

The ultimate guide to building business games and simulations that work



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Introduction

Business leaders around the world are turning to business simulation games to address failings in their company culture, introduce new behaviours, and improve the correlation between performance and profit. That's because simulations provide a safe way to get people to consider tough business scenarios, with no damaging consequences to the business.

As such, they are a proven way to help people learn about themselves, understand the inner workings of an organisation, and go on to change behaviour so they deliver value every day. But it takes skill to design a game that will

deliver such outcomes and tangible change to the business.

As a specialist practitioner in helping companies design and use business games that improve performance, we appreciate that creating these experiences is both an art and a science. Getting it right requires a combination of expertise to create an environment for positive change matched with a tailor-made game that reflects an organisation's culture and goals.

This paper will outline what you need to do to build a game that delivers lasting change.

In 9 easy steps



Business simulation: *n.* A device through which individuals learn about how businesses and organisations work, and which enables them to improve their performance within their organisation through the development of business and/or inter-personal skills.

So how do we do it?

We follow a nine-step process with every client, which falls into three stages:



For some people the thought of having nine steps to follow can feel arduous but it's not. You'll soon see it's the rigour needed for change.

What's more, we bear the load when it comes to design and delivery because that's what we do best. We take the fundamentals of the game structure and then work closely with company leaders to create a simulation that will be relevant, effective and fun.

It's actually a really satisfying process for clients because we provide the structure they need to tackle and solve very complex problems. It instills the confidence that lasting change will come from it. And because we have worked with so many organisations and transformed their approach to business we have plenty of experience to draw upon.

Start with a question When businesses come to us for help, it doesn't matter if the problem is how to embed a culture that is more values driven, an acute need to turn people into salespeople who can actually sell, or addressing the acumen needed to deliver a transformative project, the starting point is always the same: what's the business challenge?

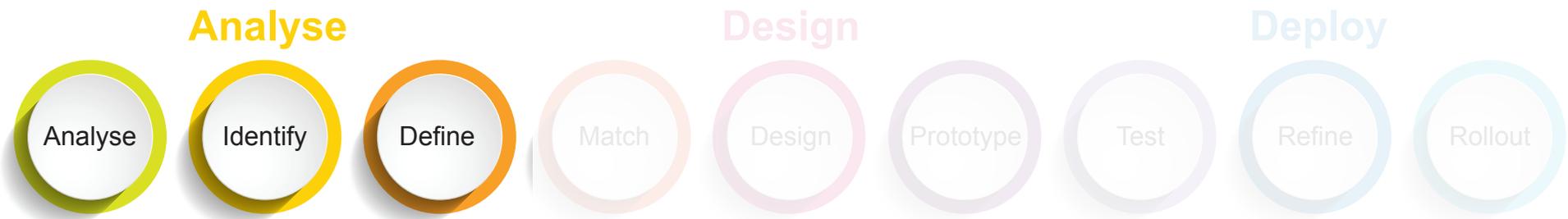
It seems such a simple question to ask but the answer is often complex and more involved than people realise. That's why we do some analysis of the situation first. As you'll read below, this phase is critical because it lays the foundation stones for the actual game design. After the analysis is completed and only after it's completed, we test the design and then we play!

The next few sections are going to lift the bonnet on each stage and explain what's involved and why things need to happen a certain way.

STAGE 1: ANALYSE THE BUSINESS CHALLENGE

There are essentially three steps in this stage:

1. Analysis of the business challenge
2. Identification of the outcome required
3. Defining any constraints that would affect the final game design and doing a quick reality check



But what does that really mean in practice? Let's start at the beginning.

In most situations our clients will be able to articulate the business challenge they face and have a view on how they think it needs to be addressed. It could be that a disruptive competitor is forcing significant market changes and the sales team isn't responding, a need to develop a more robust approach to values-based decision-making, or it could simply be the case that people have lost sight of the end goal and how performance and profit are related. You'll see all these examples have something in common – they all revolve around a need to address learning and behavioural change.

That's hard to do, especially if you've never done it before, and that's why leaders turn to us to help. Invariably it's because although they can see there's a problem or a need, they are struggling to identify a root cause.

Peter MacNaughtan, "It was a fascinating process. We'd have these conversations where we'd talk about what we wanted to say, and Christine Elgood would keep pushing us to define it more and more clearly. At the end of the process, we had a much better understanding of what we were asking people to do and why. As a result, we had a tangible development programme with logical stages that could be run as a business simulation that accurately reflected real business practice."

[Read our case study: www.chris-elgood.com/oracle-emea](http://www.chris-elgood.com/oracle-emea)

1. Analysis of the business challenge

This is where we come in. As an external and independent specialist, we have both the experience of helping companies see a way through, and the luxury of being able to ask tough questions that people might not ask of themselves or each other so readily. We really probe under the skin of the organisation.

We use a variety of straightforward creative problem-solving techniques, things like the 'fishbone technique' and Kipling's 5Ws and H to find out what's really going on. Ultimately, we go beyond the symptoms and get into the root causes.

As part of this, we'll ask people about the actions they take and the decisions they make. We do it in such a way that people open up and confide in the process. It's a point when people see change is possible and claim a stake in the future.

Think of us like a *friendly* metaphorical sledgehammer that uncovers the real issues and identifies how the nut can be cracked.

Of course, for some companies this can highlight trouble spots they didn't know they had. While that can be both a good and a bad thing, no budget is endless so it's at this point we use the analysis to inform what core issues have to be addressed to move into the future successfully. This then helps define the outcomes the simulation must deliver before we go on to design one.



The Kipling Method

*"I keep six honest serving-men
(They taught me all I knew);*

*Their names are What and Why and When
And How and Where and Who."*

Rudyard Kipling



Analyse

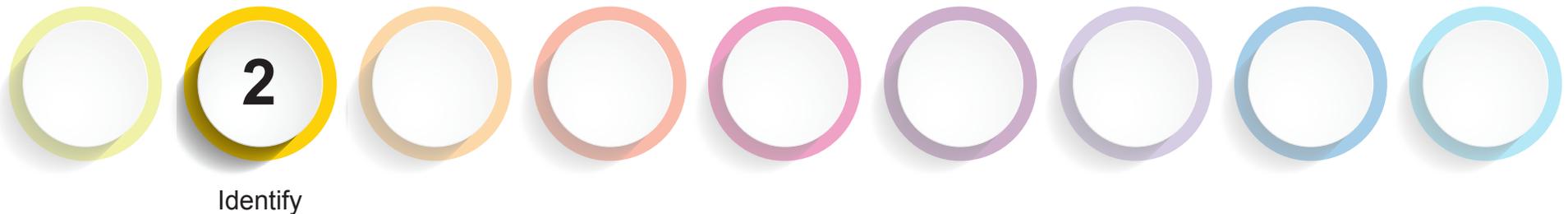
2. Identify the outcomes required

This is the stage where we ask clients to consider this fundamental question – if we want the situation to change, and for the business to overcome the challenge, what needs to happen? This helps to narrow things down. For instance, are we looking for staff to be more knowledgeable, and/or for them to be able to do something different, or to do something in a different way? It's worth noting that it's rarely just one of these! You can provide people with the opportunity to gain knowledge but they have to do something with it and do it in an appropriate manner to make a difference.

Another thing to consider is motivation. It can have a big impact on success. Fundamentally, given the option to change, do people want to learn, do they want to do things differently? Simulations are a really good way of testing this, especially where you are dealing with introjection, see diagram below. You can clearly identify the nub of the issue and understand what you have to do to get people to engage both as individuals and collectively to move the dial and build the positive momentum.



Amotivation	Extrinsic motivation				Intrinsic
	External regulation	Introjection	Identification	Integration	
Person is indifferent to the action.	"I will do it because I have been told to do it."	"I will do it because other people will value me if I do it."	"I will do it because I see that it has some value to me."	"I really want to do it but I find it difficult to get the motivation."	"I will do it because I love it!"
		Build the social connection and outcomes.	Build clear link between required action/behaviour and person's goal.	Provide an end point. Needs to be done by.	



3. Define the constraints to get the design right

This brings us to design – what will the final simulation look like? Although we have designed many simulations over the years, each one is unique and while they will comprise similar elements, they all boast nuances that reflect the organisation, its market and the specific challenge.

No two companies are the same, so there can be no such thing as one size fits all when it comes to simulations. A successful design also considers the constraints. It sounds a bit limiting to be thinking about constraints at this stage, but it is useful for structuring the options.

So, what's a constraint? Probably the biggest one is people. So, for example, you might have six people to engage in the process or you might have 600, in which case a game that reflects a small team or can be easily replicated at scale is an essential consideration.

Then there are questions related to who actually delivers the simulation – do you need a specialist, or do you have leaders who are equipped to do it? Actually, this can be a tough question to answer for some organisations and can bring some issues to a head. For example, if you are addressing the brand's core values and how these are exhibited in the business, will the facilitator be comfortable and confident handling the debate? If you don't think they will then you'll need an alternative facilitator to effect change. It simply won't work otherwise.

At this stage it's important to consider the audience. We talk explicitly about designing the experience for the participant, step 5, but you may have two audiences, the final participants and facilitators who may not have been part of the design process. It can help to develop personas for these two audiences.



Participant

- Role
- Experience with company/in role
- Length of time with company
- Potential motivation/lack of motivation



Facilitator

- Role and experience in your company
- Experience in similar organisations e.g. industry segment, specific area of challenge
- General facilitation experience
- Specific experience with games and simulations



Define

Reality check

Games and simulations are really good at addressing certain issues for example where:

- Motivation is low,
- The individuals' decisions matter and have a significant impact on outcomes,
- You are able to model the existing behaviours against the ideal behaviours and build action and outcome links.

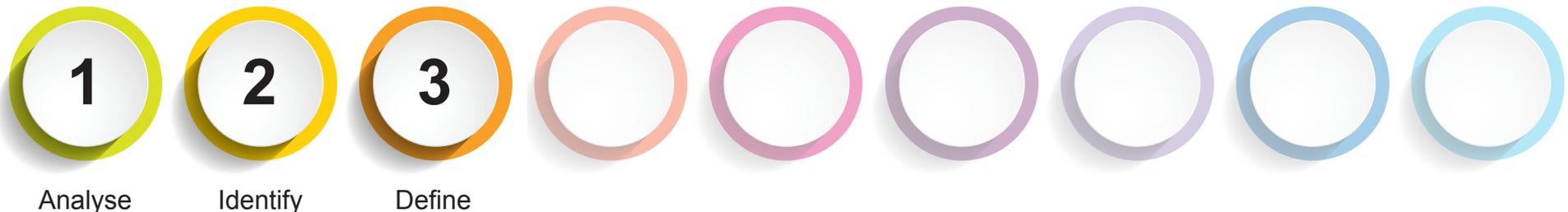
So, it's at this point in the process I'd recommend a quick reality check before signing off the analysis phase. Ask yourself if the use of a game as an intervention encourages the new behaviours, could there be ramifications that create conflict with existing processes and company culture? For instance, will behaviour changes be rewarded, or could the existing compensation structure undermine your efforts? Make sure you keep in mind these sorts of implications as you move into stage 2 and address them in parallel.

CASE STUDY

Reality check. One of our clients recently had an injection of capital from an investment firm. Almost overnight the culture took on a different hue from a successful owner managed organisation to one with equity investors looking for targeted growth and returns. The senior team kept saying 'our managers are not making the right commercial decisions'.

The analysis phase provoked a debate that started with 'we need to improve the organisation's commercial skills'. But as we unpacked the challenge it became clear that it was less about commercial skill and more about the dissemination of information from the top of the organisation down to the people making the decisions on the ground.

Key financial information was not being made available at the decision-making level and communication about priorities was not consistent throughout the business. The starting point and the actual issue uncovered were different, but acknowledging the problem helped shift the culture back towards being more productive.



STAGE 2: DESIGN THE PROTOTYPE

This is where the simulation begins to take shape and the fun starts.

But first a little background. Games have been around for thousands of years. Ancient Egypt gave us Senet and Tic-tac-toe. Now we have a myriad of different game methods and mediums to enjoy, plus the added twist of twenty first century 'gamification'. We see it in everyday life not just at work – you can earn money off your life insurance when you buy certain foods or go for a run. They all tap into the psyche of winning and use ancient gaming fundamentals. Business simulation games are no different.

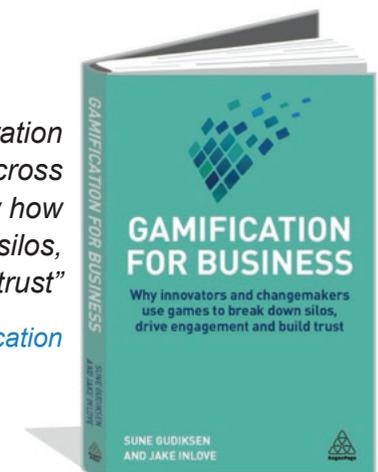
The steps in this stage are:

4. Match the challenge to the best simulation/game method
5. Design the 'experience' the participant will have and define how it will be engaging
6. Create the prototype



"Elgood is proud to be part of this collaboration between 12 organisations working across countries and industries to show how games have been used to break down silos, drive engagement and build trust"

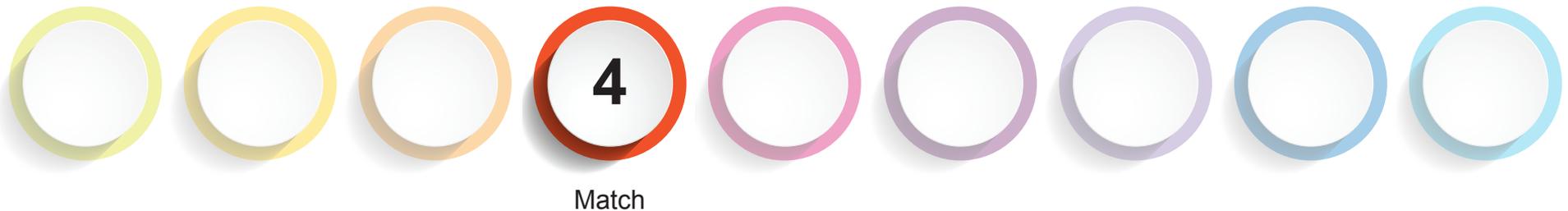
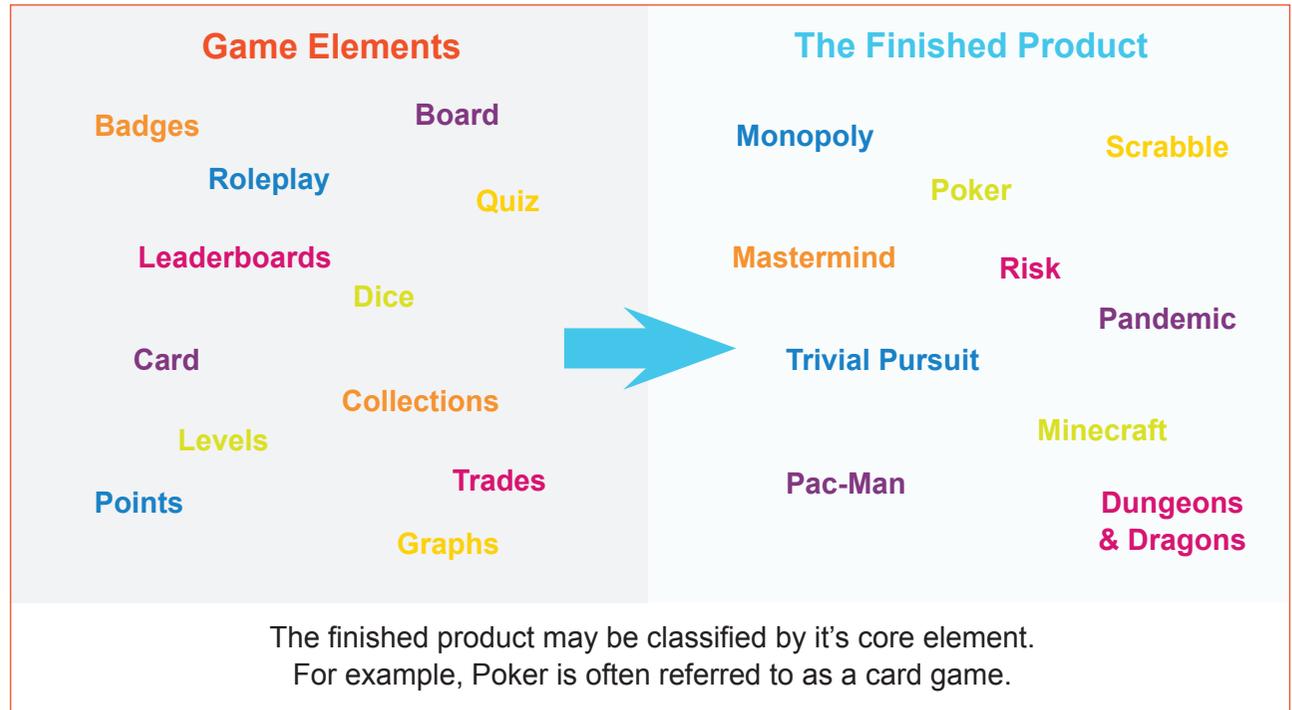
www.chris-elgood.com/product/gamification



4. Match the challenge to the game

There are numerous game formats to choose from and it's important to remember that each has their own nuances, advantages and disadvantages. The final choice of format will be influenced by both the outcomes you seek and the constraints identified.

Bear in mind many games have more than one element. While playing Patience involves just a pack of cards, the board game Trivial Pursuit includes a variety of game elements. Likewise, many computer simulations include the ubiquitous PBL's – points, badges and leader boards as part of their core framework.



5. Design the participant's experience

Whatever route you take, there are four core elements to consider when crafting a game:

- **Narrative** – You need a consistent and believable storyline with relevant scenarios. Consider what you want your participants to be doing or discussing. For example, if your goal is to improve safety, a useful narrative would be 'a day in the life' with participants planning and hosting a visit to a workplace premises. We have used this for a chemical plant where the participants had to plan and lead a tour for a visiting chief executive and inspectorate.
- **Rules** – These clearly show participants what they can and cannot do. Think of it like a giant game of snakes and ladders. What are the consequences of actions taken? How are they reflected? You also need to consider how you drive the activity forward, gain engagement and allow the players to progress so they get something very tangible out of it.
- **Feedback** – Participants need regular feedback. How are they getting on? Should they do something differently? A key feature of any game is the ability to give feedback both positive and negative. For example, a game which involves accumulating and surrendering tokens or points based on decisions is one way of providing very visible feedback – you either have a healthy pile of tokens or you don't!
 - While positive feedback is necessary, actually providing a means to deliver the less favourable feedback and development points in a safe environment is far more powerful. It's possible to constructively show that a decision or action resulted in a poor outcome and have a discussion about the alternative and better ways of doing something. Make sure you build in a constructive feedback loop.
 - A good game will also include a 'bear pit'. A metaphorical hole that people will fall into. It acts as a reminder that problems occur when they don't pay attention.
- **Fun** – Whatever you do don't forget the fun. To be successful, the game needs to engage the audience. They should want to participate. We have many tactics up our sleeve to ensure your game delivers on this metric.



Design

6. Create the prototype

When you've got your core elements nailed you can then move on to producing your prototype game.

This is where you put all your ideas together and get the look and feel of the game. Irrespective of whether the game is a physical product you can touch or a computer-based simulation, you will need a storyboard showing the player decision points and all the associated materials required.

As you work on the prototype it's likely people will throw in additional ideas, 'We could include x', and before you know it the initial structure has been nudged and tweaked to include a variety of ideas that cover 'pet ideas' but do not tackle the core challenge you identified.

As uncomfortable as it might be, I'd encourage you to be brutal and throw out ideas, not because they are bad ideas but because they could be one idea too many, which will add to the complexity and hide the core messages you want to convey to achieve your goal.

A word about complexity. The number of variables you want to cover in the game will impact on the time it takes you to deliver your solution and the cost. If you have to prototype and test 10 variables that's going to take more time and be more costly than modelling five. So, be vigilant – ask yourself does this add to the experience, will it help us achieve our objective? We will certainly ask you those questions.

What's a variable and why does it matter? If you are designing a game that involves making decisions then you need to think through the consequences – what would happen if those decisions were taken in the 'real-life' workplace? For example, if the decision a person makes in the game has an impact on 'trust in the business' you have to understand the variables that affect trust day to day. The sorts of questions to ask are: does the decision match with the published strategy? Is the decision in

line with the decisions recently made by senior directors? How will this decision be viewed by major stakeholders?

In a completely different scenario, you might have decisions being made about sales, these could affect customer relationships, short and long term operating models, business profitability and future revenue potential.

You can see how quickly the number of variables included in a game can add up.



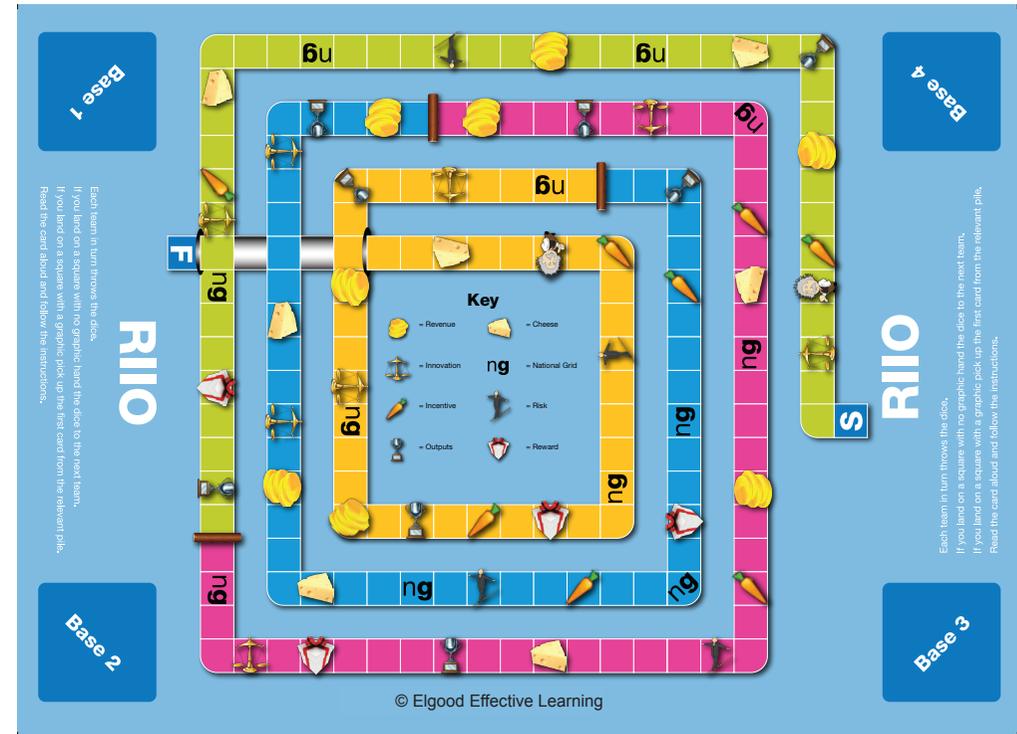
Prototype

Reality check

At this stage I would really urge you to explore all the game methods out there, don't rely on one person's positive experience of a particular method dealing with a different challenge with a different audience. You need to find the right match for the specific issue you want to address.

As part of this, consider the material difference playing the game will make. If it's not engaging then it won't deliver the benefits associated with a game/simulation. You might just as well send out a memo or undertake a tick box training activity.

And finally, be sure to get back to the original premise – is it real change you want? If it is, then get some of your own staff involved in the design and facilitation. They can be your change agents and champions, not just for the game but the months and years that follow.



“This board-based game designed for The National Grid uses a variety of game elements to address the challenge they faced – a fundamental change in the way funding would be allocated. The board was part of a conference event linking to other activities held on the day.”



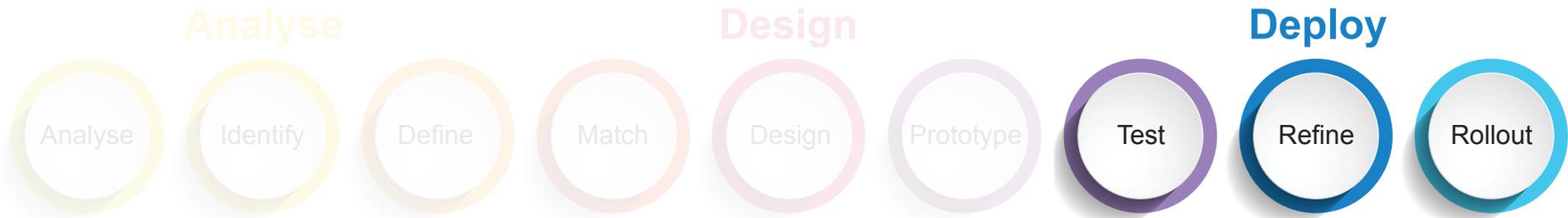
STAGE 3: DEPLOY

Once you have a prototype, it's tempting to launch straight into rolling it out. Don't. Put the brakes on for a moment and test and refine it based on the critical feedback you get from people who haven't been involved so far.

But before you do any of that, I want to draw your attention to cost. When you arrive at a prototype it should be sufficiently structured to test the idea without incurring the full cost of development. It will be an iterative process to some extent as you can't launch after just one test. But I can't stress enough that you shouldn't test ad infinitum. It's just not practical and you can end up spending a lot of unnecessary money creating what you believe is perfect only to find it does not hit the mark when you test it.

That's why the next three steps are as follows:

7. Test and gather feedback
8. Refine and evaluate considering the audience
9. Rollout



“For this simulation there was a clear process and learning objective. To ensure sales people were selecting the right channel to use for fulfilling orders while developing new internal skills. However, the number of variables we needed to model resulted in a complex decision/consequence map requiring a lot of administration for the facilitator.

The client, originally reluctant to put the simulation mechanism into a computer model, eventually acquiesced when the chosen facilitators voiced their concerns. The result was a computer program that managed the scoring while the facilitation team focussed on facilitating debate.”

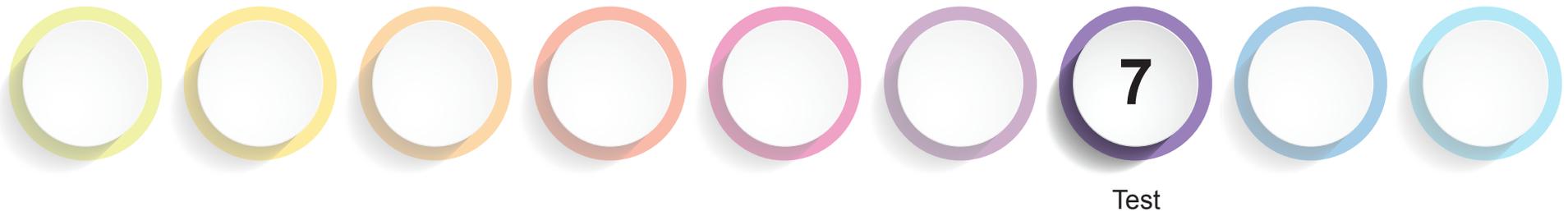
Tutor Score Sheet		OPPORTUNITIES SELECTED				REVENUE GENERATED											
Team name		PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4												
TUTOR INSTRUCTIONS To give feedback on your team's performance you are asked: • A table score sheet • The marks • Action sheet for the period • Player display • Bob Franks's development chart There is a table score sheet for each week to be filled in by the team on the tutor's action sheet. Follow the instructions within them. 1. Evaluate and select opportunities For each opportunity selected by the team: • Circle the opportunity name in the table score sheet • Place a tick in the box corresponding to the choice selected • Enter 0 in the first column • In the response generated section of the score sheet • Put a tick in the facilitator section of the tutor's action sheet • If there are words, describing a partner competency, then • If there is a tick in the facilitator section of the tutor's action sheet • If there is a tick in the opportunity name (blue text) enter the name in the facilitator section of the tutor's action sheet. 2. Develop Bob Franks Complete the scoring table, within the tutor's action sheet, with the scoring table (found on page 6 of the tutor manual), where there is a tick in the facilitator section of the tutor's action sheet. Add up all the numbers entered and record this as a total on the tutor's development chart (Bob Franks) and in the facilitator section of the tutor's action sheet. Calculate the total score from the table stated as required for this table on Bob Franks's development chart to give the new development goal. 3. Work with Partners On the tutor's action sheet locate the opportunity name and opportunity required, under the opportunity name on the tutor's action sheet. • If the capacity recorded on the tutor's action sheet matches the words on the tutor's action sheet • Tick the words on the tutor's action sheet • Circle 20% in the opportunity space for the opportunity in the tutor's development chart of the tutor's action sheet • Give the words one of the four partner competencies corresponding to the opportunity in the tutor's action sheet • Write 20% in the facilitator section of the tutor's action sheet • If the capacity recorded on the tutor's action sheet does not match the words on the tutor's action sheet • Write 0% in the facilitator section of the tutor's action sheet. 4. Grow Incremental Business Complete the table and record the results in the tutor's action sheet and in the tutor's development chart (Bob Franks) on page 6 of the tutor manual. • Write the business period's score corresponding to the period number in the opportunity space on the tutor's action sheet. • Write 75,000 in the column for top value on this sheet. • Write 0 in the column for top value on this sheet. • Write 0 in the column for top value on this sheet. • Write 0 in the column for top value on this sheet.																	
WHEN YOU HAVE COMPLETED THE SCORING: Submit the following to the tutor: 1. Player display 2. Bob Franks's development chart They will also need: 1. The opportunity opportunities for this period (the table score sheet and the opportunity names in black text from the tutor's action sheet) 2. Any action opportunities (the green or grey words and the opportunity names in blue or purple text from the tutor's action sheet) 3. Blank action sheet																	



7. Test and gather feedback

I always recommend people hang back from creating what they believe to be the game they will launch, and all the bespoke materials and complex graphics to go with it until they have tested the mechanics. Think of it this way, you can drive an ugly car with an engine but a beautiful car with a broken engine is no use to anyone.

It's also true that a polished version of a game can hinder the feedback you get. If you present something that looks like a fait accompli people might be reticent about offering you really useful ideas. I know from experience that if what you present has a few rough edges then you will get valuable insights. It's helpful to know there is still room for change when you are asked to critique something. Make sure you ask people how they felt about taking part too. You need to find out if the game is engaging, the mechanics work and it will scale to bigger audiences.

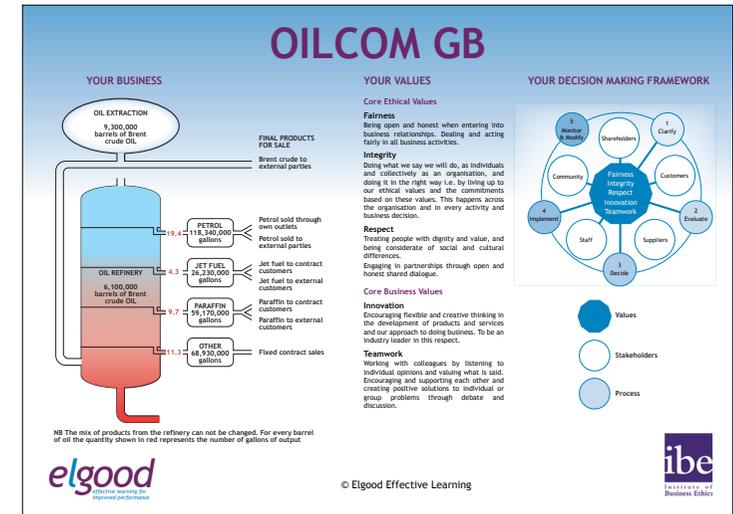


8. Refine for your audience and evaluate

Bear in mind that depending on your challenge, you might not have the luxury of a proxy audience with the exact characteristics of your final audience. Very few of our clients do. That's fine, so long as you are aware of it. It might mean you do a couple of cycles of testing to ensure consistent feedback to inform a checklist of changes.

“Working with The Institute of Business Ethics, to develop a simulation that would drive more ethical decision making, we started with a serious industry as our basis – oil exploration. However, participants got bogged down in the detail and the debate we wanted to engender was lost. Testing resulted in changing the industry from oil exploration to the grocery market and the operational decisions are now driven by a limited number of core strategic decisions. The focus is on the quality of the debate and how to apply values to business decisions where there are competing stakeholders.”

Learn more about the simulation ‘Do the Right Thing’
www.chris-elgood.com/product/do-the-right-thing



DECISION MAKING WORKSHEET

Do the Right Thing

BOARD PAPER REFERENCE: _____ COMPANY NAME: _____

1. Use this grid to note down the concerns and views you think your stakeholder groups might have on this issue.

SHAREHOLDERS	
CUSTOMERS	
SUPPLIERS	
STAFF	
COMMUNITY	
OTHER	

2. With reference to the values of the Company what conflict might arise?

FAIRNESS	
INTEGRITY	
RESPECT	
INNOVATION	
TEAMWORK	
OTHER	

3. After considering this Board Paper, what do you think the key issues are, what have you decided to do and what are the key reasons for selecting this course of action?

© Elgood Effective Learning



Refine

9. Roll out and create a game you can use time and again

With the adjustments made you can play! This is the best part, seeing your hard work in action.

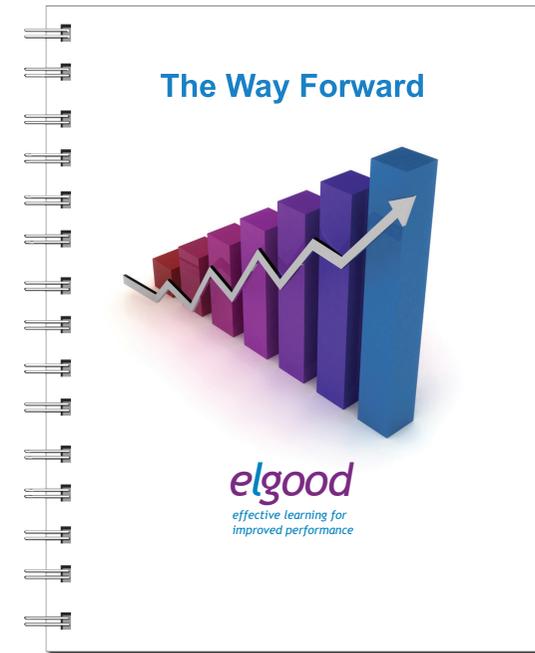
One final tip, you will have done a lot of thinking about the participants during the design process, will they enjoy participating? Remember success will also rely on you enjoying the experience. The facilitation team need to be enthusiastic about the new product and enjoy the facilitation experience for the benefits to be realised.

Typically, a simulation needs to be run a few times before it's bedded in. If you have done everything as well as you can and spent enough time on the initial design you should only need small tweaks at this stage. And once all the mechanics have been fine-tuned the structure will be credible for many years.

However, remember to review the content regularly to ensure it's not tired or out of date. A good way to do this is to get a new staff member to participate and make notes. It comes with a health warning though – remember the mechanics were created to address a specific challenge. If the challenge changes you probably won't be able to just make cosmetic changes to the simulation, you will need to make structural changes, or potentially start again.

The Way Forward

Designed originally for an MBA Alumni community this simulation, based on core economic and business principles, is reviewed bi-annually and updated to reflect some of the key concerns leaders are faced with in their political, economic, societal and technological environment.



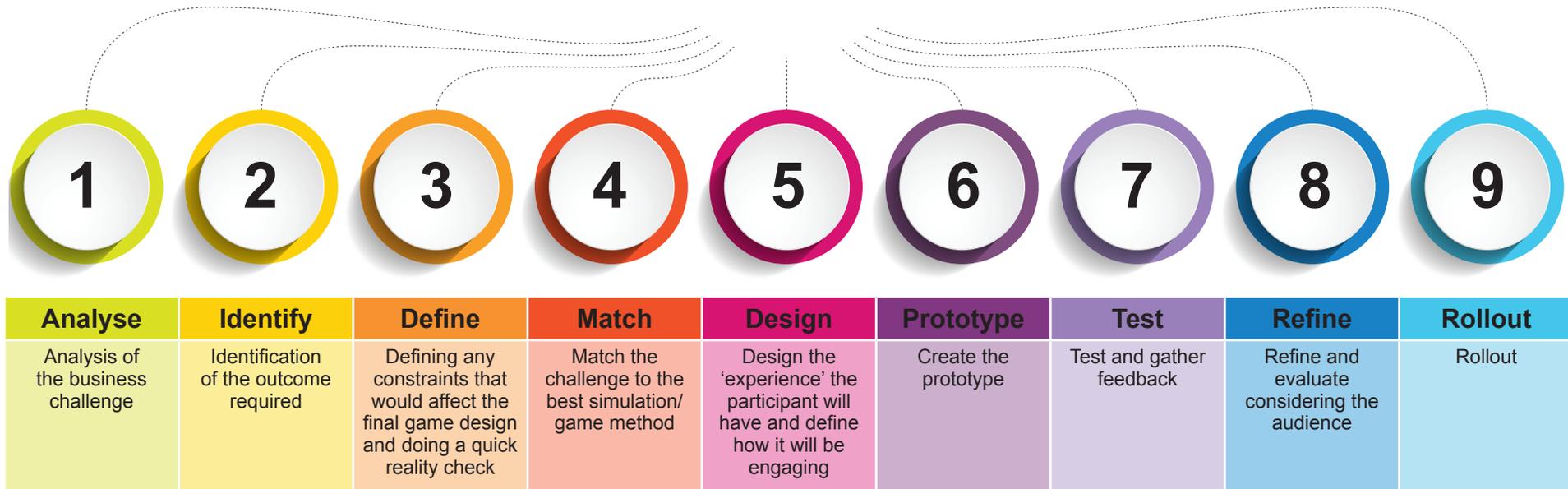
<https://www.chris-elgood.com/product/way-forward>



Rollout

The ultimate guide to building business games and simulations that work

There you have it then, the steps to creating a great simulation.
Summarised in the chart here.



If you are considering designing a business game to address your business challenge and would like to bounce some ideas around then please do give us a call.

Equally, if you've started the process and find you're a bit stuck and could use an independent, critical eye then we'd be happy to offer our expertise. We have plenty of experience to share.

Want to know more? Have a look at our [Updates](#) section online, full of case studies of companies that have successfully changed their organisations with simulations.

elgood *effective learning for improved performance*

Email: christine@chris-elgood.co.uk or call 0118 982 1115

www.chris-elgood.com