



# The 'Economic Model' of Addiction

*A White Paper on the missing  
dimension in addiction modelling  
and why it matters*



## About this document

There are 3 common academic ‘models’ of addiction, the Social, Biological and Psychological<sup>1</sup>, which attempt to understand and describe the factors which contribute to addiction in individuals and society.

Here we propose a 4th model, the Economic Model which reflects what is also called the ‘commerciogenic’ or ‘commercial determinants’ of addiction. We outline its distinctive components and show how it exploits the factors described in the other models to cause and perpetuate addiction.

## Our aim

This is the first in a series of White Papers which reflect on ‘*How Capitalism Causes Addiction*’. Our hope is to provide a different perspective and useful knowledge to help governments and regulators in their design of addiction prevention and un-addiction policies and regulation. In addition, we hope this, and the next phase of our work on Un-addiction, will also provide a helpful new lens through which individuals can view their own usage of addictive products.

## Next steps

We will be consulting on this first draft widely among different communities involved in addiction and policy. These will include the academics and practitioners involved in addiction research and treatment, capitalism and corporate responsibility; policy makers; regulators; health bodies and charities involved in the different sectors - such as smoking and tobacco control, food, gambling, alcohol and social media. We are also interested in the views of companies in the sectors we discuss.

This feedback will be incorporated into the next iteration of the model and a more in depth look at the 4 components of the Economic Model with real world stories and case studies and how to curtail its power and prevent addiction and support un-addiction. We will then produce final policy recommendations and potentially a book and film.

We would be pleased to discuss this with your organisation. If interested, please get in touch with SocietyInside Director Hilary Sutcliffe on [hilary@societyinside.com](mailto:hilary@societyinside.com).

## Our chosen definition of addiction

We will use this definition from the UK NHS website:<sup>2</sup>

*“Addiction is defined as not having control over doing, taking or using something to the point where it could be harmful to you”.*

This avoids the constraints of rigid medical or academic definitions of addiction which are often used to dismiss effects other than those at the pinnacle of a hierarchy of behaviour<sup>3</sup> such as ‘excessive use’, ‘problematic use’, ‘dependence’, ‘addiction’. It is clear that negative, life-altering mental and physical effects and harms occur at many levels of usage of addictive products designed with the aim of eroding personal self-control. We therefore see this broad framing as most appropriate for understanding the impact of Economic Model.

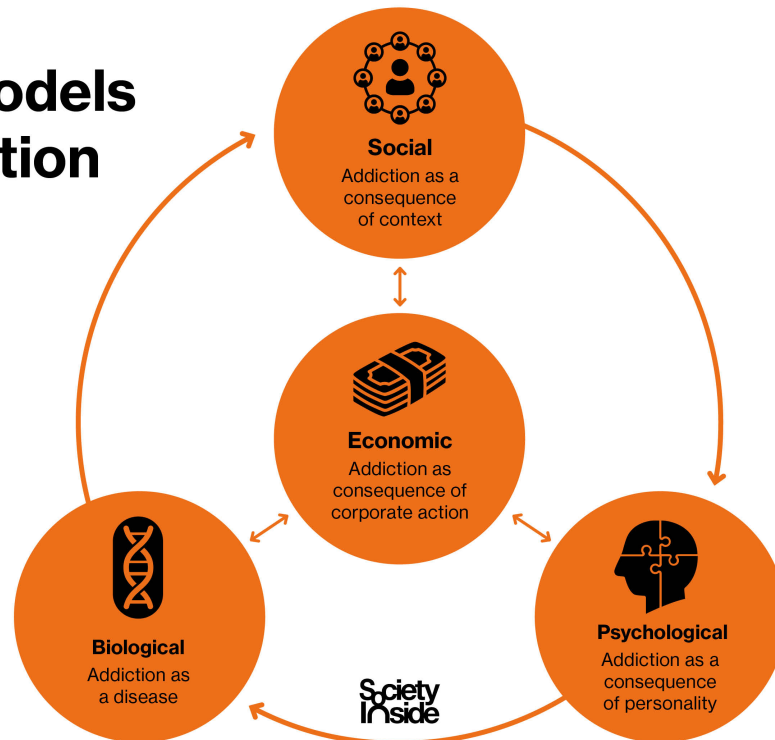
We use the term ‘un-addiction’ to describe the process and outcome of discontinuing or modifying use of an addictive product to regain agency and prevent further harm from use of the product. The term also encompasses references to treatment options and policy choices.

## The Models of Addiction

Academic study of addiction proposes a number of 'models' of which attempt to understand and describe the factors which contribute to addiction. The majority appear to focus on the qualities of the individual which lead them to become and remain addicted to various products<sup>4</sup>. References to economic models focus on the use of financial cost as a deterrent to addictive behaviours<sup>5</sup>.

We have distilled these various models into three - Social, Biological and Psychological and propose a 4th, the Economic Model. See Figure 1 below (each will be discussed further from page 11)

### The 4 models of Addiction



The Economic Model of Addiction describes how certain industries contribute to addiction. It is comparable to the other models which describe the contribution of Social, Biological or Psychological factors to addiction.

We envisage the models of addiction as interconnected, though with the Economic Model at the heart of the model for three reasons:

- The rather obvious observation that without the products there would be no addiction.
- The components of the Economic Model are directly responsible not just for the initiation of product usage and the development of addiction, but are also central to the perpetuation of addiction.
- The Economic Model also co-opts and exploits the factors described in the other models in order to cause and perpetuate addiction.

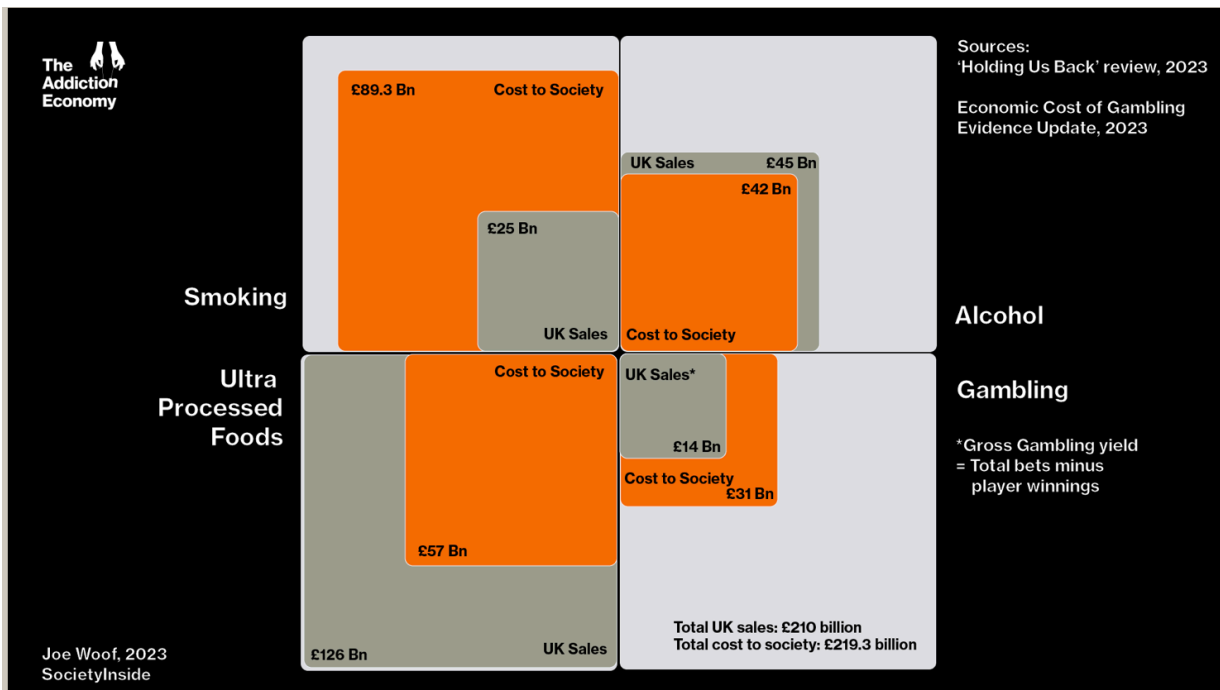
## Introducing The Economic Model of Addiction

**Definition:** “Addiction is defined as not having control over doing, taking or using something to the point where it could be harmful to you”. (NHS website)

The Economic Model describes the contribution to addiction of a group of industries whose products are deliberately designed to undermine an individual’s ability to control their usage beyond the point at which they are harmed by the product. i.e. to addict their customers. Currently in scope for this are cigarettes, vapes, alcohol, gambling, unhealthy and ultra-processed foods, opioids, computer games, social media and crypto-trading.

Defining the resulting harms of these is complex but becoming clearer. Whilst the physical and mental harm of addiction for individuals varies widely by product and context and is difficult to evaluate, at a population level research can now calculate the ‘costs to society’ in meaningful ways. Current calculations include NHS costs, social, informal and unmet care costs, loss of productivity and Quality Adjusted Life Years calculations<sup>6</sup>.

Figure 2 below shows the costs that 4 of those sectors are estimated to impose on UK society annually (cigarettes, alcohol, ultra-processed foods and gambling<sup>7</sup>). The total cost is £219.3bn. Their combined revenue generated is £210bn. We have not yet found a net ‘contribution’ to society figure, including tax or polluter pays levies, provision of jobs etc.



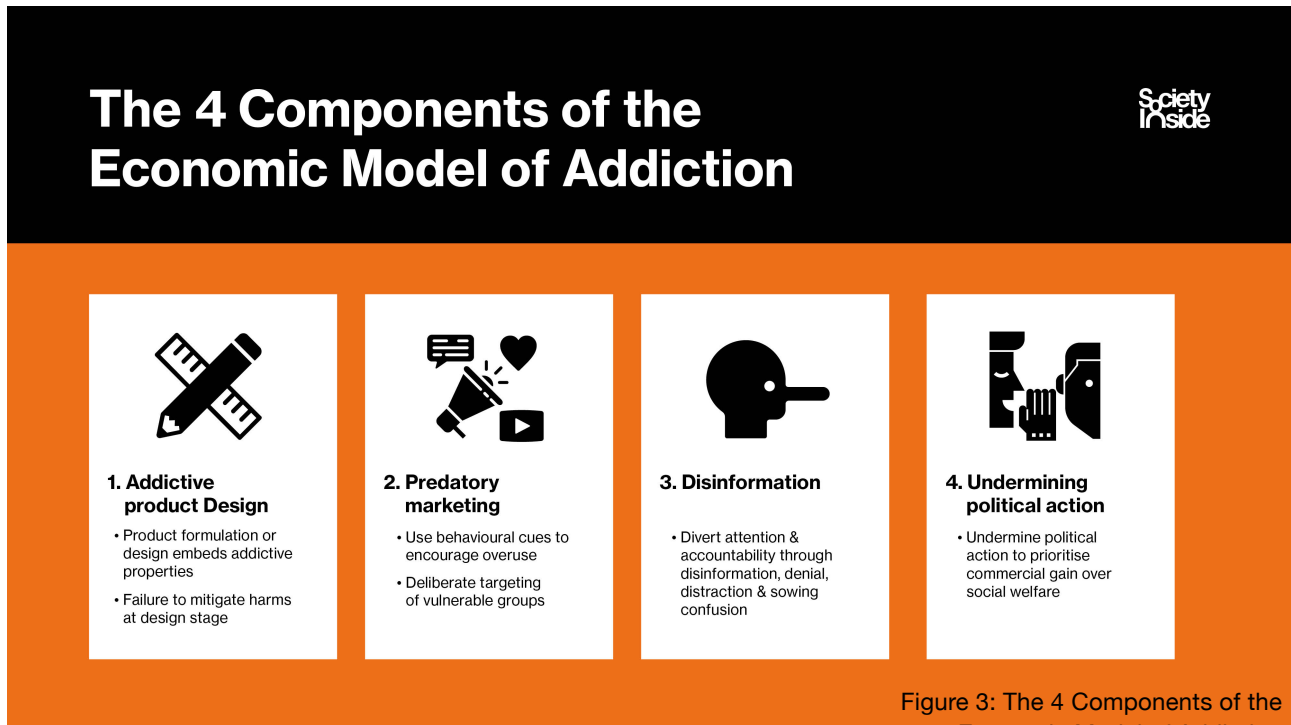
**Figure 2:** Revenue and costs to society Smoking, Alcohol, Gambling and Ultra-processed foods.

The failure to prevent harms from addictive products ensures that companies increase their commercial viability through retaining profits and creating value for shareholders, while the ‘externalities’ - the costs of the products in use - are borne by society, and the state.

# 1. The Economic Model

## The 4 components of the Economic Model explained

Our research has identified 4 'components' of the Economic Model. See Figure 3 below. These components identify and catalogue the actions taken by the industries which make up what we are calling The Addiction Economy, which make them particularly successful in addicting



their users. We also begin to explore the social values, ideologies and policy action or inaction which allows them to flourish at the expense of individual quality of life and public health.

Examples of these are as follows:

### 1. Addictive product design:

**Organisations embed properties into the product which undermine an individual's ability to control their consumption, such as:**

- **The use addictive ingredients** or specific product formulations - e.g. nicotine in cigarettes and vapes; alcohol in drinks; sugar in soft drinks and specific formulations and processes in ultra-processed foods.
- **Innovation to optimise these addictive properties, such as:**
  - Designing new ways to undermine stopping cues and stimulate excessive use, e.g. the evolving design of disposable vapes to stimulate continued unobtrusive use.
  - Combine known addictive properties eg sweet fruity flavours combined with alcoholic drinks or as the basis for vape flavourings in combination with nicotine.
  - Changing traditional formulations of substances to make them more addictive, (eg change traditional foods to more addictive foods through super-palatable ultra-

processing; increase nicotine content of vapes per ml of liquid; chemically redesign ingredients to increase strength and addictive properties, eg synthesizing opioids like oxycontin to make fentanyl (100 times stronger than heroin) to Nitazenes (a class of different opioids which can be up to 40 times stronger than Fentanyl<sup>8</sup>).

- **'Persuasive design'<sup>9</sup>- the use of behavioural science and the psychology of addiction** to design elements of the product which are known to stimulate a compulsion to use, and to override or undermine the user's ability to moderate use, for example:
  - Vape design using multiple flavours and colours, are introduced to create social dynamics and connection, particularly among young people. These traits encourage trading and sharing flavours, for example, linked to colours or sets of colours, encouraging users to match to clothes, sports teams, accessories, moods, days of the week<sup>10</sup>.
  - The use of 'intermittent variable rewards'<sup>11</sup> in design of Fixed Odds Betting Terminals, and other forms of digital gambling and slot machines to stimulate excessive use<sup>12</sup>
  - Individual and group penalties for leaving games before the end are often central to the design of in computer games<sup>13</sup>
  - Attention validation through the design of content moderation algorithms, together with the use of constant feed refreshes, notifications, likes, streaks and intermittent variable rewards in social media<sup>14</sup>.
- **Failure to mitigate proven addictive properties at design stage.** Many, if not most of the negative effects of addictive products and their properties are well known. Companies ignore societal concerns at all points in the design of the products.

## 2. Predatory marketing:

***Optimising the design of advertising, marketing and promotion using knowledge of psychology of addiction based on the other 3 models<sup>15</sup>:***

- **Stimulate social connection and in/out group dynamics** - eg portrayal of individuals or groups enjoying product in lifestyle setting<sup>16</sup> (cigarettes, vapes, alcohol, gambling)
- **Associate with positive emotions** - stress reduction, calmness, relaxation, concentration, confidence, happiness, energy, wellbeing (cigarettes, vapes, alcohol, social media apps)
- **Associate with positive health effects** - eg health claims and promotion by health professionals<sup>17</sup> (low-fat ultra-processed foods, vapes, cigarettes)
- **Associate with healthy pursuits** - eg sports sponsorship and usage by sports stars, embedded in television rights, competition names, prematch build-up, corporate hospitality, and social media<sup>18</sup> (gambling, alcohol, vapes, ultra-processed foods)
- **Associate with aspirational individuals or situations** - eg celebrity/influencer endorsement or usage on social media, product placement in films and music videos, sponsorship of live events (all products do this where it is legal<sup>19</sup>)
- **Promotion or pricing to stimulate excessive social use** - eg marketing activity and pricing of alcohol to encourage binge drinking or constant usage, buy-one-get-one-free (BOGOFs), Happy Hours etc <sup>20</sup>; free bets for good customers (ie those who lose the most) in gambling<sup>21</sup>; pricing incentives which divert consumers from purchasing non-addictive products (eg unhealthy or ultra-processed foods priced to undercut similar but healthier alternatives<sup>22</sup>)
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- **Advantageous placement of products, prominent Point of sale** by on and offline retailers, eg, sweets at the checkout, wall of colour vape displays in shops, at sports events and in bars, gambling advertisements on social media etc
- **Greenwashing or Ethics/CSR washing** - corporate responsibility messaging which is designed to work as brand promotion, but is not supported by action <sup>23</sup> e.g. DrinkAware, GambleAware<sup>24</sup> initiatives, promotion of recycling campaigns on buses for vapes<sup>25</sup>, or promotions using 'Dark nudges and sludge' behavioural science in corporate responsibility (CSR) materials in the alcohol industry<sup>26</sup>.

### ***Deliberate targeting of individuals, groups and communities most vulnerable to addiction***

- **Targeting of young people** with marketing of cigarettes and vapes, because it is known that young people's brains<sup>27</sup> are vulnerable to nicotine addiction at an early age and so most likely to result in prolonged use. Vapes are designed with child friendly colours and sweet fruity flavours which are particularly attractive to children and young people.
- **Product availability targeted at low income communities**<sup>2829</sup> who are most vulnerable to addiction through deliberate increased density of retail outlets and exposure to advertising and promotion - ultra-processed foods, cigarettes, vapes and gambling outlets.
- **Direct promotion to vulnerable groups** in the case of tobacco companies handing out free cigarettes to children and adults in low-income groups, in housing, products, issuing tobacco coupons with food stamps<sup>30</sup> or giving free samples of vapes to children and students in the UK<sup>31</sup> or targeting of indigenous communities by companies manufacturing unhealthy foods<sup>32</sup>.

## **3. Misinformation, diversion, litigation**

**The information and framing of information by companies is deliberately designed to confuse, distract, divert attention and mislead citizens, media, policy makers and the law<sup>33</sup>.**

This happens in a number of ways, for example:

- Directly through in-house production of research and communications strategies
- Use of specialist communications and management consultancies
- Through creation or funding of seemingly independent Think Tanks or Civil Society Groups to produce papers and reports which promote results favourable to industry perspectives
- Funding of academic research which has been shown to be more likely to promote results favourable to industry perspectives

These methods are used to divert attention in the following ways<sup>34</sup>:

- **Producing and promoting misinformation on benefits or harmful effects** (based on Grant Ennis 9 frames of subversion framework<sup>35</sup>)
  - **Denial of harms** despite clear evidence of harms, e.g. 'Tobacco is not addictive. In litigation companies propose that 'the addictiveness of tobacco and nicotine are more comparable to substances such as caffeine, chocolate, and even milk, than to heroin, cocaine and alcohol<sup>3637</sup>

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- **Promote benefits for the product** e.g. 'sugar is an appetite suppressant'<sup>38</sup>, 'alcohol gives you confidence', 'nicotine helps with stress'<sup>39</sup>
- **Coopting positive messages** with the aim of normalising negative effects e.g. "All You Need to Do to Have a Beach Body Is Have a Body, and Go to the Beach", Burger King PR campaign<sup>40</sup> or 'Be Body Positive with Nestle Fitness'<sup>41</sup>.
- **Misdirection** by creation or promotion of incorrect science e.g. lack of exercise not food is the key to obesity - 'lack of physical activity leads to ill health - Indian Sugar Mills Association'<sup>42</sup>, or 'Nutritionism' health harms associated with ultra-processed diets are attributed to specific nutrients (salt, added sugars, saturated or trans fats, etc) not the processing or context of dietary patterns in which they are consumed.<sup>43</sup>
- **Promotion of 'cures'** eg 'the obesity gene' or new drugs for smoking addiction, which focus on the 'addiction as a disease' and away from the impact of corporate activity.
- **The 'Treatment Trap'** promoting a framing which focuses only on treatment, embedding the view that society must adapt to rather than prevent addictions which are an inevitable fact of life. Many companies directly fund medical care for the problems that they have caused.
- **Victim blaming via individualism** - Research and communications about population level problems which focus attention on 'free will', 'rational choice' 'empowerment' of individuals through education to make 'better choices' are common in corporate messaging. They are popular because they put the onus on the individual to change their behaviour which also reduces political will for population level treatments, such as reduction in availability of unhealthy products. Recent 'Save our Vape' campaigns in the UK are an example, backed by think tanks such as the Adam Smith Institute and Global Britain both with ties to tobacco companies<sup>44</sup>.
- **Complexity as a diversion** - system complexity is '*routinely used to divert emphasis from diet-specific inventions*'<sup>45</sup> and make solutions seem impossible to undermine potentially effective interventions and dispute their role in causing health problems. For example: "*Young people's drinking is influenced by a complex number of interacting factors including family, peers, media, cultural norms and government policies. Therefore, a complex range of solutions and the involvement of different stakeholders are needed to reduce the potential risk for harm.*"<sup>46</sup>.
- **Multifactorialism** focuses is on drawing attention to a diverse number of factors which may contribute to problems caused by the product. Communications genetics, neurology eg ADHD, social environment - poverty or disadvantage, lack of exercise, personal choice, psychological issues, societal conditioning and social norms among others. (It is easy to see how the different models of addiction are used for this purpose). Multifactorialism different from complexity in that it proposes the dilution of action on many fronts rather than proposing the effective path is not clear



**Figure 3:** Grant Ennis’s 9 frames of subversion applied to addiction.

<b>Grant Ennis’s 9 frames of subversion applied to addiction</b> These frames can be blatant or subtle and can reflect aspects of reality; but they are used by industry to shape debates and subvert attempts to regulate.		
<b>1. Denial</b> Our product is not addictive	<b>2. It’s actually good for people</b> In fact our product is relaxing, calming, helps people cope, just a treat or a bit of fun	<b>3. Anyway it’s normal</b> Addiction is just a normal part of life which has been going on for millennia
<b>4. You’re focusing on the wrong thing</b> This (a disconnected solution) is the real answer to the problem, not restriction	<b>5. It’s genetic</b> Some people are just genetically pre-disposed. There is a miracle cure for these poor people which is imminent	<b>6. We must all focus on treating this terrible disease</b> See how we generously we support innovative treatment therapies for this intractable social problem
<b>7. We all have a right to freedom of choice</b> We must not infringe personal choice. People just need to be educated and empowered to overcome their weakness	<b>8. It’s so complex there is no clear solution</b> Simplistic solutions like bans don’t work. This is a ‘wicked’ problem with no clear path, more research is needed	<b>9. Everything is to blame</b> Addiction is a multifactorial problem, it is naive to think otherwise, we need to take action on many different fronts (but not restriction)

## 4. Undermining political action

The primary route to preventing addiction, or not, is political - for example

- **Inaction which exacerbates harm:** where no policy actions are taken to prevent harms despite clear benefits to society.
- **Inaction which prevents harm:** Can’t think of examples of that currently!
- **Action which exacerbates harms** - such as subsidising health harming industries through tax rebates, relaxation of rules on product formulation, product availability, advertising or product promotion.
- **Action to prevent harm:** where specific preventative actions are taken eg prevention or restriction on product availability, addictive properties, marketing or misinformation and financial penalties, such as polluter pays levies, taxation, pricing.

The corporate undermining of political action and widespread misinformation shapes the social and political discourse on prevention and un-addiction quite profoundly. But political ideology and values such as individualism or libertarianism also undermine clarity of action on addiction.

Here we focus on the role of corporate influence on political decision-making which aims to stimulate inaction or action. In later work we will look at the political system itself, social values, The Nanny State and how these affect successful prevention and un-addiction.

## How companies undermine political action to prevent addiction:

- **Fostering negative social perceptions** and promoting negative perceptions of government intervention, eg creating or funding protests about 'the nanny state', criticisms of individual politicians.
- **Lobbying of parliament and regulators** to prevent, subvert, delay or weaken the effects of regulation and positive health policies or make them more supportive of corporate economic goals at the expense of the public interest. This can be directly or through intermediaries, such as direct or associated Trade Associations, Think Tanks and CSOs.
- **Subversion of the political process** through political donations, coopting, bribing or unduly influencing or incentivising politicians and regulators to put corporate interests before the public interest.
- **Threats of litigation or prolonged legal action** to prevent policy action or regulation. (Companies have deep pockets and often rely on individuals and governments unable to outlast them in litigation).
- **Reinforce the dominance of large or multinational companies** by subverting anti-trust law and other mechanisms to undermine competitors or alternative producers.

## NB: The Economic Model and Commercial Norms

Many of the practices documented under the Economic Model - lifestyle marketing, promotion of partial information, lobbying - are acceptable, legitimate practice and widely followed commercial norms.

With the Economic Model of addiction we pose that these practices become illegitimate if they are designed to, and result in, the increased potential for harm to individual mental and physical health and a burden of costs on society.

## How governments can respond to the Economic Model

The next phase of this project will be to research this area in more depth and catalogue and give more detailed examples of where companies have undermined actions and inactions and explore the policy responses which work to prevent addiction in individuals and costs to society. In advance of that we have explored a few of the areas in which policy and regulatory interventions could be used:

Policy options for the Economic Model?	
<b>1. Addictive product design</b> <ul style="list-style-type: none"><li>• Restrict the use of addictive product or formulations via restrictions on usage, licensing or preventing use, tax, lifting of subsidies, fines or other penalties on companies etc</li><li>• Transfer cost of harms to society to companies via levies, fines or hypothecated tax.</li><li>• Regulate for more transparency around use and enforce penalties incurred.</li></ul>	<b>2. Predatory marketing</b> <ul style="list-style-type: none"><li>• Prevent marketing or promotion of products, particularly lifestyle marketing.</li><li>• Prevent 'victim blaming' strategies which focus on individual responsibility for addiction &amp; avoid corporate culpability</li><li>• Prevent 'ethics/green washing' communications strategies.</li><li>• Prevent and penalise targeting of vulnerable groups via fines, levies or restrictions.</li></ul>

<p><b>3. Misinformation &amp; diversion</b></p> <ul style="list-style-type: none"> <li>• Policies to proactively fund NGOs and fact checking orgs to support media, citizens and parliamentarians on misinformation.</li> <li>• Prevent company funded studies appearing in science journals. (However, proper funding of independent testing is also essential. Often companies are the only ones who will pay for reasonable tests of product effects).</li> <li>• Enforce regulation for transparency of funding for all CSOs and think tanks.</li> </ul>	<p><b>4. Undermining political action</b></p> <ul style="list-style-type: none"> <li>• Prevent undue influence of corporations on politicians by fair lobbying restrictions</li> <li>• Develop more transparent policy and regulatory development processes which actively involve those impacted by products</li> <li>• Penalise companies who breach lobbying rules</li> <li>• Penalise parliamentarians who breach lobbying rules</li> <li>• Enforce trade and advertising descriptions laws</li> </ul>
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## Negative and positive interpretations of the Economic Model

Our synthesis of this Economic Model of Addiction can be seen as both positive and negative, even by those who agree with the framing. These may include:

### Negative interpretations

- This framing may be seen as fatalistic and disempowering - ‘the companies made me do it, what hope is there’.
- Can contribute to individual beliefs that they have no agency in their addiction and undermine un-addiction.
- A focus of addiction centred on corporate activity may distract from the essential need for political action in response.

### Positive interpretations

- Distilling the areas of corporate contribution to addiction can make the need for certain interventions clearer and this lens could be empowering for politicians, civil society groups and citizens.
- Making clear corporate influence can lead to innovations which directly avoid or counter abuse of personal control and avoid harm.
- Knowledge of corporate influence has been shown to be empowering for individuals to see their addiction in a different light and enable them to take personal action.

## The Economic Model and the 3 common models of addiction<sup>47</sup>

Here we explore the 3 common models of addiction - Social, Biological, Psychological and and their intersection with the Economic Model.

### 2. The Social Model

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**This model positions addiction as a consequence of circumstance and social context.**

It explores the influences of context on addiction and an individual's ability to 'resist' addiction. These include:

- **Family influence** - upbringing, living in families with similar or other addictions
- **Peer influence** - peer addiction or pressure to use products to fit in, join in or stand out
- **Community** - normalisation of product usage or addiction in the community
- **Social stressors** - poverty, unemployment, disadvantage, discrimination, isolation, trauma

### The Economic Model and the Social Model

The Economic Model draws on and influences the Social Model in different ways. For example:

- Companies use knowledge of social contributions to addiction to target communities and individuals based on perception of vulnerability to addiction and link to social stressors, e.g proliferation of sales outlets in poorer communities, focused marketing on young people, or those with other addictions.
- Companies use understanding of social drivers, such as the influence of peers on social acceptability, to create and market products more effectively.
- Companies use the contribution to addiction described by the social model as a means of distraction from their own impact'

### Negative and positive interpretations of the Social Model

The Social Model of addiction can also be interpreted positively and negatively:

#### **Negative Interpretations**

- This framing can lead to determinism and victim blaming resulting in apathy, ineffective treatment or stigma - 'poverty causes addiction', 'it's the parent's fault', 'what do you expect living there'.
- It can lead to discrimination and lack of support due to social bias and stigma.
- It can contribute to individual beliefs of lack of agency in un-addiction.

#### **Positive interpretations**

- Increased understanding of the social context of addiction and its interaction with the Economic Model can lead to more personal, targeted and effective interventions
- Understanding of context provides more empathetic and responsive support

### 3. The Biological Model

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**This model positions addiction as a disease.**

This model looks for answers in the physiology of addiction. It explores:

- **Genetic correlations** - such as heritable traits for dependence and increased risk ratios in families; heritable components in behaviours, such as ADHD which appears to link 'behavioural disinhibition' and increased propensity to addiction.
- **Neurological correlations** - aspects of brain chemistry and reactions which indicate, contribute to and demonstrate compulsive behaviour and lack of control over the addiction, reinforcement, tolerance and withdrawal. Research explores areas such as the role of dopamine and ways that addictions hijack the reward system of the brain compelling the addicted person to continue using the product.
- Un-addiction seen through the lens to the Biological Model can focus on medical, pharmacological or neurological interventions.

#### The Economic Model and the Biological Model

- Companies use knowledge and perceptions of neurological aspects of addiction to design products and marketing to undermine an individual's ability to control their usage.
- This view of addiction aligned to the power of the pharmaceutical sector can lead to the focus of addiction treatment by pharmaceuticals at the expense of sometimes more effective psychological and social treatments which are therefore not well researched or funded.
- Companies use biological determinism to frame or misdirect communications to blame the individual for their addiction and not their product or political inaction.

#### Negative and positive interpretations of the Biological Model

##### Negative

- It can lead to determinism and false beliefs that people can't change their behaviour because of their unalterable dispositions.
- Medicalisation can lead to downplaying of the contribution of the economic, social and psychological models and ignore other issues which remain after treatment.
- Medicalisation of addiction contributes to an increasing reliance on pharmacological approaches to treatment at the expense of prevention and other highly effective therapies
- This model can reinforce an incorrect view that all addiction is long-term, chronic and incurable which hinders un-addiction.

##### Positive

- The concept of addiction as a disease has been helpful in de-stigmatising addiction, which was, and still is viewed by some, as a moral failing or weakness in the character of the addicted.
- Medicalisation of addiction opened the door to the funding and development of new useful drug treatments for health problems associated with addiction and treatments of addiction.
- Understanding of the potential for the contribution of physiology to addiction opens up different = interpretations of behaviours.

## 4. The Psychological Model

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**This model positions addiction as a consequence of personality and character.**

It has a number of areas of academic focus:

**The Addictive Personality** - here addiction is seen as part of an innate problem, the 'disorder' is a problem of self-regulation, defiance, antisocial or conduct behaviours or specific traits. Discovering 'the addictive personality' is the goal (which, despite significant effort, has not yet been 'found')

**A coping strategy** - here addiction is seen as a result of poor coping mechanisms. People are unable to cope with stress, strong emotions, anger, boredom, anxiety and depression, and use addictive products for escape or comfort.

**Expectation** - here addiction is seen as a response to an expectation that a certain response eg relaxing, calming, loss of inhibition, stress dampening, occurs with the use of the product.

**Conditioning/reinforcement** - here addiction is about response to situational cues, 'Pavlovian' responses, tolerance, conditioning, withdrawal, relapsing.

**Compulsive excessive behaviour** - here addiction is linked with ritualistic, 'out of control' behaviours such as OCD, repeated handwashing etc.

**Habit** - here addiction is a function of habits which become embedded

### The Economic Model and the Psychological Model

- Companies use understanding of the psychological aspects of addiction to design products and marketing strategies to undermine personal self-control.
- Companies use the psychological model to blame individuals for their addiction and misdirect political and social attention from the most appropriate action.

### Negative and positive interpretations of the Psychological Model

#### Negative

- The '*moral*' framing - addiction only happens to a deviant personality, to which criminalisation can seem a reasonable response
- The '*weakness*' framing - addiction is a weakness of character or a deficit will power - to which stigma, victimisation and infantilisation can seem a reasonable response.
- The '*blame*' framing - it's the addict's fault they are addicted, there is something wrong with them, normal people aren't. They don't deserve help and should pull themselves together. Lack of support in un-addiction can seem a reasonable response.
- The '*choice*' framing - addicts are choosing to use these products. Lack of support in un-addiction can seem a reasonable response.

#### Positive

- A '*support*' framing - understanding of the complex nature of the psychological aspects of addiction opens up the potential for a more supportive, helpful rounded approach to prevention and un-addiction which is grounded in individual experiences.
- It can also give rise to empowering psychological methods of un-addiction and countering the view of addiction as long-term, chronic and incurable which hinders un-addiction.

## 4. The Econ-Bio-Psycho-Social Model

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The diversity of those who become addicted, the many exceptions to the different models and the variety of reasons for addiction and un-addiction led to a movement to bring all these factors into an overarching model and consider the contribution of them all at the same time. This was called the the Bio-Psycho-Social Model<sup>48</sup>.

If this were to be seen as the defining model, we proposed that the Economic Model be added and put first. Without these products, there would be nothing to be addicted to and by far the most effective ways of addiction prevention involve the restriction of the availability and use of the products and dismantling of the underpinning factors in the Economic Model.

There are also downsides to this view of addiction as multifactorial. The Econ-Bio-Psycho-Social Model makes policy and treatment more difficult and plays into the hands of the companies who use its complexity to undermine clarity of action.

Policy makers can struggle to focus and corporate disinformation programmes are empowered by this academic lack of clarity about the causes of addiction. It also confuses citizens and undermines social and political will to take the necessary actions to effectively restrict the economic model.

However, it also seems a reasonable interpretation of the way addiction happens to people in real life.

Our ongoing focus will be on policy and regulatory interventions to prevent the success of the Economic Model which we believe will positively affect individuals in ways which are components of the other models too.

### What gets in the way of policy action on the Economic Model?

The policy options and regulations which are required to dismantle the Economic Model (legal restrictions on sale, packaging and marketing, tax, levies, limitations and transparency on lobbying, funding of academic research etc) are to some totally obvious and to others inappropriate and run counter to their values.

The objections to and support for such policy options are broadly summarised as follows:

#### Objections and support for restrictions on Economic Model

##### Opponents

- **The Nanny State** - 'we don't want the 'big state' interfering in our personal lives'
- **The Right to Choose** - 'we should be free to choose to use these products even if it harms us and others'
- **Effectiveness** - 'these policies don't work and are a waste of public money'
- **Ideology** - 'the market is the best way to regulate society, if people didn't want them they wouldn't buy them'.
- **Financial** - 'these companies contribute to society, give us jobs, paying taxes, they should be allowed to flourish for the economic good of the country'.

## Supporters

- **The Neglectful state** - ‘government’s are not doing their job properly if they don’t protect their citizens from harm - even from companies’
- **The public interest** - ‘the public interest should override the individuals right to choose products which harm individuals and society’
- **Effectiveness** - ‘these are what works’
- **Ideology** - ‘as a society, we cannot afford to subsidise the social costs of the harms incurred by these companies’
- **Financial** - ‘these companies are a net drain on the NHS and society and should be dismantled’.

## Conclusion

*“What we know about effective treatment for addiction can be summed up relatively easily, we know surprisingly little”* explain Robert West and Jamie Brown in their influential book *The Theory of Addiction*, where they then go on to catalogue just how little is in fact known<sup>49</sup>.

We propose that a good part of the reason why addictions are so difficult to treat, is the environment created by the Economic Model which causes and perpetuates addiction. Dismantling the Economic Model is the best starting point for prevention and un-addiction.

## What next?

We believe that it is essential for the health and wellbeing of individuals and society that the activities of addiction economy companies are curtailed until they can do no further harm.

We would like to make this case more forcefully. The next stage of our project will aim to do the following:

1. Illustrate how the model works in real life with stories and case studies in writing or film
2. Better understand the objections to and restrictions on the Economic Model
3. Be clearer about what works and doesn’t to prevent addiction and support un-addiction
4. Better understand the cultural and systemic implications of dismantling the Economic Model
5. Explore the factors which will help citizens trust an approach which prioritises putting the good of society ahead of individual liberty and economic factors. (Based on our previous 6 year research programme on Trust, Policy and Governance)

## Your views

Please feel free to comment on this document by commenting on LinkedIn or sending your thoughts to [hilary@societyinside.com](mailto:hilary@societyinside.com).

## Funding

The project to date is self-funded. We are seeking funding for the next stage. If you know of suitable grants or would like to partner with us, please contact [hilary@societyinside.com](mailto:hilary@societyinside.com)



## About the authors

The lead author is Hilary Sutcliffe, Director of UK not-for-profit SocietyInside. Her research over the last 25 years has been exploring the concept and practice of a 'Pro-Society' approach to business, innovation and regulation<sup>50</sup>. She authored the European Commission's Primer for Responsible Research and Innovation in 2010<sup>51</sup> and recently complete a 6 year project 'Trust and Tech Governance<sup>52</sup>' exploring the role of trust in the governance and regulation of innovation. This was supported by a follow up multi-stakeholder project developing a Framework for the Meaningful Involvement of Stakeholders in AI Innovation<sup>53</sup> and Regulation<sup>54</sup>.

Joe Woof joined SocietyInside after completing a BA in Geography with a focus on social media addiction and young people and a Masters in Science Communication where he researched the corporate and policy influence on the adoption of vapes (aka e-cigarettes ) in the UK, leading to the product of a short film [The Vaping Dilemma](#).

See more about The Addiction Economy initiative here: [www.theaddictioneconomy.com](http://www.theaddictioneconomy.com) or SocietyInside here: [www.societyinside.com](http://www.societyinside.com). To get in touch, email [hilary@societyinside.com](mailto:hilary@societyinside.com), or via LinkedIn where Hilary posts an Addiction Economy Thought for the Day each working day.

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12 March 2024

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