no impact
    - Written by inexperienced junior analysts
    - Largely based off googling
    - Rarely read
    - Result: low impact value. Biases go unchallenged. Mistake made.

- Insight: To change a mind requires changing perspective. Best achieved by exposing a person to an experience that tests their views and forces them to make decisions under less than ideal conditions.

- Solution: An immersive simulation experience where subject sees what happens when their theory meets practice.
    - Expectations rarely survive first contact with experience
    - Level of intricacy far higher than in written report
    - Anticipate how other actors will react to your decisions

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- Solution: An immersive simulation experience where subject sees what happens when their theory meets practice.
    - Expectations rarely survive first contact with experience
    - People learn much better by doing, and decision-making can be practiced just like any other skill.
    - Level of intricacy far higher than in written report
    - Anticipate how other actors will react to your decisions